# michigan ap – kentucky 2012

# 1ac for all debates except round 7

### 1ac prolif

#### Advantage one is Prolif –

#### Continued prolif risks global war

Heisbourg 12—chairman of the council of the Geneva Centre for Security Policy and of the London-based International Institute for Strategic Studies (Francois, 3/4/12, “NUCLEAR PROLIFERATION – LOOKING BACK, THINKING AHEAD: HOW BAD WOULD THE FURTHER SPREAD OF NUCLEAR WEAPONS BE?,” http://www.npolicy.org/article\_file/Nuclear\_Proliferation\_-\_Looking\_Back\_Thinking\_Ahead\_How\_Bad\_Would\_the\_Further\_Spread\_of\_Nuclear\_Weapons\_Be.pdf, RBatra)

The problem with this reassuring reading of the past is that it is not entirely true. Yes, the NPT had a major material effect by gradually making non nuclear the new normal. Yes again, defense guarantees by the US weaned Germany, Italy (13), South Korea, Taiwan and even neutral Sweden away from the nuclear road, followed by the US-French-British assurances to post-Soviet Ukraine. Yes too, various levels of coercion worked in Iraq, Libya and Syria. But no, the practice of even the most ‘classical’ bilateral deterrence was not nearly as reassuring as the mainstream narrative inherited from the Cold War would have it. Nor can we consider that our elements for empirical judgment as methodologically satisfactory in terms of their breadth and depth. These two negatives will be examined in turn.

Nuclear archives, as other sensitive governmental archives, open up usually after an interval of decades and even then with varying levels of culling and redaction. Even oral histories tend to follow this pattern, as ageing witnesses feel freer to speak up. Hence a paradox: when the Soviet- American nuclear confrontation was central to our lives and policies during the Cold War, we didn’t how bad things really where; now that we are beginning to know, there is little public interest given the disappearance of the East-West contest. Yet there are lessons of general interest which can be summarized as follows: 1) the Cuban missile crisis brought us much closer to the brink than the acute sense of danger which prevailed at the time, for reasons which are germane to the current situation: massive failures of intelligence on Soviet nuclear preparations and dispositions in Cuba, notably on tactical nukes and on the operational readiness of a number of IRBMs and their warheads; dysfunctional or imperfect command and control arrangements (notably vis à vis Soviet submarines), unintentionally mixed signals on each antagonist’s actions). These are effectively laid out in Michael Dobb’s book, “One Minute to Midnight”(14). 2) the safety and security of nuclear forces are subject to potentially calamitous procedural, technical or operational mishaps and miscalculations, somewhat along the lines of what applies to related endeavors (nuclear power and aerospace). Scott Sagan in his “Limits of Safety”(15) provides compelling research on the American Cold War experience. It would be interesting to have a similar treatment on the Soviet experience…Although it can be argued that today’s nuclear arsenals are much smaller and easier to manage reliable, and that the technology for their control has been vastly improved, several facts remain:

the US has continued to witness serious procedural lapses in the military nuclear arena (16); the de-emphasis of the importance of nuclear weapons in the US force structure is not conducive to treating them with the respect which is due to their destructive power; other nuclear powers do not necessarily benefit from the same technology and learning curves as the older nuclear states, and notably the US; cheek-to-jowl nuclear postures, which prevailed in the Cuban missile crisis and which help explain why World War III nearly occurred, and which characterize India and Pakistan today.

Despite the dearth of detail on Indian and Pakistani nuclear crisis management, we know that the stability of nuclear deterrence between India and Pakistan is by no means a given, with serious risks occurring on several occasions since the mid-1980s(17).

At another level of analysis, we have to recognize the limits of the database on which we ground our policies on nonproliferation. The nuclear age, in terms of operationally usable devices, began in 1945, less than seventy years, less than the age of an old man. The fact that there has been no accidental or deliberate nuclear use during that length of time is nearly twice as reassuring as the fact that it took more than thirty years (18) for a nuclear electricity generating plant to blow up, in the form of the Chernobyl disaster of 1986. But given the destructive potential of nuclear weapons, twice as much reassurance (in the form of no use of nuclear weapons for close to seventy years) is probably not good enough. Furthermore, the Chernobyl disaster involved the same sort of errors of judgment, procedural insufficiencies and crisis-mismanagement visible in Scott Sagan’s book, not only or even mainly, flawed design choices: inadvertence at work, in other words of the sort which could prevail in a time-sensitive, geographically constrained Indo- Pakistani or Middle Eastern conflict. Give it another seventy years to pass judgment?

The same empirical limits apply to the number of actors at play: we have simple bipolar (US-USSR/Russia or India/Pakistan) and complex bipolar (US/France/UK/NATO-Soviet Union/Russia) experience; we’ve had US-Soviet-Chinese or Sino- Indian-Pakistani tripolarity; and we’ve had a number of unipolar moments (one nuclear state vis à vis non-nuclear antagonists). But we mercifully have not had to deal with more complex strategic geometries –yet- in the Middle East or East Asia. We only know what we know, we don’t know what we don’t know.

A historical narrative which is not reassuring and an empirical record that is less than compelling need to inform the manner in which we approach further proliferation.

PROLIFERATION PUSH AND PULL

Ongoing proliferation differs from that of the first halfcentury of the nuclear era in three essential ways: on the demand side, the set of putative nuclear actors is largely focused in the most strategically stressed regions of the world; on the supply side, the actual or potential purveyors of proliferation are no longer principally the first, industrialized, generation of nuclear powers; the technology involved in proliferation is somewhat less demanding than it was during the first nuclear age. Taken together, these changes entail growing risks of nuclear use.

Demand is currently focusing on two regions, the Middle East and East Asia (broadly defined) and involves states and, potentially, non-state actors. In the Middle East, Iran’s nuclear program is the focus of the most intense concerns. A potential consequence in proliferation terms would be to lead regional rivals of Iran to acquire nuclear weapons in term: this concern was vividly in 2007 by the then President of France, Jacques Chirac (19) who specifically mentioned Egypt and Saudi Arabia. The likelihood of such a “proliferation chain-reaction” may have been increased by President Obama’s recent repudiation of containment as an option (20): short of Iran being persuaded or forced to abandon its nuclear ambitions, the neighboring states would presumably have to contemplate security options other than a Cold War style US defense guarantee. Given prior attempts by Iraq, Syria and Libya to become nuclear powers, the probability of a multipolar nuclear Middle East has to be rated as high in case Iran is perceived as having acquired a military nuclear capability. Beyond the Middle East, the possibility of civil war in nuclear-armed Pakistan leading to state failure and the possibility of nukes falling out of the hands of an effective central government. There are historical precedents for such a risk, most notably, but not only(21)in the wake of the collapse of the Soviet Union: timely and lasting action by outside powers, such as the US with the Nunn-Lugar initiative, and the successor states themselves has prevented fissile material from falling into unauthorized hands in significant quantities. Pakistan could pose similar problems in a singularly more hostile domestic environment. As things stand, non-state actors, such as post-Soviet mafiya bosses (interested in resale potential) or Al Qaeda (22) have sought, without apparent success, to benefit from opportunities arising from nuclear disorder in the former USSR and Central Asia. Mercifully, the price Al Qaeda was ready to pay was way below the going rate (upwards of hundreds of $million) for the sorts of services provided by the A.Q.Khan network (see below)to some of his clients.

Although North Korea’s nuclear ambitions appear to be both more self-centered and more containable than is the case for Iran, the possibility of state collapse in combination with regional rivalry leave no room for complacency.

More broadly we are facing the prospect of a multipolar nuclear Middle East, linked to an uncertain nuclear Pakistan already part of a nuclear South Asia tied via China to the Korean nexus in which nuclear America and Russia also have a stake. More broadly still, such a nuclear arc-of-crisis from the Mediterranean to the Sea of Japan, would presumably imply the breakdown of the NPT regime, or at least its reversion to the sort of status it had during the Seventies, when many of its currently significant members had not yet joined (23), unloosening both the demand and supply sides of proliferation.

On the supply side, “old style” proliferation relied on official cooperation between first-generation nuclear or nuclearizing powers, of which the Manhattan project was a forerunner (with American, British and Canadian national contributions and multinational scientific teams), followed inter alia by post-1956 French-Israeli, post-1958 US-UK, pre- 1958 USSR-China cooperation. If India relied heavily on the “unwitting cooperation” , notably on the part of Canada and the US involved in the Atoms for Peace CIRUS research reactor, Pakistan set up the first dedicated, broad spectrum, crossborder trading network to make up for the weakness of its limited industrial base. This import-focused organization thus went beyond traditional espionage-aided efforts (as practiced by the USSR during and after the Manhattan project) or case-by-case purloining or diversion of useful material on the global market (as practiced by Israeli operatives). Even before the Pakistani network had fulfilled its primary task of supplying the national program, it began its transformation into an export-oriented venture.

Libya, Iran, North Korea and a fourth country which remains officially unnamed became the main outlets of what became the world’s first private-sector (albeit government originated and ,presumably, supported)proliferation company which was only wound down after strong Western pressure on Pakistan after 9/11. Although the by-now richly documented A.Q.Khan network (24) appears to have ceased to function in its previous incarnation, it has powerfully demonstrated that there is an international market for proliferation which other operators can expect to exploit. Furthermore, budding, resource-weak nuclear powers have a strong incentive to cover the cost of their investment by selling or bartering their nuclear-related assets, including delivery systems. The fruits of state-tostate cooperation between Iran, North Korea and Pakistan are clearly apparent in the close-to-identical genealogy of their nuclear-capable ballistic missiles of the No- Dong/Ghauri/Shahab families displayed in military parades and test launches. Not all such cooperation consists of televised objects.

Even in the absence of game-changing breakthroughs, technical trends facilitate both demand and supply-side proliferation. For the time being, the plutonium route towards the bomb remains essentially as easy and as difficult as from the earliest years of the nuclear era. Provided a country runs a (difficult-to-hide) research or a power reactor from which low-irradiated fuel can be downloaded at will (such as CANDUtype natural uranium reactors), reprocessing is a comparatively straightforward and undemanding task. Forging and machining a multiple-isotope metal which is notorious for its numerous physical states and chemical toxicity is a substantial challenge, with the companion complications of devising a reliable implosion mechanism. Nuclear testing is highly desirable to establish confidence in the end-result. Opportunities for taking the plutonium-proliferation road may increase somewhat as new techniques (such as pyro-processing) come on stream. Developments in the enriched uranium field have been more substantial in facilitating proliferation. The development of lighter and more efficient centrifuges make it easier for a state to extract enriched uranium speedily in smaller and less visible facilities. Dealing with the resulting military-level HEU is a comparatively undemanding task. The long-heralded advent of industrially effective and reliable laser enrichment technology may eventually further increase ease of access. Downstream difficulties would still remain. Although implosion-mechanisms are not mandatory, they are desirable in order both to reduce the critical mass of U235 for a nuclear explosion and to make for a lighter and smaller more-readily deliverable weapons package.

In sum, incremental improvements increase the risk of proliferation. However, non-state actors are not yet, and will not be on the basis of known technical trends, in a position to master the various steps of the two existing military nuclear fuel cycles, which remain the monopoly of states. Nonstate actors would need the active complicity from (or from accomplices within) states, or benefit from the windfall of state collapse, to acquire a military nuclear capability. The threat of nuclear terrorism continues to be subordinated to developments involving state actors, a remark which is not meant to be reassuring since such developments (see above) are increasingly likely as proliferation spreads to new states and as state failure threatens in the ‘arc of proliferation’ extending from the Mediterranean to North-East Asia. Furthermore, non-state actors can be satisfied with levels of nuclear reliability and performance which states could not accept. A difficult-to-deliver or fizzle-prone nuclear device would not provide a state with the level of deterrence needed to shield it from pre-emptive or retaliatory action, whereas a terrorist group would not be seeking such immunity. A road or ship-delivered imperfect device, which would be closer to a radiological bomb than to a fully-fledged atomic weapon would provide its non-state owners with immense potential. The road to a non-state device does not need to be as well-paved.

NUCLEAR FUTURES

‘New’ lessons from a revisited past and current trends in nuclear proliferation, will tie into a number of characteristics of contemporary international relations with potentially destabilizing consequences, leading to an increasing likelihood of nuclear use. Four such characteristics will be singled out here both because of their relevance to nuclear crisis management and because of their growing role in the world system in the age of globalization:

- Strategic upsets

- Limits of imagination

- Unsustainable strains

- Radical aims

The 2008 French Defence and National Security White Paper (25) developed the concept of ‘ruptures stratégiques’ (strategic upsets) to describe the growing tendency of the world system to generate rapid, unexpected, morphing upsets of international security as a consequence of globalization broadly defined against the backdrop of urbanizing populations generating economic growth and environmental and resource constraints. In themselves, such upsets are not novel (see inter alia, a pandemic such as the Black Death in 1348-49, the Great Depression not to mention World Wars or indeed the major and benign strategic upset of 1989-1991) but the very nature of globalization and the relationship between human activity and the Earth’s ability to sustain them) mean more, and more frequent as well as more complex upsets. If this reading is correct –and the Great financial crisis, the Arab revolutions, the accession of China to superpower status can be mentioned as examples which followed the publication of the White paper- ,then the consequences in the nuclear arena will be twofold. First, nuclear doctrines and dispositions which were conceived under a set of circumstances (such as the Cold War or the India-Pakistan balance of power) may rapidly find themselves overtaken by events. For instance it is easier to demonstrate that US and Russian nuclear forces still visibly bear the imprint of their 1950s template than it is to demonstrate their optimal adaptation to post-post-Cold War requirements. Second, more challenges to international security and of a largely unforeseeable nature mean greater strains placed on the ability of nuclear powers to manage crises against the backdrop of their possession of nuclear weapons. In many, indeed most, cases, such ‘ruptures stratégiques’ will no doubt be handled with nuclear weapons appearing as irrelevant: hypothetical security consequences of an epidemic (such as the interhuman transmission of the H5N1 bird flu virus) or prospective conflicts resulting from climate change do not have prima facie nuclear aspects. But beyond the reminder that we don’t know that as a fact, the probability is, under the ‘rupture stratégique’ hypothesis, that there will be more occasions for putting all crisis management, including nuclear, to the test.

Human societies tend to lack the imagination to think through, and to act upon, what have become known as ‘black swan’ events (26): that which has never occurred (or which has happened very rarely and in a wholly different context) is deemed not be in the field of reality, and to which must be added eventualities which are denied because their consequences are to awful to contemplate. The extremes of human misconduct (the incredulity in the face of evidence of the Holocaust, the failure to imagine 9/11) bear testimony to this hard-wired trait of our species. This would not normally warrant mention as a factor of growing salience if not for the recession into time of the original and only use of nuclear weapons in August 1945. Non-use of nuclear weapons may be taken for granted rather than being an absolute taboo. Recent writing on the reputedly limited effects of the Hiroshima and Nagasaki bombs (27) may contribute to such a trend, in the name of reducing the legitimacy of nuclear weapons. Recent (and often compelling) historical accounts of the surrender of the Japanese Empire which downplay the role of the atomic bombings in comparison to early research can produce a similar effect, even if that may not have been the intention (28). However desirable it has been, the end of atmospheric nuclear testing (29) has removed for more than three decades the periodic reminders which such monstrous detonations made as to the uniquely destructive nature of nuclear weapons. There is a real and growing risk that we forget what was obvious to those who first described in 1941 the unique nature of yet-to-be produced nuclear weapons (30). The risk is no doubt higher in those states for which the history of World War II has little relevance and which have not had the will or the opportunity to wrestle at the time or ex post facto with the moral and strategic implications of the nuclear bombing of Japan in 1945.

Unsustainable strains are possibly the single most compelling feature of contemporary proliferation. Tight geographical constraints –with, for instance, New Delhi and Islamabad located within 300 miles of each other-; nuclear multipolarity against the backdrop of multiple, criss-crossing, sources of tension in the Middle East (as opposed to the relative simplicity of the US-Soviet confrontation); the existence of doctrines (such as India’s ‘cold start’) and force postures (such as Pakistan’s broadening array of battlefield nukes) which rest on the expectation of early use; the role of non-state actors as aggravating or triggering factors when they are perceived as operating with the connivance of an antagonist state ( in the past, the assassination of the Austrian Archduke in Sarajevo in 1914; in the future, Hezbollah operatives launching rockets with effect against Israel or Lashkar-e-Taiba commandos doing a ‘Bombay’ redux in India?) : individually or in combination, these factors test crisis management capabilities more severely than anything seen during the Cold War with the partial exception of the Cuban missile crisis. Even the overabundant battlefield nuclear arsenals in Cold War Central Europe, with their iffy weapons’ safety and security arrangements, were less of a challenge: the US and Soviet short-range nuclear weapons so deployed were not putting US and Soviet territory and capitals at risk.

It may be argued that these risk factors are known to potential protagonists and that they therefore will be led to avoid the sort of nuclear brinksmanship which characterized US and Soviet behavior during the Cold War in crises such as the Korean war, Berlin, Cuba or the Yom Kippur war. Unfortunately, the multiple nuclear crises between India and Pakistan demonstrate no such prudence, rather to the contrary. And were such restraint to feed into nuclear policy and crisis planning –along the lines of apparently greater US and Soviet nuclear caution from the mid-Seventies onwards-, the fact would remain that initial intent rarely resists the strains of a complex, multi-actor confrontation between inherently distrustful antagonists. It is also worth reflecting on the fact that during the 1980s, there was real and acute fear in Soviet ruling circles that the West was preparing an out-of-the-blue nuclear strike, a fear which in turn fed into Soviet policies and dispositions (31).

The Cold War was a set of crises and misunderstandings which came within a whisker of a nuclear holocaust; India and Pakistan’s nuclear standoff is deeply unstable not least as a result of the interaction with non-state actors; a multipolar nuclear Middle East would make the Cuban missile crisis look easy in comparison.

Great conflicts tend to occur when one or several of the antagonists views the status quo as sufficiently undesirable and/or unsustainable to prompt forceful pro-action. Notwithstanding widespread perceptions to the contrary, this was not the case of the USSR and the United States during the Cold War. The US had chosen a policy of containment, as opposed to roll-back, of the Soviet Empire within its limits established as a result of World War II. The Soviet Union seized targets of opportunity outside of its 1945 area of control but avoided direct confrontation with US forces. Messianic language from the USSR on the global victory of communism or from the US about the end of the Evil Empire did not take precedence over the prime Soviet concern of preserving the Warsaw Pact and the US pursuit of containment – and, no less crucially, their mutual confidence that they could achieve these aims without going to war one with the other.

No such generalization can be made about the Middle East, a region in which the very existence of a key state (Israel) is challenged while others have gone to war with each other (e.G.Iran-Iraq war, the Gulf War of 1990-1991), or are riven by deep internal conflicts. Actors such as Hezbollah, with its organic and functional links with Islamic Iran and Alawite Syria add to the complexities and dangers. Extreme views and actions vis à vis the strategic status quo are widely prevalent. Although the India-Pakistan relationship corresponds to something akin to the US-Soviet ‘adversarial partnership’, that does not apply to radical non-state actors prevalent in Pakistan with more or less tight links to that country’s military intelligence services (ISI, Inter-Services Intelligence). The potential for danger is compounded by the variety of such groups: the Pashtu-related Pakistani Taliban (TTP), Kashmiri-related groups, Jihadi militants from the core provinces of Punjab and Sind… Their common characteristics are extreme radicalism, high levels of operational proficiency, and shared enmity of India. Their potential for triggering a conflict between the two countries is substantial, above and beyond the intentions of government officials.

#### The impact is extinction

Kroenig, 12 [May 26th, Matthew Kroenig: Assistant Professor of Government, Georgetown University and Stanton Nuclear Security Fellow, Council on Foreign Relations, The History of Proliferation Optimism: Does It Have A Future? Prepared for the Nonproliferation Policy Education Center, <http://www.npolicy.org/article.php?aid=1182&tid=30>]

Proliferation Optimism: Proliferation optimism was revived in the academy in Kenneth Waltz’s 1979 book, Theory of International Politics.[[1]](#footnote-1)[29] In this, and subsequent works, Waltz argued that the spread of nuclear weapons has beneficial effects on international politics. He maintained that states, fearing a catastrophic nuclear war, will be deterred from going to war with other nuclear-armed states. As more and more states acquire nuclear weapons, therefore, there are fewer states against which other states will be willing to wage war. The spread of nuclear weapons, according to Waltz, leads to greater levels of international stability. Looking to the empirical record, he argued that the introduction of nuclear weapons in 1945 coincided with an unprecedented period of peace among the great powers. While the United States and the Soviet Union engaged in many proxy wars in peripheral geographic regions during the Cold War, they never engaged in direct combat. And, despite regional scuffles involving nuclear-armed states in the Middle East, South Asia, and East Asia, none of these conflicts resulted in a major theater war. This lid on the intensity of conflict, according to Waltz, was the direct result of the stabilizing effect of nuclear weapons. Following in the path blazed by the strategic thinkers reviewed above, Waltz argued that the requirements for deterrence are not high. He argued that, contrary to the behavior of the Cold War superpowers, a state need not build a large arsenal with multiple survivable delivery vehicles in order to deter its adversaries. Rather, he claimed that a few nuclear weapons are sufficient for deterrence. Indeed, he even went further, asserting that any state will be deterred even if it merely suspects its opponent might have a few nuclear weapons because the costs of getting it wrong are simply too high. Not even nuclear accident is a concern according to Waltz because leaders in nuclear-armed states understand that if they ever lost control of nuclear weapons, resulting in an accidental nuclear exchange, the nuclear retaliation they would suffer in response would be catastrophic. Nuclear-armed states, therefore, have strong incentives to maintain control of their nuclear weapons. Not even new nuclear states, without experience in managing nuclear arsenals, would ever allow nuclear weapons to be used or let them fall in the wrong hands. Following Waltz, many other scholars have advanced arguments in the proliferation optimist school. For example, Bruce Bueno de Mesquite and William Riker explore the “merits of selective nuclear proliferation.”[[2]](#footnote-2)[30] John Mearsheimer made the case for a “Ukrainian nuclear deterrent,” following the collapse of the Soviet Union.[[3]](#footnote-3)[31] In the run up to the 2003 Gulf War, John Mearsheimer and Steven Walt argued that we should not worry about a nuclear-armed Iraq because a nuclear-armed Iraq can be deterred.[[4]](#footnote-4)[32] And, in recent years, Barry Posen and many other realists have argued that nuclear proliferation in Iran does not pose a threat, again arguing that a nuclear-armed Iran can be deterred.[[5]](#footnote-5)[33] What’s Wrong with Proliferation Optimism? The proliferation optimist position, while having a distinguished pedigree, has several major problems. Many of these weaknesses have been chronicled in brilliant detail by Scott Sagan and other contemporary proliferation pessimists.[[6]](#footnote-6)[34] Rather than repeat these substantial efforts, I will use this section to offer some original critiques of the recent incarnations of proliferation optimism. First and foremost, proliferation optimists do not appear to understand contemporary deterrence theory. I do not say this lightly in an effort to marginalize or discredit my intellectual opponents. Rather, I make this claim with all due caution and with complete sincerity. A careful review of the contemporary proliferation optimism literature does not reflect an understanding of, or engagement with, the developments in academic deterrence theory in top scholarly journals such as the American Political Science Review and International Organization over the past few decades.[[7]](#footnote-7)[35] While early optimists like Viner and Brodie can be excused for not knowing better, the writings of contemporary proliferation optimists ignore the past fifty years of academic research on nuclear deterrence theory. In the 1940s, Viner, Brodie, and others argued that the advent of Mutually Assured Destruction (MAD) rendered war among major powers obsolete, but nuclear deterrence theory soon advanced beyond that simple understanding.[[8]](#footnote-8)[36] After all, great power political competition does not end with nuclear weapons. And nuclear-armed states still seek to threaten nuclear-armed adversaries. States cannot credibly threaten to launch a suicidal nuclear war, but they still want to coerce their adversaries. This leads to a credibility problem: how can states credibly threaten a nuclear-armed opponent? Since the 1960s academic nuclear deterrence theory has been devoted almost exclusively to answering this question.[[9]](#footnote-9)[37] And, unfortunately for proliferation optimists, the answers do not give us reasons to be optimistic. Thomas Schelling was the first to devise a rational means by which states can threaten nuclear-armed opponents.[[10]](#footnote-10)[38] He argued that leaders cannot credibly threaten to intentionally launch a suicidal nuclear war, but they can make a “threat that leaves something to chance.”[[11]](#footnote-11)[39] They can engage in a process, the nuclear crisis, which increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. As states escalate a nuclear crisis there is an increasingprobability that the conflict will spiral out of control and result in an inadvertent or accidental nuclear exchange. As long as the benefit of winning the crisis is greater than the incremental increase in the risk of nuclear war, threats to escalate nuclear crises are inherently credible. In these games of nuclear brinkmanship, the state that is willing to run the greatest risk of nuclear war before back down will win the crisis as long as it does not end in catastrophe. It is for this reason that Thomas Schelling called great power politics in the nuclear era a “competition in risk taking.”[[12]](#footnote-12)[40] This does not mean that states eagerly bid up the risk of nuclear war. Rather, they face gut-wrenching decisions at each stage of the crisis. They can quit the crisis to avoid nuclear war, but only by ceding an important geopolitical issue to an opponent. Or they can the escalate the crisis in an attempt to prevail, but only at the risk of suffering a possible nuclear exchange. Since 1945 there were have been many high stakes nuclear crises (by my count, there have been twenty) in which “rational” states like the United States run a risk of nuclear war and inch very close to the brink of nuclear war.[[13]](#footnote-13)[41] By asking whether states can be deterred or not, therefore, proliferation optimists are asking the wrong question. The right question to ask is: what risk of nuclear war is a specific state willing to run against a particular opponent in a given crisis? Optimists are likely correct when they assert that Iran will not intentionally commit national suicide by launching a bolt-from-the-blue nuclear attack on the United States or Israel. This does not mean that Iran will never use nuclear weapons, however. Indeed, it is almost inconceivable to think that a nuclear-armed Iran would not, at some point, find itself in a crisis with another nuclear-armed power and that it would not be willing to run any risk of nuclear war in order to achieve its objectives. If a nuclear-armed Iran and the United States or Israel have a geopolitical conflict in the future, over say the internal politics of Syria, an Israeli conflict with Iran’s client Hezbollah, the U.S. presence in the Persian Gulf, passage through the Strait of Hormuz, or some other issue, do we believe that Iran would immediately capitulate? Or is it possible that Iran would push back, possibly even brandishing nuclear weapons in an attempt to deter its adversaries? If the latter, there is a real risk that proliferation to Iran could result in nuclear war. An optimist might counter that nuclear weapons will never be used, even in a crisis situation, because states have such a strong incentive, namely national survival, to ensure that nuclear weapons are not used. But, this objection ignores the fact that leaders operate under competing pressures. Leaders in nuclear-armed states also have very strong incentives to convince their adversaries that nuclear weapons could very well be used. Historically we have seen that in crises, leaders purposely do things like put nuclear weapons on high alert and delegate nuclear launch authority to low level commanders, purposely increasing the risk of accidental nuclear war in an attempt to force less-resolved opponents to back down. Moreover, not even the optimists’ first principles about the irrelevance of nuclear posture stand up to scrutiny. Not all nuclear wars would be equally devastating.[[14]](#footnote-14)[42] Any nuclear exchange would have devastating consequences no doubt, but, if a crisis were to spiral out of control and result in nuclear war, any sane leader would rather be facing a country with five nuclear weapons than one with thirty-five thousand. Similarly, any sane leader would be willing to run a greater risk of nuclear war against the former state than against the latter. Indeed, systematic research has demonstrated that states are willing to run greater risks and, therefore, more likely to win nuclear crises when they enjoy nuclear superiority over their opponent.[[15]](#footnote-15)[43] Proliferation optimists miss this point, however, because they are still mired in 1940s deterrence theory. It is true that no rational leader would choose to launch a nuclear war, but, depending on the context, she would almost certainly be willing to risk one. Nuclear deterrence theorists have proposed a second scenario under which rational leaders could instigate a nuclear exchange: a limited nuclear war.[[16]](#footnote-16)[44] By launching a single nuclear weapon against a small city, for example, it was thought that a nuclear-armed state could signal its willingness to escalate the crisis, while leaving its adversary with enough left to lose to deter the adversary from launching a full-scale nuclear response. In a future crisis between a nuclear-armed China and the United States over Taiwan, for example, China could choose to launch a nuclear attack on Honolulu to demonstrate its seriousness. In that situation, with the continental United States intact, would Washington choose to launch a full-scale nuclear war on China that could result in the destruction of many more American cities? Or would it back down? China might decide to strike hoping that Washington will choose a humiliating retreat over a full-scale nuclear war. If launching a limited nuclear war could be rational, it follows that the spread of nuclear weapons increases the risk of nuclear use. Again, by ignoring contemporary developments in scholarly discourse and relying exclusively on understandings of nuclear deterrence theory that became obsolete decades ago, optimists reveal the shortcomings of their analysis and fail to make a compelling case. The optimists also error by confusing stability for the national interest. Even if the spread of nuclear weapons contributes to greater levels of international stability (which discussions above and below suggest it might not) it does not necessarily follow that the spread of nuclear weapons is in the U.S. interest. There might be other national goals that trump stability, such as reducing to zero the risk of nuclear war in an important geopolitical region. Optimists might argue that South Asia is more stable when India and Pakistan have nuclear weapons, but certainly the risk of nuclear war is higher than if there were no nuclear weapons on the subcontinent. In addition, it is wrong to assume that stability is always in the national interest. Sometimes it is, but sometimes it is not. If stability is obtained because Washington is deterred from using force against a nuclear-armed adversary in a situation where using force could have advanced national goals, stability harms, rather than advances, U.S. national interests. The final gaping weakness in the proliferation optimist argument, however, is that it rests on a logical contradiction. This is particularly ironic, given that many optimists like to portray themselves as hard-headed thinkers, following their premises to their logical conclusions. But, the contradiction at the heart of the optimist argument is glaring and simple to understand: either the probability of nuclear war is zero, or it is nonzero, but it cannot be both. If the probability of nuclear war is zero, then nuclear weapons should have no deterrent effect. States will not be deterred by a nuclear war that could never occur and states should be willing to intentionally launch large-scale wars against nuclear-armed states. In this case, proliferation optimists cannot conclude that the spread of nuclear weapons is stabilizing. If, on the other hand, the probability of nuclear war is nonzero, then there is a real danger that the spread of nuclear weapons increases the probability of a catastrophic nuclear war. If this is true, then proliferation optimists cannot be certain that nuclear weapons will never be used. In sum, the spread of nuclear weapons can either raise the risk of nuclear war and in so doing, deter large-scale conventional conflict. Or there is no danger that nuclear weapons will be used and the spread of nuclear weapons does not increase international instability. But, despite the claims of the proliferation optimists, it is nonsensical to argue that nuclear weapons will never be used and to simultaneously claim that their spread contributes to international stability. Proliferation Anti-obsessionists: Other scholars, who I label “anti-obsessionists” argue that the spread of nuclear weapons has neither been good nor bad for international politics, but rather irrelevant. They argue that academics and policymakers concerned about nuclear proliferation spend too much time and energy obsessing over something, nuclear weapons, that, at the end of the day, are not all that important. In Atomic Obsession, John Mueller argues that widespread fears about the threat of nuclear weapons are overblown.[[17]](#footnote-17)[45] He acknowledges that policymakers and experts have often worried that the spread of nuclear weapons could lead to nuclear war, nuclear terrorism and cascades of nuclear proliferation, but he then sets about systematically dismantling each of these fears. Rather, he contends that nuclear weapons have had little effect on the conduct of international diplomacy and that world history would have been roughly the same had nuclear weapons never been invented. Finally, Mueller concludes by arguing that the real problem is not nuclear proliferation, but nuclear nonproliferation policy because states do harmful things in the name of nonproliferation, like take military action and deny countries access to nuclear technology for peaceful purposes. Similarly, Ward Wilson argues that, despite the belief held by optimists and pessimists alike, nuclear weapons are not useful tools of deterrence.[[18]](#footnote-18)[46] In his study of the end of World War II, for example, Wilson argues that it was not the U.S. use of nuclear weapons on Hiroshima and Nagasaki that forced Japanese surrender, but a variety of other factors, including the Soviet Union’s decision to enter the war. If the actual use of nuclear weapons was not enough to convince a country to capitulate to its opponent he argues, then there is little reason to think that the mere threat of nuclear use has been important to keeping the peace over the past half century. Leaders of nuclear-armed states justify nuclear possession by touting their deterrent benefits, but if nuclear weapons have no deterrent value, there is no reason, Ward claims, not to simply get rid of them. Finally, Anne Harrington de Santana argues that nuclear experts “fetishize” nuclear weapons.[[19]](#footnote-19)[47] Just like capitalists, according to Karl Marx, bestow magical qualities on money, thus fetishizing it, she argues that leaders and national security experts do the same thing to nuclear weapons. Nuclear deterrence as a critical component of national security strategy, according to Harrington de Santana, is not inherent in the technology of nuclear weapons themselves, but is rather the result of how leaders in countries around the world think about them. In short, she argues, “Nuclear weapons are powerful because we treat them as powerful.”[[20]](#footnote-20)[48] But, she maintains, we could just as easily “defetish” them, treating them as unimportant and, therefore, rendering them obsolete. She concludes that “Perhaps some day, the deactivated nuclear weapons on display in museums across the United States will be nothing more than a reminder of how powerful nuclear weapons used to be.”[[21]](#footnote-21)[49] The anti-obsessionists make some thought-provoking points and may help to reign in some of the most hyperbolic accounts of the effect of nuclear proliferation. They remind us, for example, that our worst fears have not been realized, at least not yet. Yet, by taking the next step and arguing that nuclear weapons have been, and will continue to be, irrelevant, they go too far. Their arguments call to mind the story about the man who jumps to his death from the top of a New York City skyscraper and, when asked how things are going as he passes the 15th story window, replies, “so far so good.” The idea that world history would have been largely unchanged had nuclear weapons not been invented is a provocative one, but it is also unfalsifiable. There is good reason to believe that world history would have been different, and in many ways better, had certain countries not acquired nuclear weapons. Let’s take Pakistan as an example. Pakistan officially joined the ranks of the nuclear powers in May 1998 when it followed India in conducting a series of nuclear tests. Since then, Pakistan has been a poster child for the possible negative consequences of nuclear proliferation. Pakistan’s nuclear weapons have led to further nuclear proliferation as Pakistan, with the help of rogue scientist A.Q. Khan, transferred uranium enrichment technology to Iran, Libya, and North Korea.[[22]](#footnote-22)[50] Indeed, part of the reason that North Korea and Iran are so far along with their uranium enrichment programs is because they got help from Pakistan. Pakistan has also become more aggressive since acquiring nuclear weapons, displaying an increased willingness to sponsor cross-border incursions into India with terrorists and irregular forces.[[23]](#footnote-23)[51] In a number of high-stakes nuclear crises between India and Pakistan, U.S. officials worried that the conflicts could escalate to a nuclear exchange and intervened diplomatically to prevent Armageddon on the subcontinent. The U.S. government also worries about the safety and security of Pakistan’s nuclear arsenal, fearing that Pakistan’s nukes could fall into the hands of terrorists in the event of a state collapse or a break down in nuclear security. And we still have not witnessed the full range of consequences arising from Pakistani nuclear proliferation. Islamabad has only possessed the bomb for a little over a decade, but they are likely to keep it for decades to come, meaning that we could still have a nuclear war involving Pakistan. In short, Pakistan’s nuclear capability has already had deleterious effects on U.S. national security and these threats are only likely to grow over time. In addition, the anti-obsessionists are incorrect to argue that the cure of U.S. nuclear nonproliferation policy is worse than the disease of proliferation. Many observers would agree with Mueller that the U.S. invasion of Iraq in 2003 was a disaster, costing much in the way of blood and treasure and offering little strategic benefit. But the Iraq War is hardly representative of U.S. nonproliferation policy. For the most part, nonproliferation policy operates in the mundane realm of legal frameworks, negotiations, inspections, sanctions, and a variety of other tools. Even occasional preventive military strikes on nuclear facilities have been far less calamitous than the Iraq War. Indeed, the Israeli strikes on nuclear reactors in Iraq and Syria in 1981 and 2007, respectively, produced no meaningful military retaliation and a muted international response. Moreover, the idea that the Iraq War was primarily about nuclear nonproliferation is a contestable one, with Saddam Hussein’s history of aggression, the unsustainability of maintaining the pre-war containment regime indefinitely, Saddam’s ties to terrorist groups, his past possession and use of chemical and biological weapons, and the window of opportunity created by September 11th, all serving as possible prompts for U.S. military action in the Spring of 2003. The claim that nonproliferation policy is dangerous because it denies developing countries access to nuclear energy also rests on shaky ground. If anything, the global nonproliferation regime has, on balance, increased access to nuclear technology. Does anyone really believe that countries like Algeria, Congo, and Vietnam would have nuclear reactors today were it not for Atoms for Peace, Article IV of the NPT, and other appendages of the nonproliferation regime that have provided developing states with nuclear technology in exchange for promises to forgo nuclear weapons development? Moreover, the sensitive fuel-cycle technology denied by the Nuclear Suppliers Group (NSG) and other supply control regimes is not even necessary to the development of a vibrant nuclear energy program as the many countries that have fuel-cycle services provided by foreign nuclear suppliers clearly demonstrate. Finally, the notion that nuclear energy is somehow the key to lifting developing countries from third to first world status does not pass the laugh test. Given the large upfront investments, the cost of back-end fuel management and storage, and the ever-present danger of environmental catastrophe exemplified most recently by the Fukushima disaster in Japan, many argue that nuclear energy is not a cost-effective source of energy (if all the externalities are taken into account) for any country, not to mention those developing states least able to manage these myriad challenges. Taken together, therefore, the argument that nuclear nonproliferation policy is more dangerous than the consequences of nuclear proliferation, including possible nuclear war, is untenable. Indeed, it would certainly come as a surprise to the mild mannered diplomats and scientists who staff the International Atomic Energy Agency, the global focal point of the nuclear nonproliferation regime, located in Vienna, Austria. The anti-obsessionsists, like the optimists, also walk themselves into logical contradictions. In this case, their policy recommendations do not necessarily follow from their analyses. Ward argues that nuclear weapons are irrelevant and, therefore, we should eliminate them.[[24]](#footnote-24)[52] But, if nuclear weapons are really so irrelevant, why not just keep them lying around? They will not cause any problems if they are as meaningless as anti-obsessionists claim and it is certainly more cost effective to do nothing than to negotiate complicated international treaties and dismantle thousands of warheads, delivery vehicles, and their associated facilities. Finally, the idea that nuclear weapons are only important because we think they are powerful is arresting, but false. There are properties inherent in nuclear weapons that can be used to create military effects that simply cannot, at least not yet, be replicated with conventional munitions. If a military planner wants to quickly destroy a city on the other side of the planet, his only option today is a nuclear weapon mounted on an ICBM. Therefore, if the collective “we” suddenly decided to “defetishize” nuclear weapons by treating them as unimportant, it is implausible that some leader somewhere would not independently come to the idea that nuclear weapons could advance his or her country’s national security and thereby re-fetishize them. In short, the optimists and anti-obsessionists have brought an important perspective to the nonproliferation debate. Their arguments are provocative and they raise the bar for those who wish to argue that the spread of nuclear weapons is indeed a problem. Nevertheless, their counterintuitive arguments are not enough to wish away the enormous security challenges posed by the spread of the world’s most dangerous weapons. These myriad threats will be considered in the next section. Why Nuclear Proliferation Is a Problem The spread of nuclear weapons poses a number of severe threats to international peace and U.S. national security including: nuclear war, nuclear terrorism, emboldened nuclear powers, constrained freedom of action, weakened alliances, and further nuclear proliferation. This section explores each of these threats in turn. Nuclear War. The greatest threat posed by the spread of nuclear weapons is nuclear war. The more states in possession of nuclear weapons, the greater the probability that somewhere, someday, there is a catastrophic nuclear war. A nuclear exchange between the two superpowers during the Cold War could have arguably resulted in human extinction and a nuclear exchange between states with smaller nuclear arsenals, such as India and Pakistan, could still result in millions of deaths and casualties, billions of dollars of economic devastation, environmental degradation, and a parade of other horrors. To date, nuclear weapons have only been used in warfare once. In 1945, the United States used one nuclear weapon each on Hiroshima and Nagasaki, bringing World War II to a close. Many analysts point to sixty-five-plus-year tradition of nuclear non-use as evidence that nuclear weapons are unusable, but it would be naïve to think that nuclear weapons will never be used again. After all, analysts in the 1990s argued that worldwide economic downturns like the great depression were a thing of the past, only to be surprised by the dot-com bubble bursting in the later 1990s and the Great Recession of the late Naughts.[[25]](#footnote-25)[53] This author, for one, would be surprised if nuclear weapons are not used in my lifetime. Before reaching a state of MAD, new nuclear states go through a transition period in which they lack a secure-second strike capability. In this context, one or both states might believe that it has an incentive to use nuclear weapons first. For example, if Iran acquires nuclear weapons neither Iran, nor its nuclear-armed rival, Israel, will have a secure, second-strike capability. Even though it is believed to have a large arsenal, given its small size and lack of strategic depth, Israel might not be confident that it could absorb a nuclear strike and respond with a devastating counterstrike. Similarly, Iran might eventually be able to build a large and survivable nuclear arsenal, but, when it first crosses the nuclear threshold, Tehran will have a small and vulnerable nuclear force. In these pre-MAD situations, there are at least three ways that nuclear war could occur. First, the state with the nuclear advantage might believe it has a splendid first strike capability. In a crisis, Israel might, therefore, decide to launch a preemptive nuclear strike to disarm Iran’s nuclear capabilities and eliminate the threat of nuclear war against Israel. Indeed, this incentive might be further increased by Israel’s aggressive strategic culture that emphasizes preemptive action. Second, the state with a small and vulnerable nuclear arsenal, in this case Iran, might feel use ‘em or loose ‘em pressures. That is, if Tehran believes that Israel might launch a preemptive strike, Iran might decide to strike first rather than risk having its entire nuclear arsenal destroyed. Third, as Thomas Schelling has argued, nuclear war could result due to the reciprocal fear of surprise attack.[[26]](#footnote-26)[54] If there are advantages to striking first, one state might start a nuclear war in the belief that war is inevitable and that it would be better to go first than to go second. In a future Israeli-Iranian crisis, for example, Israel and Iran might both prefer to avoid a nuclear war, but decide to strike first rather than suffer a devastating first attack from an opponent. Even in a world of MAD, there is a risk of nuclear war. Rational deterrence theory assumes nuclear-armed states are governed by rational leaders that would not intentionally launch a suicidal nuclear war. This assumption appears to have applied to past and current nuclear powers, but there is no guarantee that it will continue to hold in the future. For example, Iran’s theocratic government, despite its inflammatory rhetoric, has followed a fairly pragmatic foreign policy since 1979, but it contains leaders who genuinely hold millenarian religious worldviews who could one day ascend to power and have their finger on the nuclear trigger. We cannot rule out the possibility that, as nuclear weapons continue to spread, one leader will choose to launch a nuclear war, knowing full well that it could result in self-destruction. One does not need to resort to irrationality, however, to imagine a nuclear war under MAD. Nuclear weapons may deter leaders from intentionally launching full-scale wars, but they do not mean the end of international politics. As was discussed above, nuclear-armed states still have conflicts of interest and leaders still seek to coerce nuclear-armed adversaries. This leads to the credibility problem that is at the heart of modern deterrence theory: how can you threaten to launch a suicidal nuclear war? Deterrence theorists have devised at least two answers to this question. First, as stated above, leaders can choose to launch a limited nuclear war.[[27]](#footnote-27)[55] This strategy might be especially attractive to states in a position of conventional military inferiority that might have an incentive to escalate a crisis quickly. During the Cold War, the United States was willing to use nuclear weapons first to stop a Soviet invasion of Western Europe given NATO’s conventional inferiority in continental Europe. As Russia’s conventional military power has deteriorated since the end of the Cold War, Moscow has come to rely more heavily on nuclear use in its strategic doctrine. Indeed, Russian strategy calls for the use of nuclear weapons early in a conflict (something that most Western strategists would consider to be escalatory) as a way to de-escalate a crisis. Similarly, Pakistan’s military plans for nuclear use in the event of an invasion from conventionally stronger India. And finally, Chinese generals openly talk about the possibility of nuclear use against a U.S. superpower in a possible East Asia contingency. Second, as was also discussed above leaders can make a “threat that leaves something to chance.”[[28]](#footnote-28)[56] They can initiate a nuclear crisis. By playing these risky games of nuclear brinkmanship, states can increases the risk of nuclear war in an attempt to force a less resolved adversary to back down. Historical crises have not resulted in nuclear war, but many of them, including the 1962 Cuban Missile Crisis, have come close. And scholars have documented historical incidents when accidents could have led to war.[[29]](#footnote-29)[57] When we think about future nuclear crisis dyads, such as India and Pakistan and Iran and Israel, there are fewer sources of stability that existed during the Cold War, meaning that there is a very real risk that a future Middle East crisis could result in a devastating nuclear exchange.

#### Global interest makes nuclear industry expansion dangerous now

Banks and Ebinger, 11 [John P, Charles K, John is a fellow with the Energy Security Initiative at the Brookings Institution, Charles is senior fellow and director of the Energy Security Initiative at the Brookings Institution, “Introduction: Planning a Responsible Nuclear Future” in “Business and Nonproliferation”, p. googlebooks]

Nuclear energy is a twentieth-century innovation but until recently has not spread beyond a relatively small number 0F industrialized nations (see maps on pages 4 5). All this is about to change. With global electricity demand increasing dramatically, greenhouse gas emissions, and energy security becoming national priorities, developed and developing countries alike are reexamining nuclear energy as a means of providing a reliable E scalable source of low-carbon power. The International Energy Agency (IEA) projects that global electricity demand will increase 2.2 percent a year to 2035, with about 80 percent of that growth occurring in emerging economies outside the Organization for Economic Cooperation £ Development (OECD).' Even if new policy initiatives are introduced to lower carbon dioxide (CO2) emissions Q combat global climate change, global energy-related CO2 emissions are expected to increase 21 percent between 2008 2035.1 Emerging market economies account For all of this projected increase in emissions. In the face of rising prices and increasing volatility in the oil market, many of these economies have shifted their attention to nuclear energy as a means of reducing dependence on oil (often a major source of their power generation), improving their balance of payments, and bolstering national energy security.’ Currently, 440 reactors with a total capacity of 375 gigawatts (G\Wc) arc in operation worlclwicle.\* As of March 2011, 65 nuclear reactor units, with a total capacity of 63 G\Ve, are under construction.5 As of April 2011, 158 projects are also on order or planned and 326 proposed." These preparations For replacing or expanding reactor ﬂeets Q For new entries to the marketplace follow a decades-long lull in construction suggest a “nuclear renaissance” has begun. \Y/hile “renaissance” implies a revival or return to a better time. the global expansion of nuclear energy in the coming decades will differ in several resects from the way civilian nuclear power developed between the late 1950s mid-19805. First, the scope and pace of this new deployment could be signiﬁcantly larger than in previous periods of expansion: some recent analyses put installed nuclear capacity up at 550—850 G\Ve by 2035. depending on assumptions about the implementation of low-carbon energy policiesf In IEA projections, a 50 per- cent cut in energy-related CO, emissions by 2050 would require global capacity to reach 1,200 G\Ve, a net addition of 30 G\Ve each year over the next forty years.“ To put this ﬁgure into perspective, during the period of nuclear p0wer’s most rapid expansion (1981-90). capacity increased by only 20 G\Ve a year, slowing to an annual average of 4 G\X/e from 1991 to 2006." To achieve large- scale reductions in energy—related CO: emissions, nuclear capacity must there- lore grow not only faster but also For several decades longer than during nuclear energy's previous “golden age." (As the preface indicates, safety concerns arising in the aftermath ofthe Fukushima accident will slow or scale back nuclear power expansion globally in the short term. At the same time, the longer-term impact of Fukushima on global nuclear power expansion will be less adverse, especially in emerging market countries.) Also different today is the number of countries seeking to build their ﬁrst nuclear power reactor. Some sixty-ﬁve countries have expressed interest in or are actively planning for nuclear power."' As the International Atomic Energy Agency (IAEA) points out, however, most of these countries are merely “con- sidering” the range of issues involved in nuclear power development. Many of them cannot realistically afford the large costs associated with civilian nuclear power programs. According to some analyses, countries with a GDP ofless than $50 billion could not spend several billion dollars building a reactor." ln addi- tion, many aspirant countries still lack the electricity grids required For nuclear power: electricity systems with a capacity below l0 G\Ve are unlikely to be able to accommodate a nuclear reactor.“ Some countries could address this issue by expanding electricity interconnections with neighboring states or developing ower export arrangements; however, these alternatives are not widely available in any case would take time to implement. At the same time, a number of countries have credible plans to become new nuclear energy states (NNES). The IAEA has indicated that ten to twenty-ﬁve countries might begin operating their ﬁrst plants by 2030, whereas since Cher- nobyl only thrce—China, Mexico, Romania—havc brought nuclear plants online for the ﬁrst time.” The following list shows the stages of progress of eleven emerging market countries in their ellorts to develop a civilian nuclear energy programz“ —Power reactors under construction: Iran.“ —Contracts signed, legal regulatory infrastructure well developed: United Arab Emirates (UAE), Turkey. —Committed plans, legal Q regulatory infrastructure developing: Vietnam, jordan. —\Well-developed plans but commitment pending: Thailand. Indonesia. Egypt, Kazakhstan. —Developing plans: Saudi Arabia, Malaysia. Emerging market nations entertaining the construction of new nuclear power capacity lace several critical issues. Domestically, each must establish strong institutions and viable regulatory frameworks addressing health, safety, prolif- eration, environmental concerns while ensuring that adequate human ﬁnancial resources are available for these tasks. Even if a state is willing to buy a nuclear reactor on a “turnkey” basis (paying For an outside operator to build Q run the system), it must still train its own nationals in these various respects Q establish a strong academic industrial culture in all aspects of commercial nuclear operations in order to achieve a sound, sustainable program. The NNES will need to build these capabilities in a sufficient timely manner. New States One of the biggest challenges in any expansion of the civilian nuclear sector is that of maintaining and strengthening the global regime for nuclear proliferation. The changing geopolitical J security environment, combined with the political instability of many regions countries that aspire to develop civilian nuclear reactor technology, has already raised proliferation concerns. Nuclear power reactors could become attractive targets for terrorists, who might also seek access to ﬁssile material for radiological dispersal devices (“dirty bombs”) or for nuclear weapons. With such materials more widely available, the proliferation risks could mount. As commercial enrichment and recycling programs multiply, countries may be tempted also to develop latent nuclear weapons capabilities, especially if they aspire to attain regional predominance, international standing, or the capabilities of regional rivals. An expansion of nuclear energy could further tax an already stressed proliferation regime. In light ofArticle IV of the Nuclear Treaty (NPT), wl1icl1 states that the treat shall not aﬁect the “inalienable right . . . to develop research, production duse of nuclear energy For peaceful purposes without discrimination . . . the right to partici ate in, the fullest possible exchange of equipment, materials H scientiﬁc ii technological information For the peaceful uses olinuclear energy, ” some nations are considering acquisition of fuel cycle capabilities as a way to avoid further dependence on foreign suppliers when they develop nuclear power.“ The NPT contains no provisions to restrict acquisition of such capabilities, although members of the Nuclear Suppliers Group (a voluntary group of nations that restricts nuclear exports) have long practiced restraint on technology transfers of sensitive components of the Fuel cycle. A sharp increase in the demand for nuclear fuel could enhance the commercial attractiveness of uranium enrichment reprocessing, enticing new entrants into the market." Nations with large uranium resources might seek to add value to their uranium exports by moving further up the chain of produc- tion or by expanding current capabilities (Australia, Canada, Kazakhstan, South Africa have all discussed this option recently). Even if the high cost of Fuel cycle activities proves to be a disincentive to their development, the NNES— especially in emerging markets—may consider Fuel supply security exercis- ing sovereign rights under Article IV of the NPT more relevant than economic drivers in their decisions about enrichment or reprocessing.“ With governments playing an increasing role in securing and meeting nuclear contracts, political motivations might also enter into assessments of the nuclear capabilities neces- sary for recipient countries. The great danger in the race to build out new capacity is that some new players may not take proliferation concerns as seriously as existing service providers. To address these issues, there has been a reinvigorated discussion of multilat- eral nuclear approaches (MN/\s). M NAs establish a framework to safeguard Arti- cle IV rights, speciﬁcally by limiting the diffusion ofsensitive nuclear materials E technologies while concurrently guaranteeing long-term supply of nuclear fuel to civilian nuclear power programs. Some steps in this direction include two recently approved fuel banks: the Russian-backed lnternational Uranium Enrich- ment Center in Angarsk the ME/\ Nuclear Threat Initiative Fuel Bank.” The institutional challenges to the regime are compounded both by the actions of rogue states such as Iran’s clandestine nuclear program and North Korea’s nuclear weapons testing Q new uranium enrichment pro- gram, Q by non-state activities such as the operations ofblack market nuclear networks arranged by Pakistani scientist A. Khan. Conﬁdence in the regime’s ability to respond to resolve proliferation threats has thus fallen. New technologies may put further stress on the system. Particularly worrying are the expansion of centrifuge technology, commercialization of the laser enrichment process, development and deployment of next-generation reprocessing techniques that require advanced safeguards, and the potential spread of fast reactors. Although the impact of these dynamics is tlifﬁcult to foresee, the proliferation regime needs to keep pace with the rapidly changing, complex nuclear market, especially those developments activities that facilitate the expansion of uranium enrichment and spent fuel reprocessing. This is a major challenge for a regime already under stress.

#### Plan prevents global prolif and solidifies leadership

Wharton, 9/27/12 [Art Wharton is a principal project engineer at Westinghouse Electric Company LLC in Nuclear Power Plants Business & Project Development. He is a member of the ANS Planning Committee, ANS Public Policy Committee, the ANS Operations and Power Division Program Committee, is the Treasurer of the ANS Operations and Power Division, is the Pittsburgh ANS Local Section Past Chair, a Trustee on the Board of Pittsburgh’s Urban Pathways Charter School, and is a guest contributor to the ANS Nuclear Café, “U.S. Global Nuclear Leadership Through Export-Driven Engagement, http://ansnuclearcafe.org/2012/09/27/u-s-global-nuclear-leadership-through-export-driven-engagement/]

It’s logical that ANS would want U.S. nuclear technology to dominate the global market; but the position statement does not come from a market-driven angle—it is noted as a non-proliferation measure. This may seem paradoxical at first, but I ask the audience: Would you rather the U.S. nuclear energy industry influence the world’s developing countries as they inevitably build their nuclear infrastructure? Or would you prefer the influence of the nuclear energy industry of another country, which might not enforce and teach the same level of rigor in operational excellence, human performance, and design for non-proliferation?¶ ANS is now taking the stance that nuclear energy is not only a valuable source of domestic stability, but also an international security imperative. As developing countries begin taking advantage of nuclear energy as a clean energy source (this is already well underway and accelerating), the United States will be looked toward for its technology leadership in nuclear energy.¶ 1-2-3 Agreements¶ For bilateral nuclear trade agreements (known as 1-2-3 Agreements), it is imperative that the 1-2-3s be negotiated in a way that assures safety, but does not necessarily demand that a sovereign nation give up its sovereignty (such as automatically requiring that a country never “enrich” uranium to the very low levels required for use as nuclear fuel). The origination of the ANS position statement was a U.S. House of Representatives bill proposed to essentially enact a “gold standard” in 1-2-3 agreements, after the United Arab Emirates had agreed to forego its right to enrich uranium as an anti-proliferation measure. Since we know that these types of requirements are not being placed on agreements among other countries, such a requirement would place the United States in an uncompetitive stance, left to watch from the sidelines as the international nuclear trade landscape develops. Logically, ANS would like to see American technology leading the way to a cleaner and safer energized world.¶ The exportation of peaceful nuclear technology is highly valuable to developing nations. Historically, countries that developed nuclear energy technology actually developed nuclear weapons first, before they realized how much more valuable nuclear technology is for peaceful purposes. Why not help developing countries skip that first step?¶ U.S. nuclear technology is designed with anti-proliferation in mind as part of global security policy, so the exportation of U.S. nuclear energy technology as a market leader serves as a security imperative, to ensure that peaceful and nonproliferative technology isused dominantly throughout the world. I ask again: Would you rather see a developing country install U.S. technology under the guidance and influence of the United States? Or, would you rather see a developing country buy from someone else?¶ Influence and control¶ This is actually an area where Position Statement 83 may bring a little discomfort to the people in the nonproliferation community. It contains an undertone of influence, rather than control, over the expansion of nuclear science and technology in the international community. When I was a very young boy, my parents were able to control me; indeed, it was their responsibility to control me as I was raised. But something weird happened as I grew up into my teen years: I gained a sense of sovereignty. I could think for myself, act for myself, and I was pretty sure I knew more than them anyway, as most teenagers do. I wasn’t completely grown up yet, but the game had changed. My parents could no longer expect the ability to control me, but needed to still influence me to grow into a productive member of society (Craig Piercy, the Washington, D.C. representative for ANS, tells of this paradigm shift with pictures of his children as they grew up—it’s personally compelling and relatable).¶ In a global society where the United States out-spends everyone else on national defense (and shall we say, international defense), there yet comes a time when even the immense capability of the U.S. Armed Forces cannot effectively control the global community—but the positive example of the U.S. nuclear energy industry, its exemplary safety record, and its operational excellence can serve as a beacon of influence as it exports its technology.¶ This is why the United States must be the market leader in the exportation of peaceful nuclear technology. But I’m not done.¶

#### US leadership offsets dangerous tech

Ferguson, 10 [Dr. Charles D. Ferguson, President of the Federation of American Scientists, Adjunct Professor in the Security Studies Program at Georgetown University and Adjunct Lecturer in the National Security Studies Program at the Johns Hopkins University, May 19, 2010, Statement before the House Committee on Science and Technology for the hearing on Charting the Course for American Nuclear Technology: Evaluating the Department of Energy’s Nuclear Energy Research and Development Roadmap, <http://www.fas.org/press/_docs/05192010_Testimony_HouseScienceCommHearing%20.pdf>]

\*PHWR = pressurized heavy water reactor

The United States and several other countries have considerable experience in building and operating small and medium power reactors. The U.S. Navy, for example, has used small power reactors since the 1950s to provide propulsion and electrical power for submarines, aircraft carriers, and some other surface warships. China, France, Russia, and the United Kingdom have also developed nuclear powered naval vessels that use small reactors. Notably, Russia has deployed its KLT-40S and similarly designed small power reactors on icebreakers and has in recent years proposed building and selling barges that would carry these types of reactors for use in sea-side communities throughout the world. China has already exported small and medium power reactors. In 1991, China began building a reactor in Pakistan and started constructing a second reactor there in 2005. In the wake of the U.S.-India nuclear deal, Beijing has recently reached agreement with Islamabad to build two additional reactors rated at 650 MWe.2 One of the unintended consequences of more than 30 years of sanctions on India’s nuclear program is that India had concentrated its domestic nuclear industry on building small and medium power reactors based on Canadian pressurized heavy water technology, or Candu-type reactors. Pressurized heavy water reactors (PHWRs) pose proliferation concerns because they can be readily operated in a mode optimal for producing weapons-grade plutonium and can be refueled during power operations. Online refueling makes it exceedingly difficult to determine when refueling is occurring based solely on outside observations, for example, through satellite monitoring of the plant’s operations. Thus, the chances for potential diversion of fissile material increase. This scenario for misuse underscores the need for more frequent inspections of these facilities. But the limited resources of the International Atomic Energy Agency have resulted in a rate of inspections that are too infrequent to detect a diversion of a weapon’s worth of material.3 The opening of the international nuclear market to India may lead to further spread of PHWR technologies to more states. For example, last year, the Nuclear Power Corporation of India, Ltd. (NPCIL) expressed interest in selling PHWRs to Malaysia.4 NPCIL is the only global manufacturer of 220 MWe PHWRs. New Delhi favors South-to-South cooperation; consequently developing states in Southeast Asia, sub-Saharan Africa, and South America could become recipients of these technologies in the coming years to next few decades. Many of these countries would opt for small and medium power reactors because their electrical grids do not presently have the capacity to support large power reactors and they would likely not have the financial ability to purchase large reactors. What are the implications for the United States of Chinese and Indian efforts to sell small and medium power reactors? Because China and India already have the manufacturing and marketing capability for these reactors, the United States faces an economically competitive disadvantage. Because the United States has yet to license such reactors for domestic use, it has placed itself at an additional market disadvantage. By the time the United States has licensed such reactors, China and India as well as other competitors may have established a strong hold on this emerging market. The U.S. Nuclear Regulatory Commission cautioned on December 15, 2008 that the “licensing of new, small modular reactors is not just around the corner. The NRC’s attention and resources now are focused on the large-scale reactors being proposed to serve millions of Americans, rather than smaller devices with both limited power production and possible industrial process applications.” The NRC’s statement further underscored that “examining proposals for radically different technology will likely require an exhaustive review” ... before “such time as there is a formal proposal, the NRC will, as directed by Congress, continue to devote the majority of its resources to addressing the current technology base.”6 Earlier this year, the NRC devoted consideration to presentations on small modular reactors from the Nuclear Energy Institute, the Department of Energy, and the Rural Electric Cooperative Association among other stakeholders.7 At least seven vendors have proposed that their designs receive attention from the NRC.8 Given the differences in design philosophy among these vendors and the fact that none of these designs have penetrated the commercial market, it is too soon to tell which, if any, will emerge as market champions. Nonetheless, because of the early stage in development, the United States has an opportunity to state clearly the criteria for successful use of SMRs. But because of the head start of China and India, the United States should not procrastinate and should take a leadership role in setting the standards for safe, secure, and proliferation-resistant SMRs that can compete in the market. Several years ago, the United States sponsored assessments to determine these criteria.9 While the Platonic ideal for small modular reactors will likely not be realized, it is worth specifying what such an SMR would be. N. W. Brown and J. A. Hasberger of the Lawrence Livermore National Laboratory assessed that reactors in developing countries must: • “achieve reliably safe operation with a minimum of maintenance and supporting infrastructure; • offer economic competitiveness with alternative energy sources available to the candidate sites; • demonstrate significant improvements in proliferation resistance relative to existing reactor systems.”10 Pointing to the available technologies at that time from Argentina, China, and Russia, they determined that “these countries tend to focus on the development of the reactor without integrated considerations of the overall fuel cycle, proliferation, or waste issues.” They emphasized that what is required for successful development of an SMR is “a comprehensive systems approach that considers all aspects of manufacturing, transportation, operation, and ultimate disposal.” Considering proliferation resistance, their preferred approach is to eliminate the need for on-site refueling of the reactor and to provide for waste disposal away from the client country. By eliminating on-site refueling the recipient country would not need to access the reactor core, where plutonium—a weapons-usable material—resides. By removing the reactor core after the end of service life, the recipient country would not have access to fissile material contained in the used fuel. Both of these proposed criteria present technical and political challenges.

And, the plan shapes international norms – history proves

Lieberman, 11 [November 15, 2011 Nonproliferation, Congress, and Nuclear Trade: Plus ça change, plus c’est la même chose¶ Jodi Lieberman Jodi Lieberman is senior government relations¶ specialist at the American Physical Society in¶ Washington, D.C, http://csis.org/files/publication/111116\_nonproliferation\_congress\_and\_nucleartrade.pdf

U.S. Nonproliferation Influence While 123 agreements are an important U.S. nonproliferation tool, they are not the only ones available. U.S. nonproliferation policy and bilateral and multilateral initiatives are also a key part of U.S. influence on global nonproliferation norms and actions. U.S. nonproliferation influence is also derived from its leadership role over the last 50 years in making nonproliferation a significant foreign policy objective. The United States has been instrumental in helping create the essential elements of the nonproliferation regime, including the Nuclear Non-Proliferation Treaty (NPT), the Nuclear Suppliers Group, the Convention on the Physical Protection of Nuclear Material, and many others. In addition, its own domestic policies have helped shape norms of nonproliferation. According to Scott Sagan, “U.S. policymakers and scholars…too often ignore or underestimate the influence of U.S. domestic nuclear decisions on those of foreign governments… American nuclear policies play an important role in shaping—if not fully determining—the decisions made in other capitals regarding nuclear power, the nuclear fuel cycle, and nuclear security.”23 One example of U.S. influence on nuclear issues is its decision to abandon plutonium reprocessing in the 1970s. Once the Carter administration officially withdrew government support for reprocessing in the United States and cancelled construction of commercial breeder reactors in April 1977, it exerted pressure on other countries to do the same. The administration believed that this decision would end U.S. exports of reprocessing technologies, thus limiting their availability, and would ultimately lead other countries to follow suit. While France and Japan went forward with their plutonium reprocessing efforts, of the 32 countries that at some point in their history pursued reprocessing, 12 abandoned plans altogether due, at least in part, to U.S. diplomatic pressure.24 Writing in the Bulletin of Atomic Scientists in 1976, President Carter reflected on a world in which, “by 1990, developing nations alone will produce enough plutonium in their reactors to build 3000 Hiroshimasized bombs a year… This prospect of a nuclear future is particularly alarming if a large number of nations develop their own national plutonium reprocessing facilities with the capacity to extract plutonium from the spent fuel… [T]he danger is not so much in the spread of nuclear reactors themselves… The far greater danger lies in the spread of facilities for the enrichment of uranium and the reprocessing of spent reactor fuel.”25 He stated that while the United States has not approved the export of enrichment and reprocessing technologies, “some of the other principal suppliers of nuclear equipment have begun to make such sales…[making it] absolutely essential to halt the sale of such plants.” U.S. success in convincing these countries to forgo reprocessing was helped by the United States setting an example domestically by not reprocessing (and low uranium prices). Although countries that had already embarked on commercial reprocessing were not swayed to abandon their large investments for nonproliferation reasons, no countries have initiated commercial reprocessing programs since then. U.S. assistance to other countries in safeguards and nuclear security also helps accomplish its nonproliferation goals. Programs implemented by the Departments of Energy, Defense, and State, as well as the Nuclear Regulatory Commission, generally include technical, financial and/or “in-kind” assistance. Technical assistance is provided in a broad range of areas and has included, inter alia, help in: implementing state systems of accounting and control of nuclear materials (SSACs); training former nuclear weapons scientists in “peaceful” applications of their expertise; implementation of UN Security Council Resolution 1540; development of nuclear security regulations; and strengthening physical protection of nuclear facilities. Financial assistance has included: funding for implementation of IAEA safeguards and UN Security Council Resolution 1540; and contribution to the IAEA nuclear security fund for strengthening protection of nuclear materials. In-kind assistance includes provision of U.S. experts and equipment. At the highest levels, presidential initiatives can help underscore the importance of nonproliferation in U.S. foreign policy. For example, in April 2010, President Barack Obama convened a Nuclear Security Summit in Washington, D.C., the goal of which was to “come to a common understanding of the threat posed by nuclear terrorism, to agree to effective measures to secure nuclear material, and to prevent nuclear smuggling and terrorism.”26 More than 40 heads of state attended and made national commitments relating to nuclear security.27 The countries agreed on a work plan related to support for and implementation of UN Security Council Resolution 1540, the Convention on the Physical Protection of Nuclear Material (CPPNM), IAEA nuclear security efforts, and other activities to account for and protect weaponsusable nuclear material. A second nuclear security summit will be held in South Korea in 2012.

#### And, LFTR reactors are key – in situ reprocessing checks fissile diversion

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

\*LFTR = liquid fluoride thorium reactor

IN REPORTING ON THE THORIUM POWER MOVEMENT, I heard plenty of reasons why it would never work. After a year or so I classified them into three categories: market barriers, challenges related to waste and proliferation, and what I came to call the traditionalist argument. The market-based argument is simple: the nuclear power industry has a fuel today that is abundant and inexpensive. Why should it switch to a new, relatively unproven fuel? These assumptions are faulty (uranium may well not be inexpensive and plentiful much longer—see the comments of Srikumar Banerjee, chair of India’s Atomic Energy Commission, from chapter 7). More important, this argument does not take into account the broader costs and risks of uranium-based nuclear power, which have been highlighted by the Fukushima-Daiichi accident. There’s little chance of nuclear power’s fulfilling its promise until those costs are driven down—by shifting to thorium power. The waste and proliferation issues are more complicated, and I will break them down into four elements.“ In distilled form they sum up the objections to thorium from both the nuclear establishment and antinuclear groups. 1. The use of enriched uranium or plutonium in thorium fuel to ignite the fission reaction carries proliferation risks, and U-233 is as useful as Pu-239 for making nuclear bombs. This is the central claim of those who dismiss thorium’s prospects for reducing the nuclear waste stream: Solid-fuel thorium reactors produce both U233 (the fissile daughter element of Th232) and plutonium, so what’s the difference? What’s more, thorium reactors require lowenriched uranium or plutonium to initiate the fission reaction, thus creating more material that can be refined into bombs. The kernel of truth here is that the U233 (and thus the plutonium as well) created in the transmutation of thorium is contaminated by U232, one of the nastiest isotopes in the universe. With a half-life of less than 70 years, U-232 decays into the radioisotopes bismuth-212 and thallium-208, which emit intense gamma rays that make it very, very hard to handle and transport (not to mention reprocess) and that would very likely destroy the electronics of any weapon into which they were built. Theoretically, it's possible to make a bomb with U-233, but plutonium is much easier to make and does not come with the problematic U-232. Militaries will always opt for plutonium and U235, because they can't afford to expose their personnel to the deadly risks of U232. As for terrorists, they'd be better off simply buying natural uranium on the open market and finding a way to enrich it. The United States reportedly tested bombs with U-233 cores in the late 1950s, but no country has ever included it as a material as a part of its nuclear weapons program. It's useless even for the most zealous of hypothetical suicide bombers, because they’d probably never reach their target. 2. Most proposed thorium reactors require reprocessing to separate out the U-233 for use in fresh fuel. As with conventional uranium power plants that include reprocessing, bomb-making material is separated out, making it vulnerable to theft or diversion. This is a tired canard. Never mind that every nuclear fuel cycle currently in production or contemplated generates “bomb-making material” -- this statement ignores the realities of weapons building. Most Gen IV designs described in this chapter involve fuel recycling; indeed, as the Peterson report stated, recycling is critical to the future of nuclear power. To be sure, reprocessing spent fuel rods from a solid fuel thorium reactor is not a simple matter, whether you’re making bombs or new fuel. But it’s important to note that, as with all these arguments, external reprocessing is necessary only for solid fuel reactors, not LFTRs. Alone among advanced reactor designs, LFTRs have the capacity to reprocess the fuel in the reactor building itself, while the reactor is operating. There’s no opportunity for diversion unless you raid the entire plant, shut down the reactor, and figure out a way to separate and abscond with the weaponizable isotopes. Good luck with that. 3. The claim that radioactive waste from thorium reactors creates waste that would have to be isolated from the environment for only 500 years, whereas irradiated uranium-only fuel remains dangerous for hundreds of thousands of years, is false. Thorium-based reactors create long-lived fission products like technetium-99 (its half-life is more than 200,000 years), and thorium- 232 is extremely long lived (its half-life is 14 billion years). This argument ignores the larger context. The volume of fission products from thorium-based solid fuel reactors is about a tenth of that from conventional reactors. What's more, in small amounts, many of these fission products have become common in modern life. Technetium-99, for example, is powerful stuff, worthy of respectful treatment; it’s also commonly used, in a slightly altered form, in medical imaging procedures. Millions of patients ingest it every day without significant risk. The amounts of technetium-99 produced in solid-fuel thorium reactors would be negligible; in LFTRs it would be processed off along with other fission products and largely recycled. Some geological storage will be required, but in general waste from LFTRs decays to safe, stable states within a few hundred years, far less than the millennia required for the by-products of uranium reactors. As for Th-232, it's long lived but safe. The longerlived a radioactive element is, the lower its radioactivity, with its very long half-life, Th-232 is an exceedingly weak producer of radiation. It is so common that it's found in small amounts in virtually all rock, soil, and water. You could sleep with it under your pillow and suffer no ill effects. 4. Reprocessing of thorium fuel cycles has not been successful because uranium-232 is created along with uranium-233. U-232, which has a halflife of about 70 years, is extremely radioactive and is therefore quite dangerous in small quantities. U-232 is indeed extremely radioactive, but its brief half-life means that in less than a century half of it will have decayed to a stable form. Because isotopes decay at a geometric rate (50 percent of half of the original material, or one-quarter of the original, is still radioactive after another 70 years, then one-eighth, one-sixteenth, and so on), the decrease in radioactivity drops off quickly. Many, many hazardous materials are put in storage for centuries. We do not object to them. To summarize, the most common objections to thorium power from the perspective of radioactive waste and the proliferation of nuclear weapons are inflated for solid fuel reactors, and they simply do not apply to LFTRs. That leaves the traditionalist argument, which essentially echoes Milton Shaw and the WASH-1222 report from 1972: It can’t be done because it has never been done before. When I heard this brand of defeatism, it always came from someone with a vested interest in the current nuclear power establishment. I’ll explore the traditionalist argument in more detail in the final pages of this book.

#### And, the plan causes tech exports

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Export LFTR nuclear power plants. Simply generating inexpensive, nonpolluting LFTR power within the US is not enough to solve the global energy and environmental crises. The US should encourage exporting these small nuclear power plants because they can help the developing world end energy poverty, cut CO2 emissions globally, and become a $70 billion export industry to help the US economy. Russia, China, South Korea, and India all plan nuclear power plant exports. Lead! Who will lead? A transnational organization such as the United Nations? One nation such as the United States? Multiple state or provincial governments? Corporations? Leadership individuals? The United Nations can not solve our energy/climate crises. Dozens of IPCC-sponsored meetings only end in promises to agree and contention between rich and poor nations. Few nations will sacrifice national energy sovereignty for global good. The United States can lead in developing LFTR and thorium energy cheaper than coal. The US has the DOE national labs, the best university nuclear engineering programs, and the government/university/business tradition of entrepreneurism and commercialization. Political leadership is lacking. At the executive, congressional, and state levels elected officials fail to grasp the realities of economics, energy, environmental pollution, and global resource contention. Instead these politicians capitalize on the crowd-sourced fears of all things nuclear, and they attract feel good voters by promoting natural wind and solar energy sources, hiding the true social costs in grants, subsidies, and tax preferences that only benefit select, savvy businessmen. Yet there is an immense political opportunity for a leader to satisfy liberals and environmentalists by checking global warming and ending energy poverty, and also satisfy conservatives and businesses by avoiding carbon taxes, decreasing energy costs, and creating a new Boeing-size export industry. Governments have an opportunity to incentivize corporations to undertake LFTR research and development. Once power-plant- scale LFTRs are successfully demonstrated, and once the legal system permits, corporations can then lead in mass production of LFTRs. We can then rely on economic self-interest of corporations to produce and install LFTRs as fast as Boeing sells airplanes. The corporations will succeed because they can rely on the economic self-interest of 7 billion people in 250 nations to choose the cheapest source of clean, safe energy. This will end C02-emitting energy from coal and reduce demand for energy from other fossil fuels.

#### Unmitigated tech breakout causes runaway prolif and nuclear war

Sokolski 9 [Henry Sokolski, Executive Director of the Nonproliferation Policy Education Center, 6/1/2009, Avoiding a Nuclear Crowd, http://www.hoover.org/publications/policy-review/article/5534]

Finally, several new nuclear weapons contenders are also likely to emerge in the next two to three decades. Among these might be Japan, North Korea, South Korea, Taiwan, Iran, Algeria, Brazil (which is developing a nuclear submarine and the uranium to fuel it), Argentina, and possibly Saudi Arabia (courtesy of weapons leased to it by Pakistan or China), Egypt, Syria, and Turkey. All of these states have either voiced a desire to acquire nuclear weapons or tried to do so previously and have one or more of the following: A nuclear power program, a large research reactor, or plans to build a large power reactor by 2030. With a large reactor program inevitably comes a large number of foreign nuclear experts (who are exceedingly difficult to track and identify) and extensive training, which is certain to include nuclear fuel making.19 Thus, it will be much more difficult to know when and if a state is acquiring nuclear weapons (covertly or overtly) and far more dangerous nuclear technology and materials will be available to terrorists than would otherwise. Bottom line: As more states bring large reactors on line more will become nuclear-weapons-ready — i.e., they could come within months of acquiring nuclear weapons if they chose to do so.20 As for nuclear safeguards keeping apace, neither the iaea’s nuclear inspection system (even under the most optimal conditions) nor technical trends in nuclear fuel making (e.g., silex laser enrichment, centrifuges, new South African aps enrichment techniques, filtering technology, and crude radiochemistry plants, which are making successful, small, affordable, covert fuel manufacturing even more likely)21 afford much cause for optimism. This brave new nuclear world will stir existing security alliance relations more than it will settle them: In the case of states such as Japan, South Korea, and Turkey, it could prompt key allies to go ballistic or nuclear on their own. Nuclear 1914 At a minimum, such developments will be a departure from whatever stability existed during the Cold War. After World War II, there was a clear subordination of nations to one or another of the two superpowers’ strong alliance systems — the U.S.-led free world and the Russian-Chinese led Communist Bloc. The net effect was relative peace with only small, nonindustrial wars. This alliance tension and system, however, no longer exist. Instead, we now have one superpower, the United States, that is capable of overthrowing small nations unilaterally with conventional arms alone, associated with a relatively weak alliance system ( nato) that includes two European nuclear powers (France and the uk). nato is increasingly integrating its nuclear targeting policies. The U.S. also has retained its security allies in Asia (Japan, Australia, and South Korea) but has seen the emergence of an increasing number of nuclear or nuclear-weapon-armed or -ready states. So far, the U.S. has tried to cope with independent nuclear powers by making them “strategic partners” (e.g., India and Russia), nato nuclear allies (France and the uk), “non-nato allies” (e.g., Israel and Pakistan), and strategic stakeholders (China); or by fudging if a nation actually has attained full nuclear status (e.g., Iran or North Korea, which, we insist, will either not get nuclear weapons or will give them up). In this world, every nuclear power center (our European nuclear nato allies), the U.S., Russia, China, Israel, India, and Pakistan could have significant diplomatic security relations or ties with one another but none of these ties is viewed by Washington (and, one hopes, by no one else) as being as important as the ties between Washington and each of these nuclear-armed entities (see Figure 3). There are limits, however, to what this approach can accomplish. Such a weak alliance system, with its expanding set of loose affiliations, risks becoming analogous to the international system that failed to contain offensive actions prior to World War I. Unlike 1914, there is no power today that can rival the projection of U.S. conventional forces anywhere on the globe. But in a world with an increasing number of nuclear-armed or nuclear-ready states, this may not matter as much as we think. In such a world, the actions of just one or two states or groups that might threaten to disrupt or overthrow a nuclear weapons state could check U.S. influence or ignite a war Washington could have difficulty containing. No amount of military science or tactics could assure that the U.S. could disarm or neutralize such threatening or unstable nuclear states.22 Nor could diplomats or our intelligence services be relied upon to keep up to date on what each of these governments would be likely to do in such a crisis (see graphic below): Combine these proliferation trends with the others noted above and one could easily create the perfect nuclear storm: Small differences between nuclear competitors that would put all actors on edge; an overhang of nuclear materials that could be called upon to break out or significantly ramp up existing nuclear deployments; and a variety of potential new nuclear actors developing weapons options in the wings. In such a setting, the military and nuclear rivalries between states could easily be much more intense than before. Certainly each nuclear state’s military would place an even higher premium than before on being able to weaponize its military and civilian surpluses quickly, to deploy forces that are survivable, and to have forces that can get to their targets and destroy them with high levels of probability. The advanced military states will also be even more inclined to develop and deploy enhanced air and missile defenses and long-range, precision guidance munitions, and to develop a variety of preventative and preemptive war options. Certainly, in such a world, relations between states could become far less stable. Relatively small developments — e.g., Russian support for sympathetic near-abroad provinces; Pakistani-inspired terrorist strikes in India, such as those experienced recently in Mumbai; new Indian flanking activities in Iran near Pakistan; Chinese weapons developments or moves regarding Taiwan; state-sponsored assassination attempts of key figures in the Middle East or South West Asia, etc. — could easily prompt nuclear weapons deployments with “strategic” consequences (arms races, strategic miscues, and even nuclear war). As Herman Kahn once noted, in such a world “every quarrel or difference of opinion may lead to violence of a kind quite different from what is possible today.”23 In short, we may soon see a future that neither the proponents of nuclear abolition, nor their critics, would ever want. None of this, however, is inevitable.

#### Federal action is key to reverse industry decline and influence reactor adoption

Wallace and Williams, 12 [Michael, Senior Adviser, U.S. Nuclear Energy Project, Sarah, CSIS, “Nuclear Energy in America: Preventing It’s Early Demise,” http://csis.org/files/publication/120417\_gf\_wallace\_williams.pdf]

America’s nuclear energy industry is in decline. Low natural gas prices, financing hurdles, new safety and security requirements, failure to resolve the waste issue and other factors are hastening the day when existing reactors become uneconomic, making it virtually impossible to build new ones. Two generations after the United States took this wholly new and highly sophisticated technology from laboratory experiment to successful commercialization, our nation is in danger of losing an industry of unique strategic importance, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future. The pace of this decline, moreover, could be more rapid than most policymakers and stakeholders anticipate. With 104 operating reactors and the world’s largest base of installed nuclear capacity, it has been widely assumed that the United States—even without building many new plants—would continue to have a large presence in this industry for some decades to come, especially if existing units receive further license extensions. Instead, current market conditions are such that growing numbers of these units are operating on small or even negative profit margins and could be retired early. Our nation is in danger of losing an industry of unique strategic importance, unique potential for misuse, and unique promise for addressing the environmental and energy security demands of the future.60 | Center for Strategic and International Studies Meanwhile, China, India, Russia, and other countries are looking to significantly expand their nuclear energy commitments. By 2016, China could have 50 nuclear power plants in operation, compared with only 14 in 2011. India could add 8 new plants and Russia 10 in the same time frame. These trends are expected to accelerate out to 2030, by which time China, India, and Russia could account for nearly 40 percent of global nuclear generating capacity. Meanwhile, several smaller nations, mostly in Asia and the Middle East, are planning to get into the nuclear energy business for the first time. In all, as many as 15 new nations could have this technology within the next two decades. Meanwhile, America’s share of global nuclear generation is expected to shrink, from about 25 percent today to about 14 percent in 2030, and—if current trends continue—to less than 10 percent by mid-century. With the center of gravity for global nuclear investment shifting to a new set of players, the United States and the international community face a difficult set of challenges: stemming the spread of nuclear weapons-usable materials and know-how; preventing further catastrophic nuclear accidents; providing for safe, long-term nuclear waste management; and protecting U.S. energy security and economic competitiveness. In this context, federal action to reverse the American nuclear industry’s impending decline is a national security imperative. The United States cannot afford to become irrelevant in a new nuclear age. Our nation’s commercial nuclear industry, its military nuclear capabilities, and its strong regulatory institutions can be seen as three legs of a stool. All three legs are needed to support America’s future prosperity and security and to shape an international environment that is conducive to our long-term interests. Three specific aspects of U.S. leadership are particularly important. First, managing the national and global security risks associated with the spread of nuclear technology to countries that don’t necessarily share the same perspective on issues of nonproliferation and nuclear security or may lack the resources to implement effective SHARE OF NET GLOBAL NUCLEAR GENERATION 1980-2030 Source: Energy Information Agency (EIA) databaseGlobal Forecast 2012 | 61 safeguards in this area. An approach that relies on influence and involvement through a viable domestic industry is likely to be more effective and less expensive than trying to contain these risks militarily. Second, setting global norms and standards for safety, security, operations, and emergency response. As the world learned with past nuclear accidents and more recently with Fukushima, a major accident anywhere can have lasting repercussions everywhere. As with nonproliferation and security, America’s ability to exert leadership and influence in this area is directly linked to the strength of our domestic industry and our active involvement in the global nuclear enterprise. A strong domestic civilian industry and regulatory structure have immediate national security significance in that they help support the nuclear capabilities of the U.S. Navy, national laboratories, weapons complex, and research institutions. Third, in the past, the U.S. government could exert influence by striking export agreements with countries whose regulatory and legal frameworks reflected and were consistent with our own nonproliferation standards and commitments. At the same time, our nation set the global standard for effective, independent safety regulation (in the form of the Nuclear Regulatory Commission), led international efforts to reduce proliferation risks (through the 1970 NPT Treaty and other initiatives), and provided a model for industry self-regulation. The results were not perfect, but America’s institutional support for global nonproliferation goals and the regulatory behaviors it modeled clearly helped shape the way nuclear technology was adopted and used elsewhere around the world. This influence seems certain to wane if the United States is no longer a major supplier or user of nuclear technology. With existing nonproliferation and safety and security regimes looking increasingly inadequate in this rapidly changing global nuclear landscape, American leadership and leverage is more important and more central to our national security interests than ever. To maintain its leadership role in the development, design, and operation of a growing global nuclear energy infrastructure, the next administration, whether Democrat or Republican, must recognize the invaluable role played by the commercial U.S. nuclear industry and take action to prevent its early demise.

#### Thorium is key – spurs elimination of plutonium stockpiles

Donohue, 8/27/12 [Nathan Donohue is a research intern for the Project on Nuclear Issues, CSIS, “Thorium and its Value in Nonproliferation”, <http://csis.org/blog/thorium-and-its-value-nonproliferation>]

The Federation of American Scientists (FAS) recently featured an article on their Science Wonk blog entitled “What about thorium?” As the article discussed, thorium is an element, which like uranium, has the ability to be utilized to produce nuclear power. More importantly, thorium fueled reactors are reported to be more proliferation resistant than uranium fueled reactors. However, despite these assertions, thorium has almost universally been ignored in favor of uranium based nuclear power reactors. The purpose of this piece is to conduct a review of thorium and to develop a better understanding of thorium’s nonproliferation benefits as it relates to nuclear power production. As FAS notes, natural thorium is a fertile material, while not itself fissionable, can be converted into a fissile material suitable to sustain a nuclear fission chain reaction. Accordingly, when natural thorium captures neutrons it becomes a new isotope of thorium which then goes through a process of decay where over a period of weeks, the thorium actually turns into uranium in the form of U-233. Unlike natural thorium, this U-233 is a fissile material suitable to sustain a nuclear fission chain reaction. The use of thorium to produce nuclear power is not a new concept. Research into thorium began in the late 1950’s and in 1965, Alvin Weinberg, the head of the Oak Ridge National Laboratory, and his team [built](http://www.wired.com/magazine/2009/12/ff_new_nukes/) a working thorium reactor using a molten salt bath design. Thorium was used to power one of the first commercial nuclear power plants in the U.S. in Shippingport, Pennsylvania in 1977. Nevertheless, research into thorium never found a foothold in the U.S. nuclear power infrastructure. By 1973, thorium research and development was fading to the uranium based focus of the U.S. nuclear industry, which was in the process of developing 41 new nuclear plants, all of which used uranium. The Shippingport facility was one of the last vestiges of thorium research in the U.S. for decades. Recently there has been a renewed focus on thorium based nuclear power, specifically in regards to the benefits related to spent fuel, [including](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) research involving the European Commission, India, Canada, Slovakia, the Russian Federation, China, France and the Republic of Korea. The utilization of thorium is purported to have the ability to reduce spent fuel waste by upwards of 50% while at the same time reducing the amount of plutonium within the fuel. To that end, thorium fuel designs are regarded as a better alternative for power production in terms of the plutonium proliferation risk inherent in spent fuel from uranium-fueled reactors. For example, all 104 reactors in the U.S. use uranium fuel. In these reactors, when the uranium in the form of U-238 captures extra neutrons, it goes through a process of decay whereby plutonium in the form of Pu-239 is produced. The spent fuel can then be reprocessed to isolate and remove this plutonium, which can then be used in the core of a nuclear weapon. Roughly 13 kilograms (kg) of reactor grade plutonium is necessary to power a nuclear weapon. In total, these 104 U.S. reactors accumulate roughly 2,000 tons of spent fuel per year. The 2,000 tons of waste produced annually by these nuclear utilities, contains roughly [25,520](http://www.fas.org/rlg/980826-pu.htm) kg of plutonium or enough plutonium to build 1,963 nuclear weapons a year. Globally, the total world generation of reactor-grade plutonium in spent fuel is equal to roughly 70 tons annually; more than two times what the U.S. produces. Conversely, there is the thorium seed and blanket design. This reactor [concept](http://www.wired.com/magazine/2009/12/ff_new_nukes/) is based on a design comprised of inner seed rods of uranium which provide neutrons to an outer blanket of thorium-uranium dioxide rods, creating U-233, which in turn powers the nuclear reactor. The important difference with this design is in the nature of the spent fuel. As advocates of thorium such as the U.S. company Lightbridge purport, this process would realize a significant reduction in the “quantity and quality” of plutonium produced within the spent fuel, achieving upwards of an 80% reduction in plutonium. For [example](http://www.americanscientist.org/issues/feature/2003/5/thorium-fuel-for-nuclear-energy/5.), “a thorium-fueled reactor …would produce a total of 92 kilograms of plutonium per gigawatt-year of electricity generated, whereas a conventional water-cooled reactor would result in 232 kilograms.” In addition to a lower percentage of plutonium in the spent fuel, the composition of the plutonium produced is different as well, featuring a higher content of the plutonium isotopes Pu-238, Pu-240, and Pu-242. Weapons-grade plutonium requires roughly 90% plutonium in the form of Pu-239. Plutonium with higher contents of Pu-238 and Pu-240 is inherently unpredictable, and can spontaneously fission, making it “difficult or impossible to compress a bomb core containing several kilograms of plutonium to supercriticality before the bomb [disassembles] with a greatly reduced yield.” This reduces the reliability of a given nuclear weapon, thus making the thorium process less suitable for the development of plutonium for a nuclear weapon**.** The International Atomic Energy Agency [considers](http://hdl.handle.net/1721.1/29956) plutonium containing more than 81% Pu-238 “not weapons-usable.” Although thorium offers the ability to reduce the plutonium risk inherent in spent fuel, it does not eliminate the need for enriched uranium. Specifically, Lightbridge’s seed and blanket fuel technology would require uranium enriched to less than 20 % in both the seed and blanket fuel rods. Equally significant, the U-233 that is produced in the seed and blanket design poses its own proliferation concern. A nuclear weapon can be constructed with a significant quantity of U-233, which the IAEA defines as [**8**](http://moltensalt.org/references/static/downloads/pdf/ORNL-6952.pdf) **kg of U-233**, and both the U.S. and India have detonated nuclear devices which utilized U-233. At the same time though, U-233 produced through this design also contains a small amount of the uranium isotope U-232, which emits a powerful, highly penetrating gamma ray. As [noted](http://www.iaea.org/Publications/Magazines/Bulletin/Bull511/51104894344.pdf) by Ray Sollychin, the Executive Director of the Neopanora Institute-Network of Energy Technologies, this reportedly makes “U233 weapons significantly more difficult to conceal and much more dangerous to handle.” In addition, reactors which use a thorium based seed and blanket design are engineered so that the U-233 which is produced is simultaneously denatured or blended with U-238, further reducing its suitability for a nuclear weapon. Moreover, the blanket is designed to remain within the reactor for upwards of nine to twelve years. This allows for the U-233 that is produced within the blanket to burn “in situ.” Lastly, any attempt to prematurely remove the blanket and separate the U-233 from the U-238, U-234 and U-236 isotopes [will](http://hdl.handle.net/1721.1/29956) also “remove the fissile U-235 from the resulting enriched steam,” once again making it unsuitable for a nuclear weapon. From this brief review of thorium and its properties, it appears clear that from a proliferation standpoint, that thorium fueled reactors provide for a safer nuclear power production process. In fact, it begs the question why thorium was overlooked in the first place. The simple answer is that the U.S. nuclear infrastructure was originally designed to facilitate mass quantities of plutonium for the production of a nuclear weapons arsenal. According to an article by Richard Martin in Wired magazine, “Locked in a struggle with a nuclear- armed Soviet Union, the U.S. government in the 60’s chose to build uranium-fueled reactors — in part because they produce plutonium that can be refined into weapons-grade material.” During the Cold War, maintaining nuclear parity with the Soviets was an overarching goal. Yet, with the end of the Cold War, the focus has shifted from acquiring nuclear weapons to stymying their development by both state and non-state actors. Therefore, the plutonium byproduct of the global nuclear power infrastructure has now become a liability and a proliferation risk. As the IAEA has [noted](http://www-pub.iaea.org/mtcd/publications/pdf/te_1450_web.pdf), “for nuclear power to be accepted as a significant contributor of primary energy in the next century, it should be based on a fuel cycle, which is highly proliferation-resistant.” For this reason, further research and development of thorium needs to be explored, not only in terms of seed and blanket technology but other thorium based designs as well, including thorium-based Pebble Bed Reactor, fast reactors (liquid metal cooled and gas cooled); and advanced designs such as Molten Salt Reactor and Accelerator Driven System.

#### And, in-situ reprocessing removes plutonium – solves extinction from terrorism

Rhodes, 12 [February, Professor Chris Rhodes is a writer and researcher. He studied chemistry at Sussex University, earning both a B.Sc and a Doctoral degree (D.Phil.); rising to become the youngest professor of physical chemistry in the U.K. at the age of 34. A prolific author, Chris has published more than 400 research and popular science articles (some in national newspapers: The Independent and The Daily Telegraph) He has recently published his first novel, "University Shambles" was published in April 2009 (Melrose Books), “Hopes Build for Thorium Nuclear Energy”, <http://oilprice.com/Alternative-Energy/Nuclear-Power/Hopes-Build-for-Thorium-Nuclear-Energy.html>]

There is much written to the effect that thorium might prove a more viable nuclear fuel, and an energy industry based upon it, than the current uranium-based process which serves to provide both energy and weapons - including "depleted uranium" for armaments and missiles. There are different ways in which energy might be extracted from thorium, one of which is the accelerator-driven system (ADS). Such accelerators need massive amounts of electricity to run them, as all particle accelerators do, but these are required to produce a beam of protons of such intensity that until 10 years ago the prevailing technology meant that it could not have been done. As noted below, an alternative means to use thorium as a fuel is in a liquid fluoride reactor (LFR), also termed a molten salt reactor, which avoids the use of solid oxide nuclear fuels. Indeed, China has made the decision to develop an LFR-based thorium-power programme, to be active by 2020.¶ Rather like nuclear fusion, the working ADS technology is some way off, and may never happen, although Professor Egil Lillestol of Bergen University in Norway is pushing that the world should use thorium in such ADS reactors. Using thorium as a nuclear fuel is a laudable idea, as is amply demonstrated in the blog "Energy from Thorium" (http://thoriumenergy.blogspot.com/). However, the European Union has pulled the plug on funding for the thorium ADS programme, which was directed by Professor Carlo Rubbia, the Nobel Prize winner, who has now abandoned his efforts to press forward the programme, and instead concentrated on solar energy, which was another of his activities. Rubbia had appointed Lillestol as leader of the CERN physics division over two decades ago, in 1989, who believes that the cause is not lost.¶ Thorium has many advantages, not the least being its greater abundance than uranium. It is often quoted that there is three times as much thorium as there is uranium. Uranium is around 2 - 3 parts per million in abundance in most soils, and this proportion rises especially where phosphate rocks are present, to anywhere between 50 and 1000 ppm. This is still only in the range 0.005% - 0.1% and so even the best soils are not obvious places to look for uranium. However, somewhere around 6 ppm as an average for thorium in the Earth's crust is a reasonable estimate. There are thorium mineral deposits that contain up to 12% of the element, located at the following tonnages in Turkey (380,000), Australia (300,000), India (290,000), Canada and the US combined (260,000)... and Norway (170,000), perhaps explaining part of Lillestol's enthusiasm for thorium based nuclear power. Indeed, Norway is very well endowed with natural fuel resources, including gas, oil, coal, and it would appear, thorium.¶ An alternative technology to the ADS is the "Liquid Fluoride Reactor" (LFR), which is described and discussed in considerable detail on the <http://thoriumenergy.blogspot.com/> blog, and reading this has convinced me that the LFR may provide the best means to achieve our future nuclear energy programme. Thorium exists naturally as thorium-232, which is not of itself a viable nuclear fuel. However, by absorption of relatively low energy "slow" neutrons, it is converted to protactinium 233, which must be removed from the reactor (otherwise it absorbs another neutron and becomes protactinium 234) and allowed to decay over about 28 days to uranium 233, which is fissile, and can be returned to the reactor as a fuel, and to breed more uranium 233 from thorium. The "breeding" cycle can be kicked-off using plutonium say, to provide the initial supply of neutrons, and indeed the LFR would be a useful way of disposing of weapons grade plutonium and uranium from the world's stockpiles while converting it into useful energy.¶ The LFR makes in-situ reprocessing possible, much more easily than is the case for solid-fuel based reactors. I believe there have been two working LFR's to date, and if implemented, the technology would avoid using uranium-plutonium fast breeder reactors, which need high energy "fast" neutrons to convert uranium 238 which is not fissile to plutonium 239 which is. The LFR is inherently safer and does not require liquid sodium as a coolant, while it also avoids the risk of plutonium getting into the hands of terrorists. It is worth noting that while uranium 235 and plutonium 239 could be shielded to avoid detection as a "bomb in a suitcase", uranium 233 could not, because it is always contaminated with uranium 232, which is a strong gamma-ray emitter, and is far less easily concealed.¶ It has been claimed that thorium produces "250 times more energy per unit of weight" than uranium. Now this isn't simply a "logs versus coal on the fire" kind of argument, but presumably refers to the fact that while essentially all the thorium can be used as a fuel, the uranium must be enriched in uranium 235, the rest being "thrown away" and hence wasted as "depleted" uranium 238 (unless it is bred into plutonium). If both the thorium and uranium were used to breed uranium 233 or plutonium 239, then presumably their relative "heat output" weight for weight should be about the same as final fission fuels? If this is wrong, will someone please explain this to me as I should be interested to know?¶ However, allowing that the LFR in-situ reprocessing is a far easier and less dangerous procedure, the simple sums are that contained in 248 million tonnes of natural uranium, available as a reserve, are 1.79 million tonnes of uranium 235 + 246.2 million tonnes of uranium 238. Hence by enrichment 35 million tonnes (Mt) of uranium containing 3.2% uranium 235 (from the original 0.71%) are obtained. This "enriched fraction" would contain 1.12 Mt of (235) + 33.88 Mt of (238), leaving in the other "depleted" fraction 248 - 35 Mt = 213 Mt of the original 248 Mt, and containing 0.67 Mt (235) + 212.3 Mt (238). Thus we have accessed 1.79 - 0.67 = 1.12 Mt of (235) = 1.12/224 = 4.52 x 10\*-3 or 0.452% of the original total uranium. Thus on a relative basis thorium (assuming 100% of it can be used) is 100/0.452 = 221 times as good weight for weight, which is close to the figure claimed, and a small variation in enrichment to a slightly higher level as is sometimes done probably would get us to an advantage factor of 250!¶ Plutonium is a by-product of normal operation of a uranium-fuelled fission reactor. 95 to 97% of the fuel in the reactor is uranium 238. Some of this uranium is converted to plutonium 239 and plutonium 241 - usually about 1000 kg forms after a year of operation. At the end of the cycle (a year to 2 years, typically), very little uranium 235 is left and about 30% of the power produced by the reactor actually comes from plutonium. Hence a degree of "breeding" happens intrinsically and so the practical advantage of uranium raises its head from 1/250 (accepting that figure) to 1/192, which still weighs enormously in favour of thorium!¶ As a rough estimate, 1.4 million tonnes of thorium (about one third the world uranium claimed, which is enough to last another 50 years as a fission fuel) would keep us going for about 200/3 x 50 = 3,333 years. Even if we were to produce all the world's electricity from nuclear that is currently produced using fossil fuels (which would certainly cut our CO2 emissions), we would be O.K. for 3,333/4 = 833 years. More thorium would doubtless be found if it were looked for, and so the basic raw material is not at issue. Being more abundant in most deposits than uranium, its extraction would place less pressure on other fossil fuel resources used for mining and extracting it. Indeed, thorium-electricity could be piped in for that purpose.¶ It all sounds great: however, the infrastructure would be huge to switch over entirely to thorium, as it would to switch to anything else including hydrogen and biofuels. It is this that is the huge mountain of resistance there will be to all kinds of new technology. My belief is that through cuts in energy use following post peak oil (and peak gas), we may be able to produce liquid fuels from coal, possibly using electricity produced from thorium, Thorium produces less of a nuclear waste problem finally, since fewer actinides result from the thorium fuel cycle than that from uranium. Renewables should be implemented wherever possible too, in the final energy mix that will be the fulcrum on which the survival of human civilization is poised.

#### And, dual use makes other reactors too risky – federal investment streamlines tech transfers

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Advanced nuclear power must be proliferation resistant. Nuclear weapons can cause terrible destruction of whole cities and contaminate entire regions, so expansion of nuclear power must come with assurances that the risk of proliferation of nuclear weapons is not increased. The technology for making such weapons is widely known, although the process is difficult and expensive. Building commercial nuclear power plants has not led to weapons development; nations that have nuclear weapons have developed them with purposeful programs and facilities. However dual-use technologies such as centrifuge enrichment of U-235 that can make fuel for PWRs can be adapted to make highly enriched uranium for weapons. After President Eisenhower’s Atoms for Peace speech the US helped nations to acquire the knowledge and materials to use nuclear technology for peaceful purposes. Unexpectedly this knowledge led India to develop nuclear weapons instead. Selling advanced nuclear power plants worldwide does not require providing each nation with the technical skills and materials to build nuclear power plants or nuclear weapons. Consider the airplane and jet engine industry: nations want prestigious national airlines. Fully 83 countries, from Algeria to Yemen, operate airlines using the Boeing 747 airliner, yet these nations do not have their own airframe or engine production or maintenance capabilities. General Electric makes a business of maintaining and overhauling engines at GE’s own service centers. This is a technology-transfer-resistant model suitable for LFTR installation and maintenance. The liquid fluoride thorium reactor is proliferation resistant. LFTR requires fissile material to be transported to the site for startup, but not thereafter. LFTR then creates and burns fissile U-233 that conceivably could be used instead for a nuclear weapon. Would this ever happen? China, USA, Russia, India, UK, France, Pakistan, and Israel, which account for 57% of global CO2 emissions, already have nuclear weapons and no incentive to subvert LFTR technology. So just implementing LFTRs in these nations would be a big step in addressing global warming. Many additional nations, such as Canada, Japan, and South Africa, have the capability to build nuclear weapons but have chosen not to, so there is no incentive for them to subvert LFTR technology for this purpose. Should LFTRs be implemented in other non-weapons states? Certainly terrorists could not steal this uranium dissolved in a molten salt solution along with even more radioactive fission products inside a sealed reactor. IAEA safeguards include physical security, accounting and control of all nuclear materials, surveillance to detect tampering, and intrusive inspections. LFTR’s neutron economy contributes to securing its inventory of nuclear materials. Neutron absorption by uranium-233 produces about 2.4 neutrons per fission—one to drive a subsequent fission and another to drive the conversion of Th-232 to U-233 in the blanket molten salt. Taking into account neutron losses from capture by protactinium and other nuclei, a well-designed LFTR reactor will direct just about 1.00 neutrons per fission to thorium transmutation. This delicate balance doesn’t create excess U-233, just enough to generate fuel indefinitely. If this conversion ratio could be increased to 1.01, a 100 MW LFTR might generate kilogram of excess U-233 per year. If meaningful quantities of uranium-233 are misdirected for non-peaceful purposes, the reactor will report the diversion by stopping because of insufficient U-233 to maintain a chain reaction. Yet a sovereign nation or revolutionary group might expel IAEA observers, stop the LFTR, and attempt to remove the U-233 for weapons. Accomplishing this would require that skilled engineers, working in a radioactive environment, modify the reactor's fluorination equipment to separate uranium from the fuel salt instead of the thorium blanket salt. What would happen to them? The neutrons that produce U-233 also produce contaminating U-232, whose decay products emit 2.6 MeV penetrating gamma radiation, hazardous to weapons builders and obvious to detection monitors. The U-232 decays via a cascade of elements to thallium- 208, which builds up and emits the radiation. Depending on design specifics, the proportion of U-232 would be about 0.13% for a commercial power reactor. A year after separation, a weapons worker one meter from a subcritical 5 kg sphere of such U-233 would receive a radiation dose of 43 mSv/hr, compared to 0.003 mSv/hr from plutonium, even less from U-235. Death becomes probable after 72 hours exposure. After ten years this radiation triples. A resulting weapons would be highly radioactive and therefore dangerous to military workers nearby. The penetrating 2.6 MeV gamma radiation is an easily detected marker revealing the presence of such U-233, possibly even from a satellite. U-232 can not be removed chemically, and centrifuge separation from U-233 would make the centrifuges too radioactive to maintain. Conceivably, nuclear experts might try to stop the reactor, chemically extract the uranium, and devise chemistry to remove the intermediate elements of the U-232 decay chain before the thallium is formed, except that the isotopes are continually replaced by U-232 decay. They might try to quickly separate the small amount of Pa-233 from the uranium and let it decay to pure U-233, but they would have to design and build a special chemical plant within the radioactive reactor. Bomb-makers might attempt quickly fabricate a weapon from newly separated U-233 before radiation hazards become lethal; even so there will be sufficient U-232 contamination that penetrating 2.6 MeV gamma rays will be readily detected. The challenge of developing and perfecting such new processes will be more difficult and expensive than creating a purpose-built weapons factory with known technology, such as centrifuge enrichment of U-235 conducted in Iran or PUREX for extracting plutonium from solid fuel irradiated in LWRs. Bruce Hoglund wrote a fuller report of the challenges to would-be bomb makers, and there is a discussion in the comments of the energy from thorium blog, both linked in the references section. A LFTR operating under IAEA safeguards might additionally be protected by injecting U-238 from a remotely controlled tank of U-238. The U-238 would dilute (denature) the U-233 to make it useless for weapons, but it would also stop the reactor and ruin the fuel salt for further use. For personnel safety, any U-233 material operations must be accomplished by remote handling equipment within a radioactively shielded hot cell. This can be designed to make it very hard for any insiders or outsiders to remove material from the hot cell. Another hurdle for the would-be pilferer uranium from 700° C molten salt is the retained radioactive fission products. Even with a l-hour cooling period to allow decay of the short-lived isotopes, the salt still releases ~350 W/liter of heat. That heat comes from deadly ionizing radiation that would kill a nearby pilferer in minutes unless shielded by meters of concrete or water or heavy lead. This fission product radiation is the same self protection that protects spent LWR fuel from theft. The single-fluid DMSR is highly proliferation resistant. The DMSR contains enough U-238 mixed with fissile U-233 and U-235 that the uranium can not sustain the rapid fission reaction necessary for a nuclear weapon. Uranium enriched to less than 20% U-235 is termed LEU, low-enriched uranium. The LEU fuel is not suitable for a nuclear weapon, which typically requires over 90% U-235. The DMSR with at least 80% U-238 is said to be denatured with it. The DMSR has less chemical processing equipment than the two- fluid LFTR, which uses fluorine chemistry to direct U-233 generated in the thorium blanket to the core. The DMSR has no chemical processing equipment in the reactor plant that might somehow be modified to divert U-233 for a weapons program. Because of the substantial amount of U-238 in the DMSR, it does breed plutonium from neutron capture, just as does a standard LWR. Some Pu-239 fissions. However the fissile Pu-239 isotope that might be desired for a weapon is only 31% of the plutonium, mixed with other isotopes (Pu-238, 240, 241, 242) that make the plutonium unsuitable for a weapon. Because the plutonium is dissolved in the fuel salt, there is no opportunity to remove it early to obtain weapons grade Pu-239 before neutrons convert it to other isotopes, as in a LWR, CANDU, RBMK, or military plutonium production reactor. Further, plutonium’s chemistry makes it difficult to remove from the salt. Also, the salt contains highly radioactive fission products as well as U-232, whose decay daughters emit a penetrating 2.6 MeV gamma ray. DMSR is the most proliferation-resistant nuclear reactor. There are easier paths than U-233 to make nuclear weapons. Pakistan has illustrated how a developing nation can make uranium weapons using centrifuge enrichment; in a dual path it simultaneously developed the methods to extract weapons grade plutonium from uranium reactors. India and North Korea developed plutonium weapons from heavy water or graphite moderated reactors with online fuel exchange capability. Iran has built centrifuge enrichment plants capable of making highly enriched U-235 for nuclear weapons. These proven weapons paths eliminate the incentive for nations to try to develop nuclear weapons via the technically challenging and expensive U-233 path. Only a determined, well-funded effort on the scale of a national program could overcome the obstacles to illicit use of uranium- 232/233 produced in a LFTR reactor. Such an effort would certainly find that it was less problematic to pursue the enrichment of natural uranium or the breeding of plutonium. LFTR reduces existing weapons proliferation risks. Deploying LFTRs on a global scale will not increase the risk of nuclear weapons proliferation, but rather decrease it. Starting up LFTRs with existing plutonium can consume inventories of this weapons-capable material. The thorium-uranium fuel cycle reduces demand for U-235 enrichment plants, which can make weapons material nearly as easily as power reactor fuel. Abundant energy cheaper than coal can increase prosperity and enable lifestyles that lead to sustainable populations, reducing the potential for wars over resources.

### 1ac china

#### ADVANTAGE TWO IS CHINA—

#### Current Chinese investments make thorium development inevitable, the plan prevents a monopoly through intellectual property control

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

GIVEN ALL THIS, I HAD TO ASK, why bother? Blessed with large¶ thorium reserves and an existing nuclear R&D capacity that,¶ operational snafus notwithstanding, is world class, India, rather than¶ taking a laborious three-stage route to thorium-based nuclear power,¶ could start building thorium reactors—most simply and inexpensively,¶ liquid fluoride thorium reactors—tomorrow. The reasons it’s not doing¶ so have to do with institutional inertia, national pride, and supposed¶ national security concerns~such as, for instance, building its nuclear¶ arms stockpile. China, meanwhile, is taking a more catholic approach¶ to its nuclear power program, including investigating LFTRs.¶ In a development heralded by thorium advocates around the world,¶ China officially announced in February 2011 at a Shanghai scientific¶ conference that it will begin a program to develop a thorium-fueled¶ molten salt reactor (MSR), aka an LFTR. The project was first reported¶ on the mainland in the Wen Hui Baa newspaper. I broke the news in¶ the West in a story for Wired.com. I first heard about it at a conference¶ in Oak Ridge with Sorensen and other thorium activists. The phrase¶ “Sputnik moment” was used freely. The world’s most dynamic¶ economyhad thrown down the thorium gauntlet. While India chose to¶ slog up the long hill of its three-stage program, China was going straight¶ for the prize.¶ India’s three-stage program calls for gradually phasing in thorium¶ fuel rods in advanced heavy-water reactors. The Chinese program, in¶ contrast, marks the largest national initiative to pursue thorium MSRs¶ to date. One of the world’s largest consumers of coal for electricity, the¶ People’s Republic has embarked on a public campaign to shift toward¶ less noxious energy sources, including nuclear power. The massive¶ Three Gorges dam project, one of the largest public works projects in¶ history, was designed to produce 18.2 gigawatts of electricity and has¶ also engendered fierce criticism and internal protest. Electricity¶ demand is growing at nearly 10 percent a year, and Chinese officials,¶ often willing to ignore international objections to its domestic policies,¶ are committed to using nuclear power as a source of clean, inexpensive¶ energy.¶ The nuclear ambitions of India and China are similarly outsized, but¶ the cultures and capabilities of the two countries are quite different. I¶ used to live in Hong Kong, and I’ve traveled extensively in both¶ northern India and southeastern China. The differences in the¶ countries, for me, can be summed up with a glance at their railways:¶ The Indian rail system, a source of national pride since the days of the¶ raj, is known neither for its modernity nor its efficiency. In September¶ 2011 the passengers on a cross-country journey were surprised to learn¶ that their train had somehow traveled more than 600 miles in the¶ wrong direction. This was treated as a newsworthy but not completely¶ unheard-of experience. The passengers, suitably outraged, stormed the¶ depot.¶ In China the government completed the Beijing-to-Tibet railway in¶ 2006, a dream since the days of Sun Yat-sen. Totaling 2,526 miles, it¶ includes tracks, from Golmud to Lhasa, at the highest altitude of any¶ railway in the world. The two-day journey, which passes through the¶ world’s highest-altitude railway tunnel and uses many sections of¶ elevated track passing over permafrost, costs about $160, or about¶ what it costs to go from Boston to Washington, D.C., on the relatively¶ low-tech Acela train. The new Chinese line has engendered plenty of¶ criticism regarding fears of cultural hegemony and the loss of Tibetan¶ autonomy, but no reports of wrong-way trains have surfaced. In the¶ realm of public infrastructure, India is a great producer of think-tank¶ studies, government reports, and beard-stroking orations. China,¶ unimpeded by the hurly-burly of parliamentary democracy, is a better¶ place for actually accomplishing things. If you are betting on which¶ country will build a thorium power reactor first, the choice is not¶ tough. (A July 2011 crash on a high-speed rail line near Wenzhou, on¶ the southern coast, killed 39 people and sparked a level of public outcry¶ seldom seen under communist rule on the mainland. In public¶ statements after the accident, Chinese premier Wen Jibao vowed to¶ toughen safety standards in China’s rapid industrialization—but the¶ crash did little to slow China’s drive to modernize its energy and¶ transportation infrastructure.)¶ China has 14 nuclear power reactors in operation on the mainland¶ today, with more than 25 under construction and more soon to get¶ under way. For many years a consumer of reactor technology and¶ components from the West, and from Russia, China will soon be¶ building fully homegrown reactors. The development of liquid fluoride¶ thorium reactors would make China the most advanced nuclear power¶ nation on Earth—and could well give it yet another source of high-tech¶ products to pad its export surplus.¶ Comparing nuclear reactors to humble kitchen appliances, Xu¶ Hongjie, a research scientist at the Shanghai Institute of Applied¶ Physics, said, “We need a better stove that can burn more fuel.”11 It¶ was a line reminiscent of Chairman Mao’s finest exhortations.¶ Like many nuclear nations, China declared a pause to review and¶ reassess its nuclear development plans after Fukushima. This was only a breather; Chinese officials made it clear that the Japanese accident¶ would not affect their long-range plans. And they scoffed at the German¶ decision to get out of nuclear power altogether. The comments of¶ Chinese officials did not inspire confidence. Dr. Liu Changxin, vice¶ general secretary of the China Nuclear Society, remarked that such¶ natural disasters “don’t happen in China”—a startling claim given the¶ devastation wrought by the 2008 earthquake in Sichuan Province,¶ which killed 69,000 people and left nearly five million homeless.¶ The Chinese thorium program is headed by Jiang Mianheng, an¶ electrical engineer and the son of the former Chinese president Jiang¶ Zemin (see chapter 1). Jiang Mianheng, who is also a vice president of¶ the Chinese Academy of Sciences, headed a Chinese delegation that¶ visited Oak Ridge in the fall of 2010. The Chinese politely listened to the¶ research presentations, and patiently endured the facilities tour, before¶ revealing that what they were really there for was to soak up as much¶ information on thorium MSRs as they could. “They were quite open¶ about it,” a person present at those discussions told me. In early 2012¶ Western observers of the Chinese nuclear effort stated that the¶ Shanghai Institute of Applied Physics, with around 400 people and a¶ budget of $400 million, planned to build two prototype molten salt¶ reactors by 2015.¶ Like India, China needs to shift to nuclear from coal to avoid adding¶ catastrophic levels of carbon to the atmosphere. At the same time¶ many in the U.S. thorium movement regard the development of¶ Chinese LFTRs as a direct threat to U.S. economic competitiveness. The¶ specter of Chinese competitiveness with the United States is often¶ overblown; in general, China’s prosperity and the well-being of its¶ people, are good things for the world, particularly for Americans. That¶ won’t make it feel any better when we are buying LFTRs with “Made in¶ Shanghai” stamped on the side.¶ The alarmist version of China’s next-generation nuclear strategy¶ comes down to this: if you like foreign oil dependency, you’re going to¶ love foreign nuclear dependency.¶ While various international efforts, including the Gen IV nuclear R&D¶ initiative, include a thorium MSR component, China has made clear its¶ intention to go it alone. The announcement from the Chinese Academy¶ of Sciences states explicitly that the People’s Republic plans to develop¶ and control intellectual property with regard to thorium for its own¶ benefit. “This will enable China to firmly grasp the lifeline of energy in¶ its own hands,” Wen Hui Baa reported.”¶ The plans for China’s lifeline include not only thorium but also¶ critical materials that have increased in value at a startling rate since¶ 2010 and of which China now has a monopoly: rare earth elements.¶

#### And, Chinese market dominance collapse US competitiveness

Wash Post 12 [Washington Post, 3-14, “America Is Letting China Steal Our Valuable Nuclear Innovations,” http://www.washingtonsblog.com/2012/03/america-is-letting-china-steal-our-valuable-nuclear-innovations.html]

The U.S. Is Letting China Steal Its Nuclear Innovations … Just Like Xerox Let Apple and Microsoft Steal Its Valuable Breakthroughs Microsoft and Apple grew rich by using Xerox’s innovation. Xerox’s research arm (called Xerox Parc) invented the “graphical user interface” used by all modern computers. Bill Gates famously admitted to Steve Jobs that both Microsoft and Apple had ripped of Xerox’s GUI. Xerox could have made a fortune on its innovation. But it didn’t realize what it had … and failed to capitalize on its breakthroughs (Xerox tried to sue to protect its invention … but years too late, and the lawsuit was thrown out because Xerox had missed the deadline for suing). The same dynamic is playing out in the nuclear industry. Specifically, the U.S. created a safer, more efficient form of nuclear energy running on thorium. But – like Xerox Parc – America isn’t doing anything with its innovation, and China is running off with prize. The Telegraph’s Ambrose Evans-Pritchard notes: If China’s dash for thorium power succeeds, it will vastly alter the global energy landscape …. China’s Academy of Sciences said it had chosen a “thorium-based molten salt reactor system”. The liquid fuel idea was pioneered by US physicists at Oak Ridge National Lab in the 1960s, but the US has long since dropped the ball. Further evidence of Barack `Obama’s “Sputnik moment”, you could say. Chinese scientists claim that hazardous waste will be a thousand times less than with uranium. The system is inherently less prone to disaster. “The reactor has an amazing safety feature,” said Kirk Sorensen, a former NASA engineer at Teledyne Brown and a thorium expert. “If it begins to overheat, a little plug melts and the salts drain into a pan. There is no need for computers, or the sort of electrical pumps that were crippled by the tsunami. The reactor saves itself,” he said. “They operate at atmospheric pressure so you don’t have the sort of hydrogen explosions we’ve seen in Japan. One of these reactors would have come through the tsunami just fine. There would have been no radiation release.” The Telegraph continues: Professor Robert Cywinksi from Huddersfield University said thorium must be bombarded with neutrons to drive the fission process. “There is no chain reaction. Fission dies the moment you switch off the photon beam. There are not enough neutrons for it continue of its own accord,” he said. Dr Cywinski, who anchors a UK-wide thorium team, said the residual heat left behind in a crisis would be “orders of magnitude less” than in a uranium reactor. The earth’s crust holds 80 years of uranium at expected usage rates, he said. Thorium is as common as lead. America has buried tons as a by-product of rare earth metals mining. Norway has so much that Oslo is planning a post-oil era where thorium might drive the country’s next great phase of wealth. Even Britain has seams in Wales and in the granite cliffs of Cornwall. Almost all the mineral is usable as fuel, compared to 0.7pc of uranium. There is enough to power civilization for thousands of years. \*\*\* US physicists in the late 1940s explored thorium fuel for power. It has a higher neutron yield than uranium, a better fission rating, longer fuel cycles, and does not require the extra cost of isotope separation. The plans were shelved because thorium does not produce plutonium for bombs. As a happy bonus, it can burn up plutonium and toxic waste from old reactors, reducing radio-toxicity and acting as an eco-cleaner. Dr Cywinski is developing an accelerator driven sub-critical reactor for thorium, a cutting-edge project worldwide …. The idea is to make pint-size 600MW reactors. Popular Science reports: It would be based on thorium, a radioactive element that is much more abundant, and much more safe, than traditional sources of nuclear power. Some advocates believe small nuclear reactors powered by thorium could wean the world off coal and natural gas, and do it more safely than traditional nuclear. Thorium is not only abundant, but more efficient than uranium or coal — one ton of the silver metal can produce as much energy as 200 tons of uranium, or 3.5 million tons of coal, as the Mail on Sunday calculates it. \*\*\* Thorium reactors would not melt down, in part because they require an external input to produce fission. Thorium atoms would release energy when bombarded by high-energy neutrons, such as the type supplied in a particle accelerator. Wired points out: “President Obama talked about a Sputnik-type call to action in his [State of the Union] address,” wrote Charles Hart, a a retired semiconductor researcher and frequent commenter on the Energy From Thorium discussion forum. “I think this qualifies.” While nearly all current nuclear reactors run on uranium, the radioactive element thorium is recognized as a safer, cleaner and more abundant alternative fuel. Thorium is particularly well-suited for use in molten-salt reactors, or MSRs. Nuclear reactions take place inside a fluid core rather than solid fuel rods, and there’s no risk of meltdown. In addition to their safety, MSRs can consume various nuclear-fuel types, including existing stocks of nuclear waste. Their byproducts are unsuitable for making weapons of any type. They can also operate as breeders, producing more fuel than they consume. In the 1960s and 70s, the United States carried out extensive research on thorium and MSRs at Oak Ridge National Laboratory. That work was abandoned — partly, believe many, because uranium reactors generated bomb-grade plutonium as a byproduct. Today, with nuclear weapons less in demand and cheap oil’s twilight approaching, several countries — including India, France and Norway — are pursuing thorium-based nuclear-fuel cycles. (The grassroots movement to promote an American thorium power supply was covered in this December 2009 Wired magazine feature.) China’s new program is the largest national thorium-MSR initiative to date. The People’s Republic had already announced plans to build dozens of new nuclear reactors over the next 20 years, increasing its nuclear power supply 20-fold and weaning itself off coal, of which it’s now one of the world’s largest consumers. Designing a thorium-based molten-salt reactor could place China at the forefront of the race to build environmentally safe, cost-effective and politically palatable reactors. \*\*\* A Chinese thorium-based nuclear power supply is seen by many nuclear advocates and analysts as a threat to U.S. economic competitiveness. During a presentation at Oak Ridge on Jan. 31, Jim Kennedy, CEO of St. Louis–based Wings Enterprises (which is trying to win approval to start a mine for rare earths and thorium at Pea Ridge, Missouri) portrayed the Chinese thorium development as potentially crippling. “If we miss the boat on this, how can we possibly compete in the world economy?” Kennedy asked. “What else do we have left to export?” According to thorium advocates, the United States could find itself 20 years from now importing technology originally developed nearly four decades ago at one of America’s premier national R&D facilities. The alarmist version of China’s next-gen nuclear strategy come down to this: If you like foreign-oil dependency, you’re going to love foreign-nuclear dependency. \*\*\* While the international “Generation IV” nuclear R&D initiative includes a working group on thorium MSRs, China has made clear its intention to go it alone. The Chinese Academy of Sciences announcement explicitly states that the PRC plans to develop and control intellectual property around thorium for its own benefit. “This will enable China to firmly grasp the lifeline of energy in its own hands,” stated the Wen Hui Bao report. The U.S. is acting just like Xerox Parc, letting others steal its innovations … and losing entire markets in the process. If America fails to capitalize on its breakthrough, and let’s China obtain all of the relevant thorium energy patents, we could lose the entire market. Too bad the U.S. government – instead of developing the thorium concept which it innovated decades ago – is protecting an obsolete uranium model which was chosen only because produced plutonium for nuclear warheads and powered nuclear submarines. Indeed, our government is doubling-down on archaic and unsafe technology: the Nuclear Regulatory Commission has approved construction of new nuclear plants which do not incorporate the safety measures needed to prevent a Fukushima meltdown here … and the same companies which built and operated Fukushima will build and run the U.S. plants as well.

#### The impact is heg

Martino 7 – founder and chairman of the board of Cyber Technology Group, author of numerous books on finance (Rocco, A Strategy for Success: Innovation Will Renew American Leadership, <http://www.fpri.org/orbis/5102/martino.innovationamericanleadership.pdf>,)

The United States of course faced great challenges to its security and economy in the past, most obviously from Germany and Japan in the first half of the twentieth century and from the Soviet Union in the second half. Crucial to America’s ability to prevail over these past challenges was our technological and industrial leadership, and especially our ability to continuously recreate it. Indeed, the United States has been unique among great powers in its ability to keep on creating and recreating new technologies and new industries, generation after generation. Perpetual innovation and technological leadership might even be said to be the American way of maintaining primacy in world affairs. They are almost certainly what America will have to pursue in order to prevail over the contemporary challenges involving economic competitiveness and energy dependence. 

#### Technical competitiveness is key to primacy—the impact is great power war

Baru 9 - Visiting Professor at the Lee Kuan Yew School of Public Policy in Singapore (Sanjaya, “Year of the power shift?,”

http://www.india-seminar.com/2009/593/593\_sanjaya\_baru.htm

In the modern era, the idea that strong economic performance is the foundation of power was argued most persuasively by historian Paul Kennedy. ‘Victory (in war),’ Kennedy claimed, ‘has repeatedly gone to the side with more flourishing productive base.’6 Drawing attention to the interrelationships between economic wealth, technological innovation, and the ability of states to efficiently mobilize economic and technological resources for power projection and national defence, Kennedy argued that nations that were able to better combine military and economic strength scored over others.

‘The fact remains,’ Kennedy argued, ‘that all of the major shifts in the world’s *military-power* balance have followed alterations in the *productive* balances; and further, that the rising and falling of the various empires and states in the international system has been confirmed by the outcomes of the major Great Power wars, where victory has always gone to the side with the greatest material resources.’7

**I**n Kennedy’s view the geopolitical consequences of an economic crisis or even decline would be transmitted through a nation’s inability to find adequate financial resources to simultaneously sustain economic growth and military power – the classic ‘guns vs butter’ dilemma.

#### Hegemonic decline in the context of competitiveness causes global war

**Zhang and Shi, 2011** – \*Yuhan Zhang is a researcher at the Carnegie Endowment for International Peace, Washington, D.C.; Lin Shi is from Columbia University. She also serves as an independent consultant for the Eurasia Group and a consultant for the World Bank in Washington, D.C. (America’s decline: A harbinger of conflict and rivalry, http://www.eastasiaforum.org/2011/01/22/americas-decline-a-harbinger-of-conflict-and-rivalry/)

This does not necessarily mean that the US is in systemic decline, but it encompasses a trend that appears to be negative and perhaps alarming. Although the US still possesses incomparable military prowess and its economy remains the world’s largest, the once seemingly indomitable chasm that separated America from anyone else is narrowing. Thus, the global distribution of power is shifting, and the inevitable result will be a world that is less peaceful, liberal and prosperous, burdened by a dearth of effective conflict regulation. Over the past two decades, no other state has had the ability to seriously challenge the US military. Under these circumstances, motivated by both opportunity and fear, many actors have bandwagoned with US hegemony and accepted a subordinate role. Canada, most of Western Europe, India, Japan, South Korea, Australia, Singapore and the Philippines have all joined the US, creating a status quo that has tended to mute great power conflicts. However, as the hegemony that drew these powers together withers, so will the pulling power behind the US alliance. The result will be an international order where power is more diffuse, American interests and influence can be more readily challenged, and conflicts or wars may be harder to avoid. As history attests, power decline and redistribution result in military confrontation. For example, in the late 19th century America’s emergence as a regional power saw it launch its first overseas war of conquest towards Spain. By the turn of the 20th century, accompanying the increase in US power and waning of British power, the American Navy had begun to challenge the notion that Britain ‘rules the waves.’ Such a notion would eventually see the US attain the status of sole guardians of the Western Hemisphere’s security to become the order-creating Leviathan shaping the international system with democracy and rule of law. Defining this US-centred system are three key characteristics: enforcement of property rights, constraints on the actions of powerful individuals and groups and some degree of equal opportunities for broad segments of society. As a result of such political stability, free markets, liberal trade and flexible financial mechanisms have appeared. And, with this, many countries have sought opportunities to enter this system, proliferating stable and cooperative relations. However, what will happen to these advances as America’s influence declines? Given that America’s authority, although sullied at times, has benefited people across much of Latin America, Central and Eastern Europe, the Balkans, as well as parts of Africa and, quite extensively, Asia, the answer to this question could affect global society in a profoundly detrimental way. Public imagination and academia have anticipated that a post-hegemonic world would return to the problems of the 1930s: regional blocs, trade conflicts and strategic rivalry. Furthermore, multilateral institutions such as the IMF, the World Bank or the WTO might give way to regional organisations. For example, Europe and East Asia would each step forward to fill the vacuum left by Washington’s withering leadership to pursue their own visions of regional political and economic orders. Free markets would become more politicised — and, well, less free — and major powers would compete for supremacy. Additionally, such power plays have historically possessed a zero-sum element. In the late 1960s and 1970s, US economic power declined relative to the rise of the Japanese and Western European economies, with the US dollar also becoming less attractive. And, as American power eroded, so did international regimes (such as the Bretton Woods System in 1973). A world without American hegemony is one where great power wars re-emerge, the liberal international system is supplanted by an authoritarian one, and trade protectionism devolves into restrictive, anti-globalisation barriers. This, at least, is one possibility we can forecast in a future that will inevitably be devoid of unrivalled US primacy.

#### Unipolarity checks status competition—transition increases war

**Wolforth et. al2011** (William is the Daniel Webster Professor at Dartmouth College, where he teaches in the Department of Government. Edited by Michael Mastanduno, Professor of Government and Dean of Faculty at Dartmouth College, and G. John Ikenberry, Professor of Politics and International Affairs at Princeton University, “Unipolarity, status competition, and great power war” *International Relations Theory and the Consequences of Unipolarity* pg. 65-66)

Conclusion

The evidence suggests that narrow and asymmetrical capabilities gaps foster status competition even among states relatively confident of their basic territorial security for the reasons identified in social identity theory and theories of status competition. Broad patterns of evidence are consistent with this expectation, suggesting that unipolarity shapes strategies of identity maintenance in ways that dampen status conflict. The implication is that unipoalrity helps explain low levels of military competition and conflict among major powers after 1991 and that a return to bipolarity or multipolairty would increase the likelihood of such conflict.

This has been a preliminary exercise. The evidence for the hypothesis explored here is hardly conclusive, but is sufficiently suggestive to warrant further refinement and testing, all the more so given importance of the questions at stake. If status matters in the way the theory discussed here suggests, then the widespread view that the rise of a peer competitor and the shift back to bipolar or multipolar structure present readily surmountable policy challenges is suspect. Most scholars agree with Jacek Kugler and Douglass Lemke’s argument: “[S]hould a satisfied state undergo a power transition and catch up with dominant power, there is little or no expectation of war. Given that today’s rising powers have every material reason to like the status quo, many observers are optimistic that the rise of peer competitors can be readily managed by fashioning an order that accommodates their material interests.

Yet it is harder to manage competition for status than for most material things. While diplomatic efforts to manage status competition seems easy under unipolarity, theory and evidence suggest that it could present much greater challenges as the system moves back to bipolarity or multipolairty. When status is seen as a positional good, efforts to craft negotiated bargains about status contests face long odds. And this positionality problem is particularly acute concerning the very issue unipolarity solves: primacy. The route back to bipolarity or multipolarity is thus fraught with danger. With two or more plausible claimants to primacy, positional competition and the potential for major power war could once again form the backdrop of world politics.

### 1ac

#### The United States Federal Government should expand loan guarantees for Liquid Fluoride Thorium Reactors in the United States.

### 1ac solvency

#### Small modular thorium reactors are key – the tech is ready

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

SO, IF YOU WERE GOING TO DESIGN and build a new nuclear reactor from scratch, what would it look like? First of all, you’d make it small. The old antinuke saw says, “Nuclear reactors come in only one size: extra large.” But compact modular reactors that can be prefabricated, transported by shipping container, and assembled on site are now seen by many experts as the future of nuclear energy. “If you go small, and manufacture reactors like Henry Ford did cars, there’s a host of advantages,” Tom Sanders told me shortly before he took over as president of the American Nuclear Society in 2009. (He is now its president emeritus.) “You could use automated manufacturing processes instead of doing every weld individually, you could get the plants licensed in a two-year time frame instead of seven, and it’d be much cheaper on a per-kilowatt basis.” Virtually all the major nuclear vendors, including GE-Hitachi Nuclear Energy, Bechtel (a company not exactly renowned for miniaturization), Babcock & Wilcox, and Westinghouse (now owned by the Korean tech giant Toshiba) are developing small modular reactors (SMRs). These reactors can use uranium or thorium (or even plutonium), but thorium, with its higher efficiency, offers unique qualities that make it well suited for miniaturization. They produce less than 300 megawatts, the limit for an officially small reactor. Future versions that could fit on the back of a flatbed truck are envisioned at 60 or even 30 megawatts. Like mobile homes, SMRs can be manufactured centrally and assembled on site, facilitating financing and shortening the time to production; in theory, multiple SMRs could be combined to create a large generating station. Keeping the plants small and dispersed, though, makes them less tempting targets for would-be terrorists—as does fueling them with thorium. More important, they could produce energy at a lower price per kilowatt than conventional nuclear plants, bringing the cost of nuclear power more into line with low-cost coal production. Newly infatuated with what’s known as distributed power generation (lots of smaller reactors scattered in lots of places), the nuclear industry has finally realized that bigger is not always better. More compact and more affordable are good things; even better is the prospect that thorium-powered SMRs could help solve the problem of nuclear waste storage and disposal. Some ambitious nuclear designers have even started to dream up small, modular fast breeder reactors, which is a bit like trying to control a tiger by putting it in a smaller cage. Bringing these designs into commercial production could take a decade or more. The three main barriers to widespread deployment, as Philip Moor puts it, are the same that face any new nuclear plant: “Dirt, licensing, and money,” he told me. Moor heads up a special committee of the American Nuclear Society formed to examine the business and manufacturing issues around SMRs. The Savannah River Site, a nuclear industrial complex operated by the DOE near Augusta, Georgia, will supply the dirt (the real estate and infrastructure), and industry heavyweights like GE, Westinghouse, and Bechtel are lining up to provide the money, at least for demonstration projects. That leaves licensing. “Once we start the demonstration projects, we can start pursuing the license application,” said Sanders of the American Nuclear Society. But “we need something operating on the ground.” That’s hardly a slam dunk. It’s worth noting that building minireactors is not a new concept. GE actually started the Power Reactor Innovation Small Modular (PRISM) program back in 1981, and in 1994 the NRC issued a report that said the commissioners foresaw no impediments to licensing. The project was abandoned in 2001 and then got a second life in 2006. With huge new supplies of natural gas starting to reach the market, and coal plants still the least expensive form of power generation, new nuclear plants will continue to look expensive. And investors looking back at 30 years of nuclear dead ends are sure to be wary of new technological marvels, however promising. The history of nuclear power demonstrates that nothing is truly viable until the core starts chain-reacting. Still, thorium-powered SMRs offer the best way forward for new nuclear power and a potential solution for global warming. Smaller is beautiful, and in this case it could be more profitable as well. ---- SECOND, YOU’D MAKE YOUR NEW REACTOR a breeder, preferably a thermal breeder. The failure of fast breeders to fulfill their promise has not erased their appeal; it has just caused the quest for a fast breeder to go in (slightly) new directions. Breeders would be advantageous not only because, theoretically, you’d never run out of fuel, but also because you can use them to process nuclear waste from conventional reactors. At least in the United States, the question of how to store nuclear waste has no clear answer, and there may not be one for the next decade. Building self-sustaining breeder reactors would, as the nuclearati like to say, “close the fuel cycle”; little radioactive material would be left over to dispose of. Then you’d want to make your reactor inherently safe. Inherent safety — not to be confused with passive safety, a very different thing — is a term much beloved by nuclear engineers‘; It has been applied to just about every reactor design, including the uranium-fueled lightwater reactor and the sodium-cooled fast breeder, machines whose inherent safety is, to say the least, questionable. Traditionally, the solution to this problem has been external safeguards, also called overengineering: add more controls, more redundancy, more miles of piping, more plumbing and alarms and sensors and gauges, and the inherent twitchiness of the world’s most volatile energy source could be contained and controlled. Unfortunately, all that engineering brings more complexity, and complexity in itself adds risk. Virtually all the reactor accidents that have ever occurred have had one of two causes: either a fiendishly complex mechanism failed because of a simple mishap (like a loose chunk of zirconium) or a human being failed at the task of monitoring and managing a fiendishly complex mechanism. The only truly inherently safe reactor is a liquid-core reactor, like the molten salt reactor that was created at Oak Ridge in the 1960s. For the purposes of a reactor designer, liquid—whether it’s water, liquid metal, or some type of liquid fluoride — has a marvelous characteristic: it expands rapidly when it gets hot. All materials expand when heated, of course. In a liquid-core reactor, as the energy of the liquid rises, it expands and naturally, passively, slows down the reaction, making a runaway accident nearly impossible. In technical terms, this is known as a “negative temperature coefficient of reactivity.” That means that as the temperature rises (which typically is what happens when something goes wrong in a nuclear reactor), the reactivity goes down. When the reactivity goes down, the reactor is essentially turning itself off. Liquid fuels have several other characteristics that make them safer than conventional solid fuel reactors. This is where the benefits of thorium, which for a variety of reasons is uniquely well suited to liquid fuel reactors, extend beyond the nature of the element itself. No matter how you use it—in a light-water reactor, in a pebble bed reactor— thorium offers advantages over uranium. But in a liquid fuel reactor, that advantage is magnified. If you put high-octane gas in a 1975 Ford Pinto, you’ll see some marginal performance enhancement. To get the full benefit, though, you should put it in a Ferrari Testarossa. Using thorium in a liquid fuel reactor is similar: its unique qualities as an energy source are fully exploited. For example, in liquids—particularly in molten salts—fission products tend to be stable, making it easier to isolate and remove them. One of these fission products, xenon-135, is a nuclear poison that tends to build up in conventional reactors, slowing down the reactions. It renders the fuel unusable after only a small percentage of the potential energy has been used, and it’s hideously difficult to handle as part of the nuclear waste stream. In fluid fuels, because xenon forms a noble gas (one that is impervious to chemical reactions), xenon is easy to remove. In a LFTR it can be boiled off as a gas and processed while the reactor continues operating, reducing downtime and increasing the amount of the potential energy that can be extracted from the thorium fuel. A ton of thorium can produce energy equivalent to that produced by 200 tons of uranium in a conventional light-water reactor. Liquid fuels are also impervious to radiation damage, solving one of the thorniest problems in solid fuel reactors. Continuous bombardment by neutrons over periods of weeks or months wears down not only the solid uranium pellets in a light-water reactor but also the cladding (usually made of zirconium) that contains them. Because of radiation damage and the buildup of fission poisons like xenon, fuel rods age quickly; they have to be replaced every few years, even though only 3 to 5 percent of their energy has been consumed. Liquid fuels have one other characteristic that makes them ideal for reactor cores: they flow. Gravity, not elaborate control systems or socalled passive safety systems, gives LFTRs their ultimate protection against a serious nuclear accident. In a criticality accident (i.e., if the fission reaction in the core starts to get out of control), a specially designed freeze plug in the reactor vessel melts and the liquid core simply drains out of the reactor into an underground shielded container, like a bathtub when the drain plug is pulled. The fission reactions quickly cease, and (thanks to the expansive quality noted earlier) the fluid cools rapidly. Decay heat is contained harmlessly. Meltdown is impossible, and there are no solid fuel rods too radioactive to remove. Inherently safe, LFTRs pose less threat than light-water reactors, coal-fired power plants, oil refineries, or just about any other form of large energy or chemical plant. Built small and modular, they will be less expensive to build and operate than just about any other energy source. ---- FINALLY YOU’D FUEL YOUR SMALL, breeding, inherently safe, liquidcore reactor with thorium. I mentioned in chapters 1 and 2 many of thorium’s sterling qualities as a nuclear fuel; they bear reviewing. It is abundant. In fact, used properly, it’s effectively inexhaustible. It requires no special refining or processing beyond purifying it from the monazite ore in which it is most commonly found. It can be mined safely, with none of the tailings and other results of uranium mining that, in the early years of the Atomic Age, poisoned whole communities in Russia and the United States. It’s no good for making weapons. In fact, it’s not fissile at all. It requires a kind of nuclear alchemy to be transmuted into uranium-233, which is a more efficient and safe source of energy than U-235. Finally reactors based on thorium—or, rather, U-233, into which thorium transforms in a nuclear reactor—consume far more of the latent energy trapped inside the fuel, vastly reducing or even eliminating the problem of nuclear waste. In short, you’d build a liquid fluoride thorium reactor, or LFTR. LFTRs are the first truly revolutionary reactor design to come along since the development in the 1960s of the molten salt reactor, progenitor of the LFTR. LFTRs are designed with an outer blanket of liquid fluoride that contains dissolved thorium-232—thorium tetrafluoride, to be precise (a fluoride is simply a combination of fluorine and another element; tetrafluoride means four atoms of fluorine). The thorium is borne in a solution of lithium and beryllium fluorides that has maximum heat-transfer properties, making it a supremely efficient coolant. This radioactive cocktail surrounds a core of uranium-233 that is produced from the natural decay of Th-232 bombarded by neutrons. The neutron source, to start the reaction, is typically a small amount of fissile uranium, although the neutrons can also come from a particle accelerator, of the sort used in physics experiments to smash particles together. The blanket and inner core are in two concentric containers. It’s essentially a double boiler: the inner core, sheathed in an exotic alloy of a metal such as zirconium, contains the fissile U-233, and the outer shell, or blanket, contains the fertile thorium. In this simplified diagram of a liquid fluoride thorium reactor, thorium is converted to uranium-233, which sustains the fission reaction, heating a secondary liquid that powers a turbine to create electricity. (Brad Nielsen) Once the reactor core goes critical, the fission reactions in the core continuously throw off neutrons that keep the thorium, in the blanket, in a constant state of transformation, creating a virtuous cycle. Such a plant has two separate loops of piping: one carries the fertile thorium tetrafluoride salt, once it has been sufficiently bombarded to start the decay chain, into a decay tank from which U-233 can be transferred to the inner core; the other sends the hot U-233 salt from the core to a heat exchanger to drive a steam turbine.7 There are several variations on this basic design, which use various fluids to transfer heat from the reactor core to the turbine; suffice it to say that whichever is chosen, it will be significantly more efficient than a conventional nuclear plant. After passing through the heat exchanger, the second loop, carrying hot U-233 fuel salt, cycles back into the core, with a small secondary side stream passing through a reprocessor, where the fission products are removed, preventing them from poisoning the reaction, before being cycled back into the core for further fission reactions. Because the core is liquid, it operates at atmospheric pressure, meaning that the extremely thick-walled, pressurized vessels used in conventional reactors, which have an unfortunate tendency to blow their top, are unnecessary. Because LFTRs consume virtually all their nuclear fuel, the majority of the waste products are not long-lived fissile material but rather fission products, about 83 percent of which are safe within a decade. While LFTRs, like every other nuclear reactor, generate fission products that are highly radioactive, their half-lives tend to be measured in dozens of years, not thousands. The long-lived radioactivity of LFTR waste is one ten-thousandth that of a conventional reactor. The leftovers, a small fraction of the waste produced by conventional reactors, must be stored in radiation-proof geological sites for about three centuries, compared with ten thousand years for nuclear waste from conventional uranium reactors. In fact, LFTRs themselves make great garbage dumps for spent nuclear fuel: they can refine standard nuclear waste into LFTR by-products, essentially solving the currently intractable toxic waste storage problems that plague today’s nuclear power industry. Thorium Energy Alliance This schematic shows a full thorium power plant including a reactor vessel, drain tanks, and a Brayton-cycle turbine using supercritical carbon dioxide. (Thorium Energy Alliance) With their high negative temperature coefficient, LFTRs are impervious to sudden overheating. They’re also exquisitely tunable; the concentration of fuel in the outer blanket can be adjusted continually, making it easy to control the reactivity in the core. Finally, they can run practically forever. The reactions in a LFTR produce enough excess neutrons to breed their own fuel. LFTRs are the only type of reactor that can breed more fuel than they consume in the thermal, or lower-energy, spectrum. They have the virtues of fast breeders without the volatility. Here it is useful to think back to the nature of fission and neutron absorption. In today’s conventional reactors, the great majority of the fuel is U-238, which transmutes to the transuranic element plutonium- 239 when the U-238 absorbs a single neutron. Thorium-232, by contrast, requires five neutrons to become a transuranic (neptunium-237, which can be safely burned down, or processed, in the reactor). That too makes LFTRS inherently safer than solid-fuel uranium reactors. While liquid-core reactors can be built to operate without moderators, in some LFTR designs the core does use moderators — typically graphite rods, just as in a conventional uranium reactor. Just as the LFTR has unique qualities that make it superior to light-water reactors, though, U-233 has some distinct advantages over uranium- 235, the fissile material that runs the vast majority of the world’s nuclear power stations today. U-233 displays a quality that nuclear engineers love: high neutron economy, usually expressed as q in physics equations. That means that an atom of U-233, after absorbing a stray neutron and fissioning, produces on average 2.16 neutrons. Since one neutron is required to continue the chain reaction, 1.16 neutrons are freed up to produce new fuel. Overall, LFTRs are 200 to 300 times more fuel efficient than standard reactors. They are safer, simpler, smaller, less expensive to build, and less expensive to run to produce electricity on a cost-per-kilowatt basis.

#### And, new tech developments make thorium LFTR’s expandable

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Small modular LFTRs can be mass produced. Commercialization of technology leads to lower costs as the number of units increase. Experience benefits arise from work specialization, new processes, product standardization, new technologies, and product redesign. Business economists observe that doubling the number of units produced reduces cost by a percentage termed the learning ratio, seen in the early aircraft industry to be 20%. Today Moore’s law in the computer industry illustrates a learning ratio of 50%. In The Economic Future of Nuclear Power University of Chicago economists more conservatively estimate the learning ratio is 10% for nuclear power reactors. Units produced The learning curve In this illustration, the cost of the 1024th LFTR would be about 35% the cost of the first commercial LFTR. Some engineers advocate economy-of-scale to justify large reactors, but this analysis shows that 100 MW units would have a 30% costadvantage over 1000 MW units because of the ten times more production experiences. Boeing 737 production line Boeing made 477 airplanes in 2011 costing up to $330 million each. Boeing, capable of manufacturing $200 million units daily, is a model for LFTR production. Airplane manufacturing has many of the same critical issues as manufacturing nuclear reactors: life safety, reliability, strength¶ of materials, corrosion, regulatory compliance, documentation, design control, supply chain management, and cost, for example. Reactors of 100 MW size costing $200 million can similarly be factory produced. Manufacturing more, smaller reactors traverses the learning curve more rapidly. Producing one per day for 3 years creates 1,095 production experiences, reducing costs by 65%. Documentation control integrated with manufacturing saves costs and increases accuracy. New manufacturing techniques are enabled with CAM (computer aided manufacturing), automatically converting designs to manufacturing instructions for machine tools and industrial robots. CAM can vary manufacturing parts and processes to produce a variety of units on one production line. In the Boeing photograph above, observe that the wing tips are not identical on all units. Ongoing research will lead to lower LFTR costs. Cost reductions are presaged by current engineering research. Compact, thin-plate heat exchangers may reduce fluid inventories, size, and cost. Possible new materials include silicon-impregnated carbon fiber with chemical vapor infiltrated carbon surfaces, and higher temperature nickel alloys. Operating at 950°C can increase thermal/electrical conversion efficiency beyond 50%. Such high temperatures can improve efficiency for water dissociation to create hydrogen, to lower manufacturing costs of synthetic fuels such as methanol or dimethyl ether that can substitute for gasoline or diesel oil. Initial fissile material quantities and costs are low. A 100 MW LFTR requires only about 100 kg of fissile material, such as U-233 or U-235, to start up. Thereafter it is fueled by thorium, or thorium and enriched uranium in DMSR. A LWR or LMFBR requires 5 times this, adding to capital costs. Thorium fuel is plentiful and inexpensive. One ton of thorium can power a 1,000 megawatt LFTR for a year - enough power for a city. Just 500 tons would supply all US electric energy for a year. Fuel costs at $300,000 per ton for thorium would be $0.00004/kWh, compared to coal at $0.03/kWh. Uranium enrichment costs are low. The expanding worldwide fleet of LWRs increases demand for uranium and also for the enrichment services to convert it from 0.7% to 4% U-235. Some LFTRs may require enriched uranium only for startup. Designs such as DMSRs will require a continued supply of enriched uranium, but less than 25% of the amount used by LWRs. Fuel fabrication costs are low. Unlike LWRs, there are no costs for producing high quality zirconium tube fuel rods to contain UO2 pellets and their fission products for centuries. Unlike pebble bed reactors using TRISO particle fuel, there is no cost for triple-coating millions of UO2 particles designed to retain fission products within the three redundant layers. The LFTR fuel supply form might be solid UF4 crystals or gaseous UF6, which are already intermediate, steps in the production of solid UO2 used in LWRs. New control system technologies can reduce labor costs. The number of people required to operate today’s LWRs is higher than for other forms of power production. Nuclear power plants operate 24x7, and each job employs 6 people: 4 for the 4 work shifts per week, 1 for vacation and sick leave, and 1 for training time, so labor costs mount up. In my visits I observed there are more than 1000 employees per GW of power output, adding about 1 cent/kWh to electricity costs. Information systems and control systems technologies have improved immensely since LWRs were designed in the 1970s. Safety critical software techniques enable low-labor-cost operation of aircraft, helicopters, and rapid transit. Reducing direct operator control of reactors can also avoid mistakes, such as the series of operator errors that led to the Chernobyl disaster. Security guard costs should be proportional to the possible damage threat, much lower with a non-pressurized LFTR. Even US ICBMs in missile silos were guarded with remote electronic surveillance. Transmission line costs are less with distributed LFTRs. Much of the costs associated with multi-GW power plants are for transmission lines to transport power hundreds of miles on low- loss high-voltage direct-current (HVDC) lines. Fewer transmission lines are required when 100 MW power sources such as LFTRs are near cities and manufacturing centers. Costs for HVDC lines are roughly $1 million per mile, so the costs for energy transmission over 1,000 miles is roughly 1 cent/kWh. The program objective must be energy cheaper than coal. For all the above reasons, low costs of $2/W and 3 cents/kWh is an achievable objective. A $2/watt capital cost contributes $0.02/kWh to the power cost, assuming a 40 year life, 8% interest rate, and 90% capacity factor. With plentiful, inexpensive thorium fuel, LFTR can generate electricity at <$0.03/kWh, underselling power generated by burning coal. Producing one LFTR of 100 MW size per day could phase out all coal-burning power plants worldwide in 38 years, ending 10 billion tons of CO2 emissions from world coal plants now supplying 1,400 GW of electric power. Low LFTR costs are crucial to this coal replacement strategy, achievable if cost objectives are maintained at every design choice. Less expensive electric power will check global warming by dissuading all nations from burning coal. It will also help developing economies to improve their prosperity, encouraging lifestyles with sustainable birthrates. Keeping LFTR energy costs cheaper than coal is critical to achieving the social and environmental benefits. Cost challenges can be met at the R&D stage. There are cost challenges for LFTR development. Meeting the production cost objectives of $2/W and 3 cents/kWh requires a well-executed research and development program. Corporations with deep pockets may develop advanced nuclear power, as evidenced by Bill Gates’ investment in Terrapower’s LMFBR reactor, building on prior US $16 billion R&D expenditures. There is an opportunity for substantial government or philanthropic investment in LFTR R&D to keep ultimate production costs low by removing amortization of imprecise R&D costs. Public investment in energy R&D is a much more effective public policy than ongoing alternative energy production subsidies being paid today. ¶

#### Allocation levels are key

The Economist, 09 [Nuclear's next generation inside story: A group of six new blueprints for nuclear power stations promise advances in safety and efficiency. How do they differ from existing designs?, <http://www.economist.com/node/15048703>]

Dr Ferguson thinks the prospects of the entire generation-IV programme are contingent on the level of investment allocated to nearer-term projects. “Do we commit to generation III or do we leapfrog to generation IV?” he asks. Two important considerations for answering his question are regulatory compliance and economic viability. With regard to the former, the NEA's Multinational Design Evaluation Programme is considering an international licensing scheme to standardise safety requirements for the new reactors. As for the latter, the success of generation IV reactors is likely to hinge on large amounts of government support. In the near term this support should take the form of increased research-and-development funding, says Dr Stacey of Georgia Tech. In the longer term, governments have an important role to play in the provision of loan guarantees, which are vital for overcoming engineering and “first of a kind” risks, says Joe Turnage at Unistar, a commercial nuclear joint-venture between Constellation Energy, an American utility, and EDF, a French one. But whatever the next generation of nuclear power-stations looks like, it is clear that the research being done around the world to develop such a variety of new reactors, rather than new nuclear weapons, has fulfilled Eisenhower's wish, back in 1953, that “the miraculous inventiveness of man shall not be dedicated to his death, but consecrated to his life.”

#### Loan guarantees now, but they are insufficient

Squassoni 12 Sharon, Director and Senior Fellow of the Proliferation Prevention Program at CSIS, “NUCLEAR POWER IN THE GLOBAL ENERGY PORTFOLIO”, Federation of American Scientists, February, www.fas.org/pubs/\_docs/Nuclear\_Energy\_Report-lowres.pdf

The U.S. nuclear industry has singled out government loan guarantees as essential because the private market finds loans for nuclear power plants to be too risky, and U.S. utilities are too small to take on a bigger equity to debt ratio, which would lower the cost of capital, a key element in the cost of the new plants. Under the loan guarantee program, the U.S. Treasury will guarantee 100 percent of a loan which is limited to 80 percent of the construction costs. This effectively transfers the risk of cost overruns due to lengthier construction times from project owners to the taxpayer. Congress appropriated $18.5 billion in loan guarantees for nuclear power facilities, and President Obama has recommended tripling this to $54 billion. This still falls far short of the $122 billion in requests. Industry sources suggest DOE will be able to support no more than 2-4 reactors, given costs of $5 billion to $12 billion per reactor. e Department of Energy awarded the first loan guarantee to the Vogtle reactor project in Georgia (over $8 billion) in 2010.

Federal loan guarantees causes market expansion – catalyzes capital investment

I21CE 11 Institute for 21st Century Energy, Mission of the U.S. Chamber of Commerce Institute for 21st Century Energy is to unify policymakers, regulators, business leaders, and the American public behind a common sense energy strategy to help keep America secure, prosperous, and clean, "Commit to and Expand Nuclear Energy Use", 2011 is copyright date, www.energyxxi.org/commit-and-expand-nuclear-energy-use

Nuclear power is currently an emissions-free source of 20% of America’s electricity supply, despite our not having licensed the construction of a nuclear power facility in nearly 30 years. Expansion of new nuclear power assets is essential to meet our projected growing demand while mitigating our emissions of CO2. As required by law, the federal government must provide authorized fiscal incentives for new nuclear power plants. We must solve our long-term nuclear waste challenges and aggressively expand efforts to recycle used nuclear fuel. Nuclear power is the nation’s largest emissions-free source of electricity. From a life-cycle perspective—including the impacts of uranium mining, uranium enrichment, fuel fabrication, plant construction, and fuel disposal—nuclear power offers a huge emissions advantage over any other large-scale method of baseload power generation and is on par with renewable sources. Nuclear power currently supplies about 20% of America’s electricity supply. America’s 104 operating nuclear power reactors are also the cheapest source of baseload electricityon a per-kilowatt-hour basis because operational and fuel costs are comparatively low. Although the existing nuclear units are successfully renewing their operating licenses for an additional 20 years, new nuclear power plants are essential to meet growing demand while avoiding GHG emissions. New nuclear power plants are capital-intensive, requiring an estimated $6–8 billion (2008 dollars) per plant. The U.S. electric power sector consists of many relatively small companies that do not have the size, financing capability, or financial strength to fund power projects of this scale on their own, in the numbers required. Outside financial support is necessary. The loan guarantee program authorized by EPAct2005 is a crucial tool to enable utilities to finance the construction of new reactors by increasing access to capital and enabling a higher share of leveraged debt. DOE estimates that by enabling a utility to rely more heavily on private debt than more expensive equity, a federal loan guarantee may save the ratepayers nearly 40% in the cost of power from a new nuclear plant. A well-managed loan guarantee program will be funded by project applicants and not require any expenditure of government funds. Unfortunately, the loan guarantee program has not been implemented effectively by the DOE, and the $18.5 billion in loan volume authorized by Congress for nuclear power projects is inadequate, given the estimated cost of a new nuclear power plant. That loan volume will support, at best, two, or three new projects. The current program should be expanded, and at the appropriate time merged with the Clean Energy Bank of the United States discussed earlier. The time it takes to license and build a nuclear power plant—now estimated at a minimum of eight years—is one reason the financing costs are high. The Nuclear Regulatory Commission (NRC) estimates it will take three and one-half years to review the first wave of new license applications for new designs. This period must be reduced for subsequent applications without compromising safety, and Congress must ensure the NRC has adequate resources to process license applications as expeditiously as possible. The regulatory and licensing framework has improved significantly since the 1980s, when we saw completed plants sit idle while awaiting issuance of operating licenses, but the NRC has yet to issue a Construction and Operating License under the new process. Project sponsors and investors have significant questions about whether the new process will deliver timely approvals. Delays in starting up a completed plant will subject its owners to substantial financial costs. The standby support program, established in EPAct2005, could be an effective insurance policy for nuclear plant owners against delays in the regulatory process or from litigation outside of the plant owner’s control. While this is a potentially useful tool to encourage first-movers to test the process, several changes are necessary to broaden the scope of the coverage. As currently structured, the statutory liability cap is now too low and does not reflect today’s market costs.

#### Government support is vital-~--it overcomes financial barriers to nuclear that the market cannot

Yanosek 12 Kassia, entrepreneur-in-residence at Stanford University’s Steyer-Taylor Center for Energy Policy and Finance and a private equity investor in the energy sector as a principal at Quadrant Management and Founder of Tana Energy Capital LLC, " Financing Nuclear Power in the US", Spring, energyclub.stanford.edu/index.php/Journal/Financing\_Nuclear\_Power\_by\_Kassia\_Yanosek

Over the course of the last decade, it appeared that concerns about carbon emissions, aging coal fleets, and a desire for a diversified generation base were reviving the U.S. utility sector interest in building new nuclear plants. Government and companies worked closely on design certification for Generation III reactors, helping to streamline the licensing process. New loan guarantees from the federal government targeted for nuclear projects were created as part of the 2005 Energy Policy Act. Consequently, dozens of projects entered the planning stages. Following more than 30 years in which no new units were built, it looked as if the U.S. nuclear industry was making significant headway. However, it is yet to be seen how many new nuclear projects will actually make it beyond blueprints due to one of the largest barriers to new nuclear construction: financing risk. Large upfront capital costs, a complex regulatory process, uncertain construction timelines, and technology challenges result in a risk/return profile for nuclear projects that is unattractive for the capital markets without supplementary government or ratepayer support. To many investors, nuclear seems too capital-intensive. Nuclear energy has attractive qualities in comparison to other sources of electricity. A primary motivation to pursue the development of nuclear energy in the U.S. has been its low operating fuel costs compared with coal, oil, and gas-fired plants. Over the lifetime of a generating station, fuel makes up 78% of the total costs of a coal-fired plant. For a combined cycle gas-fired plant, the figure is 89%. According to the Nuclear Energy Institute, the costs for nuclear are approximately 14%, and include processing, enrichment, and fuel management/disposal costs. Today’s low natural gas prices have enhanced the prospects of gas-fired power, but utilities still remain cautious about over-investing in new natural gas generation given the historical volatility of prices. Furthermore, nuclear reactors provide baseload power at scale, which means that these plants produce continuous, reliable power to consistently meet demand. In contrast, renewable energies such as wind or solar are only available when the wind blows or the sun shines, and without storage, these are not suitable for large-scale use. Finally, nuclear energy produces no carbon emissions, which is an attractive attribute for utilities that foresee a carbon tax being imposed in the near future. Given nuclear’s benefits, one may wonder why no new nuclear units have been ordered since the 1970s. This hiatus is in great part due to nuclear’s high cost comparative to other alternatives, and its unique set of risks. As a result, financing nuclear has necessitated government involvement, as the cost of nuclear typically exceeds that of the cost of conventional generation technologies such as coal and natural gas fired generation on a levelized cost of energy (LCOE) basis. LCOE represents the present value of the total cost of building and operating a generating plant over its financial life, converted to equal annual payments and amortized over expected annual generation, and is used to compare across different power generation technologies. For both regulated utilities and independent power producers, nuclear is unattractive if the levelized cost exceeds that of other technologies, since state utility commissions direct regulated utilities to build new capacity using the technology with the lowest LCOE. Furthermore, capital costs are inherently high, ranging in the billions or tens of billions of dollars, and are compounded by financing charges during long construction times. Without government support, financing nuclear is currently notpossible in the capital markets. Recently, Constellation Energy and NRG separately pulled the plug on new multi-billion dollar plants, citing financing problems. Projects, however, will get done on a one-off basis. Southern Company’s Vogtle Plant in Eastern Georgia is likely to be the sponsor of the first new generation to be constructed, taking advantage of local regulatory and federal support. Two new reactors of next-generation technology are in the permitting stage, which will bring online 2,200 megawatts (MW) of new capacity, and will cost $14 billion. The project will take advantage of tax credits and loan guarantees provided in the 2005 Energy Policy Act.

#### And, loan guarantees reduce financial uncertainty and boost investment

Adams 10—Publisher of Atomic insights Was in the Navy for 33 years Spent time at the Naval Academy Has experience designing and running small nuclear plants (Rod, Concrete Action to Follow Strongly Supportive Words On Building New Nuclear Power Plants, atomicinsights.com/2010/01/concrete-action-to-follow-strongly-supportive-words-on-building-new-nuclear-power-plants.html)

Loan guarantees are important to the nuclear industry because the currently available models are large, capital intensive projects that need a stable regulatory and financial environment. The projects can be financed because they will produce a regular stream of income that can service the debt and still provide a profit, but that is only true if the banks are assured that the government will not step in at an inopportune time to halt progress and slow down the revenue generation part of the project. Bankers do not forget history or losses very easily; they want to make sure that government decisions like those that halted Shoreham, Barnwell’s recycling facility or the Clinch River Breeder Reactor program are not going to be repeated this time around. For the multi-billion dollar projects being proposed, bankers demand the reassurance that comes when the government is officially supportive and has some “skin in the game” that makes frivolous bureaucratic decisions to erect barriers very expensive for the agency that makes that decision. I have reviewed the conditions established for the guarantee programs pretty carefully – at one time, my company ([Adams Atomic Engines, Inc.](http://www.atomicengines.com)) was considering filing an application. The loan conditions are strict and do a good job of protecting government interests. They were not appropriate for a tiny company, but I can see where a large company would have less trouble complying with the rules and conditions. The conditions do allow low or no cost intervention in the case of negligence or safety issues, but they put the government on the hook for delays that come from bad bureaucratic decision making.

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#### The aff isn't topical—procurement is a non-financial incentive

Czinkota et al, 9 - Associate Professor at the McDonough School of Business at Georgetown University (Michael, Fundamentals of International Business, p. 69 – google books)

Incentives offered by policymakers to facilitate foreign investments are mainly of three types: fiscal, financial, and nonfinancial. Fiscal incentives are specific tax measures designed to attract foreign investors. They typically consist of special depreciation allowances, tax credits or rebates, special deductions for capital expenditures, tax holidays, and the reduction of tax burdens. Financial incentives offer special funding for the investor by providing, for example, land or buildings, loans, and loan guarantees. Nonfinancial incentives include guaranteed government purchases; special protection from competition through tariffs, import quotas, and local content requirements, and investments in infrastructure facilities.

#### Voter for limits—including government purchase creates an entirely separate topic making us accountable for every non-market application of every energy type in any setting.

### 1nc elections

#### Obama is winning but its close and reversible – the average of recent polls puts Obama ahead

**Cook, 10/4**/12 – editor and publisher of the Cook Political Report for National Journal (Charlie, “Mitt Romney Breaks His Losing Streak” <http://www.nationaljournal.com/columns/cook-report/the-cook-report-romney-breaks-his-losing-streak-20121004?mrefid=mostViewed>)

Too many political observers see politics in an entirely binary way: Everything has to be either a “0” or a “1”; a race is either tied or it’s over; every election is either won or stolen. Some people never want to admit that their side lost. And some people think that a poll either tells them what they want to hear or is methodologically flawed—or crooked. It’s like an obnoxious sports fan (often found in Philadelphia) who views a ruling by a referee or umpire as either favorable or a bad call. Denial and simplicity reign.

The presidential election is neither tied nor over. Of the 16 most recent national polls using live telephone interviewers calling both respondents with landlines and those with cell phones (between 30 and 40 percent of voters do not have landlines and cannot legally be called by robo-pollsters), one has the race even, two have Obama with a narrow 2-point edge, five have 3-point Obama margins, two have 5-point Obama advantages, another pair have 6-point Obama leads, two have 7-point leads, and one has an 8-point Obama lead. This would strongly suggest that the Obama lead is between 3 and 6 percentage points; such brand-name polls as those by CNN, Fox News, and NBC News/Wall Street Journal are among those in that 3- to 6-point range.

Conversations with Democratic and Republican pollsters and strategists suggest that Colorado, Florida, North Carolina, and Virginia are the most competitive swing states. Some high-quality private polling shows Romney with very narrow leads in both North Carolina and Virginia, but a few other equally sophisticated surveys show Obama with narrow advantages in those two states. At least one private survey shows Florida even, but most show the Sunshine State and Colorado with narrow Obama leads, in the small- to mid-single-digit range. Just a hair or two better for Obama but still quite close are Nevada and Wisconsin, followed by Iowa. Things really get ugly for Romney in Ohio and Michigan, and, finally, in Pennsylvania, which is no longer competitive. Ohio shows a 5- to 8-point lead for Obama in private polling. In Michigan, Obama’s lead is slightly wider, and in Pennsylvania, Romney faces close to a 10-point deficit. It is mathematically possible for Romney to reach 270 electoral votes without Michigan, Ohio, or Pennsylvania, but it is in reality exceedingly unlikely.

It would take a very consequential event to change the trajectory of this race. Time will tell whether Romney’s strong debate performance on Wednesday night was the event that he needed—particularly in swing states such as Ohio. But at least he energized his supporters and sent a clear message that the race is not over.

#### SMRs incentives unpopular

**Taso 11** (Firas Eugen Taso, “21st Century Civilian Nuclear Power and the Role of Small Modular Reactors”, Fletcher School of Law and Diplomacy; Tufts University, May, http://dl.tufts.edu/ProxyServlet/?url=http://repository01.lib.tufts.edu:8080/fedora/get/tufts:UA015.012.079.00002/bdef:TuftsPDF/getPDF&filename=tufts:UA015.012.079.00002.pdf) **Quotes Paolo Ferroni, a senior engineer at Westinghouse**

Paolo Ferroni also mentions that SMRs would not solve the public concern over nuclear power. To the general public, they would still be nuclear facilities, something that they do not understand and fear. Unless they were proven and demonstrated, opposition would exist even for the smaller demonstration projects. The NIMBY attitude would likely preclude SMRs from being a game changer for nuclear power, unless something changes dramatically, not only incrementally, in public perception. Furthermore, Makhijani and Boyd argue that SMRs would not even address the climate change problem since their development will take likely another decade, they constitute a waste of money and resources, as renewable sources are already becoming cheaper than nuclear. 232 Robert Bryce disagrees with this argument in Power Hungry, saying that nuclear provides baseload power, while renewables are peak power at most, and sometimes do not even provide that. While he makes a valid point, it is hard to assess what the renewable industry could do to improve its track record, including capacity and price if it had the resources large nuclear has had for the past decades. This again comes to the opportunity cost of investing a technology to the detriment of others, in effect picking winners.

#### Energy is pivotal

**Levine, 12** - Steve LeVine is the author of The Oil and the Glory and a longtime foreign correspondent (“How dirty is Romney prepared to get to win election?” 6/13,

http://oilandglory.foreignpolicy.com/posts/2012/06/12/how\_dirty\_is\_romney\_prepared\_to\_get\_to\_win\_election)

Yet if the election is as close as the polls suggest, the energy ads could prove a pivotal factor. "Advertising is generally not decisive. Advertising matters at the margins. ... But ask Al Gore if the margin matters," said Ken Goldstein, president of the Campaign Media Analysis Group at Kantar Media. "This is looking like an election where the margin may matter."

#### Romney causes massive foreign backlash and nuclear wars around the globe

Doug Bandow 5-15-2012; Doug Bandow is a senior fellow at the Cato Institute and former special assistant to President Ronald Reagan. “Mitt Romney: The Foreign Policy of Know-Nothingism” http://www.cato.org/publications/commentary/mitt-romney-foreign-policy-knownothingism

Romney’s overall theme is American exceptionalism and greatness, slogans that win public applause but offer no guidance for a bankrupt superpower that has squandered its international credibility. “This century must be an American century,” Romney proclaimed. “In an American century, America leads the free world and the free world leads the entire world.” He has chosen a mix of advisers, including the usual neocons and uber-hawks — Robert Kagan, Eliot Cohen, Jim Talent, Walid Phares, Kim Holmes, and Daniel Senor, for instance — that gives little reason for comfort. Their involvement suggests Romney’s general commitment to an imperial foreign policy and force structure. Romney is no fool, but he has never demonstrated much interest in international affairs. He brings to mind George W. Bush, who appeared to be largely ignorant of the nations he was invading. Romney may be temperamentally less likely to combine recklessness with hubris, but he would have just as strong an incentive to use foreign aggression to win conservative acquiescence to domestic compromise. This tactic worked well for Bush, whose spendthrift policies received surprisingly little criticism on the right from activists busy defending his war-happy foreign policy. The former Massachusetts governor has criticized President Obama for “a naked political calculation or simply sheer ineptitude” in following George W. Bush’s withdrawal timetable in Iraq and for not overriding the decision of a government whose independence Washington claims to respect. But why would any American policymaker want to keep troops in a nation that is becoming ever more authoritarian, corrupt, and sectarian? It is precisely the sort of place U.S. forces should not be tied down. In contrast, Romney has effectively taken no position on Afghanistan. At times he appears to support the Obama timetable for reducing troop levels, but he has also proclaimed that “Withdrawal of U.S. forces from Afghanistan under a Romney administration will be based on conditions on the ground as assessed by our military commanders.” Indeed, he insisted: “To defeat the insurgency in Afghanistan, the United States will need the cooperation of both the Afghan and Pakistani governments — we will only persuade Afghanistan and Pakistan to be resolute if they are convinced that the United States will itself be resolute,” and added, “We should not negotiate with the Taliban. We should defeat the Taliban.” Yet it’s the job of the president, not the military, to decide the basic policy question: why is the U.S. spending blood and treasure trying to create a Western-style nation state in Central Asia a decade after 9/11? And how long is he prepared to stay — forever? On my two trips to Afghanistan I found little support among Afghans for their own government, which is characterized by gross incompetence and corruption. Even if the Western allies succeed in creating a large local security force, will it fight for the thieves in Kabul? Pakistan is already resolute — in opposing U.S. policy on the ground. Afghans forthrightly view Islamabad as an enemy. Unfortunately, continuing the war probably is the most effective way to destabilize nuclear-armed Pakistan. What will Romney do if the U.S. military tells him that American combat forces must remain in Afghanistan for another decade or two in order to “win”? The ongoing AfPak conflict is not enough; Romney appears to desire war with Iran as well. No one wants a nuclear Iran, but Persian nuclear ambitiions began under America’s ally the Shah, and there is no reason to believe that the U.S. (and Israel) cannot deter Tehran. True, Richard Grenell, who briefly served as Romney’s foreign-policy spokesman, once made the astonishing claim that the Iranians “will surely use” nuclear weapons. Alas, he never shared his apparently secret intelligence about the leadership in Tehran’s suicidal tendencies. The Iranian government’s behavior has been rational even if brutal, and officials busy maneuvering for power and wealth do not seem eager to enter the great beyond. Washington uneasily but effectively deterred Joseph Stalin and Mao Zedong, the two most prolific mass murderers in history. Iran is no substitute for them. Romney has engaged in almost infantile ridicule of the Obama administration’s attempt to engage Tehran. Yet the U.S. had diplomatic relations with Hitler’s Germany and Stalin’s Russia. Washington came to regret not having similar contact with Mao’s China. Even the Bush administration eventually decided that ignoring Kim Jong-Il’s North Korea only encouraged it to build more nuclear weapons faster. Regarding Iran, Romney asserted, “a military option to deal with their nuclear program remains on the table.” Building up U.S. military forces “will send an unequivocal signal to Iran that the United States, acting in concert with allies, will never permit Iran to obtain nuclear weapons... Only when the ayatollahs no longer have doubts about America’s resolve will they abandon their nuclear ambitions.” Indeed, “if all else fails... then of course you take military action,” even though, American and Iranian military analysts warn, such strikes might only delay development of nuclear weapons. “Elect me as the next president,” he declared, and Iran “will not have a nuclear weapon.” Actually, if Tehran becomes convinced that an attack and attempted regime change are likely, it will have no choice but to develop nuclear weapons. How else to defend itself? The misguided war in Libya, which Romney supported, sent a clear signal to both North Korea and Iran never to trust the West. Iran’s fears likely are exacerbated by Romney’s promise to subcontract Middle East policy to Israel. The ties between the U.S. and Israel are many, but their interests often diverge. The current Israeli government wants Washington to attack Iran irrespective of the cost to America. Moreover, successive Israeli governments have decided to effectively colonize the West Bank, turning injustice into state policy and making a separate Palestinian state practically impossible. Perceived American support for this creates enormous hostility toward the U.S. across the Arab and Muslim worlds. Yet Romney promises that his first foreign trip would be to Israel “to show the world that we care about that country and that region” — as if anyone anywhere, least of all Israel’s neighbors, doesn’t realize that. He asserted that “you don’t allow an inch of space to exist between you and your friends and allies,” notably Israel. The U.S. should “let the entire world know that we will stay with them and that we will support them and defend them.” Indeed, Romney has known Israeli Prime Minister Benjamin Netanyahu for nearly four decades and has said that he would request Netanyahu’s approval for U.S. policies: “I’d get on the phone to my friend Bibi Netanyahu and say, ‘Would it help if I say this? What would you like me to do?’” Americans would be better served by a president committed to making policy in the interests of the U.S. instead. Romney’s myopic vision is just as evident when he looks elsewhere. For instance, he offered the singular judgment that Russia is “our number one geopolitical foe.” Romney complained that “across the board, it has been a thorn in our side on questions vital to America’s national security.” The Cold War ended more than two decades ago. Apparently Romney is locked in a time warp. Moscow manifestly does not threaten vital U.S. interests. Romney claimed that Vladimir “Putin dreams of ‘rebuilding the Russian empire’.” Even if Putin has such dreams, they don’t animate Russian foreign policy. No longer an ideologically aggressive power active around the world, Moscow has retreated to the status of a pre-1914 great power, concerned about border security and international respect. Russia has no interest in conflict with America and is not even much involved in most regions where the U.S. is active: Asia, the Middle East, and Latin America. Moscow has been helpful in Afghanistan, refused to provide advanced air defense weapons to Iran, supported some sanctions against Tehran, used its limited influence in North Korea to encourage nuclear disarmament, and opposes jihadist terrorism. This is curious behavior for America’s “number one geopolitical foe.” Romney’s website explains that he will “implement a strategy that will seek to discourage aggressive or expansionist behavior on the part of Russia,” but other than Georgia where is it so acting? And even if Georgia fell into a Russian trap, Tbilisi started the shooting in 2008. In any event, absent an American security guarantee, which would be madness, the U.S. cannot stop Moscow from acting to protect what it sees as vital interests in a region of historic influence. Where else is Russia threatening America? Moscow does oppose NATO expansion, which actually is foolish from a U.S. standpoint as well, adding strategic liabilities rather than military strengths. Russia strongly opposes missile defense bases in Central and Eastern Europe, but why should Washington subsidize the security of others? Moscow opposes an attack on Iran, and so should Americans. Russia backs the Assad regime in Syria, but the U.S. government once declared the same government to be “reformist.” Violent misadventures in Kosovo, Afghanistan, Iraq, and Libya demonstrate that America has little to gain and much to lose from another attempt at social engineering through war. If anything, the Putin government has done Washington a favor keeping the U.S. out of Syria. This doesn’t mean America should not confront Moscow when important differences arise. But treating Russia as an adversary risks encouraging it to act like one. Doing so especially will make Moscow more suspicious of America’s relationships with former members of the Warsaw Pact and republics of the Soviet Union. Naturally, Romney wants to “encourage democratic political and economic reform” in Russia — a fine idea in theory, but meddling in another country’s politics rarely works in practice. Just look at the Arab Spring. Not content with attempting to start a mini-Cold War, Mitt Romney dropped his nominal free-market stance to demonize Chinese currency practices. He complained about currency manipulation and forced technology transfers: “China seeks advantage through systematic exploitation of other economies.” On day one as president he promises to designate “China as the currency manipulator it is.” Moreover, he added, he would “take a holistic approach to addressing all of China’s abuses. That includes unilateral actions such as increased enforcement of U.S. trade laws, punitive measures targeting products and industries that rely on misappropriations of our intellectual property, reciprocity in government procurement, and countervailing duties against currency manipulation. It also includes multilateral actions to block technology transfers into China and to create a trading bloc open only for nations genuinely committed to free trade.” Romney’s apparent belief that Washington is “genuinely committed to free trade” is charming nonsense. The U.S. has practiced a weak dollar policy to increase exports. Washington long has subsidized American exports: the Export-Import Bank is known as “Boeing’s Bank” and U.S. agricultural export subsidies helped torpedo the Doha round of trade liberalization through the World Trade Organization. Of course, Beijing still does much to offend Washington. However, the U.S. must accommodate the rising power across the Pacific. Trying to keep China out of a new Asia-Pacific trade pact isn’t likely to work. America’s Asian allies want us to protect them — no surprise! — but are not interested in offending their nearby neighbor with a long memory. The best hope for moderating Chinese behavior is to tie it into a web of international institutions that provide substantial economic, political, and security benefits. Beijing already has good reason to be paranoid of the superpower which patrols bordering waters, engages in a policy that looks like containment, and talks of the possibility of war. Trying to isolate China economically would be taken as a direct challenge. Romney would prove Henry Kissinger’s dictum that even paranoids have enemies. Naturally, Romney also wants to “maintain appropriate military capabilities to discourage any aggressive or coercive behavior by China against its neighbors.” However, 67 years after the end of World War II, it is time for Beijing’s neighbors to arm themselves and cooperate with each other. Japan long had the second largest economy on earth. India is another rising power with reason to constrain China. South Korea has become a major power. Australia has initiated a significant military build-up. Many Southeast Asian nations are constructing submarines to help deter Chinese adventurism. Even Russia has much to fear from China, given the paucity of population in its vast eastern territory. But America’s foreign-defense dole discourages independence and self-help. The U.S. should step back as an off-shore balancer, encouraging its friends to do more and work together. It is not America’s job to risk Los Angeles for Tokyo, Seoul, or Taipei. Romney similarly insists on keeping the U.S. on the front lines against North Korea, even though all of its neighbors have far more at stake in a peaceful peninsula and are able to contain that impoverished wreck of a country. The Romney campaign proclaims: “Mitt Romney will commit to eliminating North Korea’s nuclear weapons and its nuclear-weapons infrastructure.” Alas, everything he proposes has been tried before, from tougher sanctions to tighter interdiction and pressure on China to isolate the North. What does he plan on doing when Pyongyang continues to develop nuclear weapons as it has done for the last 20 years? The American military should come home from Korea. Romney complained that the North’s nuclear capability “poses a direct threat to U.S. forces on the Korean Peninsula and elsewhere in East Asia.” Then withdraw them. Manpower-rich South Korea doesn’t need U.S. conventional support, and ground units do nothing to contain North Korea’s nuclear ambitions. Pull out American troops and eliminate North Korea’s primary threat to the U.S. Then support continuing non-proliferation efforts led by those nations with the most to fear from the North. That strategy, more than lobbying by Washington, is likely to bring China around. Romney confuses dreams with reality when criticizing President Obama over the administration’s response to the Arab Spring. “We’re facing an Arab Spring which is out of control in some respects,” he said, “because the president was not as strong as he needed to be in encouraging our friends to move toward representative forms of government.” Romney asked: “How can we try and improve the odds so what happens in Libya and what happens in Egypt and what happens in other places where the Arab Spring is in full bloom so that the developments are toward democracy, modernity and more representative forms of government? This we simply don’t know.” True, the president doesn’t know. But neither does Mitt Romney. The latter suffers from the delusion that bright Washington policymakers can remake the world. Invade another country, turn it into a Western-style democracy allied with America, and everyone will live happily every after. But George W. Bush, a member of Mitt Romney’s own party, failed miserably trying to do that in both Afghanistan and Iraq. The Arab Spring did not happen because of Washington policy but in spite of Washington policy. And Arabs demanding political freedom — which, unfortunately, is not the same as a liberal society — have not the slightest interest in what Barack Obama or Mitt Romney thinks. Yet the latter wants “convene a summit that brings together world leaders, donor organizations, and young leaders of groups that espouse” all the wonderful things that Americans do. Alas, does he really believe that such a gathering will stop, say, jihadist radicals from slaughtering Coptic Christians? Iraq’s large Christian community was destroyed even as the U.S. military occupied that country. His summit isn’t likely to be any more effective. Not everything in the world is about Washington. Which is why Romney’s demand to do something in Syria is so foolish. Until recently he wanted to work with the UN, call on the Syrian military to be nice, impose more sanctions, and “increase the possibility that the ruling minority Alawites will be able to reconcile with the majority Sunni population in a post-Assad Syria.” Snapping his fingers would be no less effective. Most recently he advocated arming the rebels. But he should be more cautious before advocating American intervention in another conflict in another land. Such efforts rarely have desirable results. Iraq was a catastrophe. Afghanistan looks to be a disaster once American troops come home. After more than a decade Bosnia and Kosovo are failures, still under allied supervision. Libya is looking bad. Even without U.S. “help,” a full-blown civil war already threatens in Syria. We only look through the glass darkly, observed the Apostle Paul. It might be best for Washington not to intervene in another Muslim land with so many others aflame. Despite his support for restoring America’s economic health, Romney wants to increase dramatically Washington’s already outsize military spending. Rather than make a case on what the U.S. needs, he has taken the typical liberal approach of setting an arbitrary number: 4 percent of GDP. It’s a dumb idea, since America already accounts for roughly half the globe’s military spending — far more if you include Washington’s wealthy allies — and spends more in real terms than at any time during the Cold War, Korean War, or Vietnam War, and real outlays have nearly doubled since 2000. By any normal measure, the U.S. possesses far more military resources than it needs to confront genuine threats. What Romney clearly wants is a military to fight multiple wars and garrison endless occupations, irrespective of cost. My Cato colleague Chris Preble figured that Romney's 4 percent gimmick would result in taxpayers spending more than twice as much on the Pentagon as in 2000 (111 percent higher, to be precise) and 45 percent more than in 1985, the height of the Reagan buildup. Over the next ten years, Romney's annual spending (in constant dollars) for the Pentagon would average 64 percent higher than annual post-Cold War budgets (1990-2012), and 42 percent more than the average during the Reagan era (1981-1989). If Mitt Romney really believes that the world today is so much more dangerous than during the Cold War, he should spell out the threat. He calls Islamic fundamentalism, the Arab Spring, the impact of failed states, the anti-American regimes of Cuba, Iran, North Korea, and Venezuela, rising China, and resurgent Russia “powerful forces.” It’s actually a pitiful list — Islamic terrorists have been weakened and don’t pose an existential threat, the Arab Spring threatens instability with little impact on America, it is easier to strike terrorists in failed states than in nominal allies like Pakistan and Saudi Arabia, one nuclear-armed submarine could vaporize all four hostile states, and Russia’s modest “resurgence” may threaten Georgia but not Europe or America. Only China deserves to be called “powerful,” but it remains a developing country surrounded by potential enemies with a military far behind that of the U.S. In fact, the greatest danger to America is the blowback that results from promiscuous intervention in conflicts not our own. Romney imagines a massive bootstrap operation: he wants a big military to engage in social engineering abroad which would require an even larger military to handle the violence and chaos that would result from his failed attempts at social engineering. Better not to start this vicious cycle. America faces international challenges but nevertheless enjoys unparalleled dominance. U.S. power is buttressed by the fact that Washington is allied with every industrialized nation except China and Russia. America shares significant interests with India, the second major emerging power; is seen as a counterweight by a gaggle of Asian states worried about Chinese expansion; remains the dominant player in Latin America; and is closely linked to most of the Middle East’s most important countries, such as Israel, Saudi Arabia, Egypt, Jordan, and Iraq. If Mitt Romney really believes that America is at greater risk today than during the Cold War, he is not qualified to be president. In this world the U.S. need not confront every threat, subsidize every ally, rebuild every failed state, and resolve every problem. Being a superpower means having many interests but few vital ones warranting war. Being a bankrupt superpower means exhibiting judgment and exercising discretion. President Barack Obama has been a disappointment, amounting in foreign policy to George W. Bush-lite. But Mitt Romney sounds even worse. His rhetoric suggests a return to the worst of the Bush administration. The 2012 election likely will be decided on economics, but foreign policy will prove to be equally important in the long-term. America can ill afford another know-nothing president.

#### Romney crushes Russia relations

**CSM, 10-26-11**, p. http://www.alaskadispatch.com/article/putin-and-russian-empire-can-us-russian-relations-survive?page=0,1

Russia's foreign policy community is watching with growing nervousness as leading Republicans in the US, including at least one top contender for the party's presidential nomination, turn their ire against Barack Obama's already troubled "reset" in US-Russian relations, which the Kremlin sees as vital to its future plans for repairing Russian influence in the world.

Republicans have been critical all along of Mr. Obama's policy of building strong, practical relations with Moscow while soft-peddling US disapproval of Kremlin power abuses and human rights violations. But as recently as last December, more than a dozen Republican senators joined Democrats to win the needed two-thirds Senate ratification of the START nuclear arms reduction accord, which was understood in Moscow as a sign that pragmatism would always prevail in Washington.

Now, Russian experts do not seem so sure.

Since former president Vladimir Putin decided to shoulder aside his hand-picked successor, Dmitry Medvedev, and seek a fresh term as Russia's supreme leader, the tone of discussion about Russia in the US has grown much harsher, many note.

Mr. Putin's recently publicized plan to establish a "Eurasian Union" – a strong economic, and potentially political, alliance of former Soviet states – has rekindled fears among many in the West that Russia's strategic goal is to bring back the USSR and return to its historic rivalry with the US.

"We had hoped that the reset with the US might help Russia move into a friendlier, closer relationship with the West, but that seems to be fading fast," says Viktor Kremeniuk, deputy director of the official Institute of USA-Canada Studies in Moscow. "Now it seems the general opinion in the US is that Russia is fast becoming an authoritarian state with the scarecrow figure of Putin as its next president. It's all starting to feel a bit hopeless."

In a Washington Post interview earlier this month, Republican presidential contender Mitt Romney, often seen as moderate, is quoted as saying that Putin "dreams of rebuilding the Russian empire." Obama's reset of relations "has to end ... we have to show strength," Mr. Romney added.

Reining in Russian ambitions?

At a Washington conference Tuesday, Republican House Speaker John Boehner slammed Russia's "use of old tools and old thinking" as an attempt "to restore Soviet-style power and influence," and called for tougher measures to rein in Russian ambitions. At the same meeting, Garry Kasparov, a leader of the banned Other Russia opposition movement, urged Americans to heed Ronald Reagan's advice and treat Putin's Russia as an "evil empire" beyond the pale of civilized nations.

The current cold war-style spat between Moscow and Washington over the suspicious death of Sergei Magnitsky, an anticorruption lawyer who died after being denied medical treatment in a Russian remand prison two years ago, clearly illustrates the reasons Moscow prefers Obama to any Republican who might come into the White House.

A bill currently before the US Senate, the Sergei Magnitsky Rule of Law Accountability Act of 2011, and heavily supported by Republicans, would impose tough visa restrictions and financial penalties on a list of Russian officials deemed to be implicated in his fate.

But the US State Department has moved to preempt the bill by issuing its own "secret" list of proscribed officials, without imposing any financial sanctions, and connecting it with global human rights policies rather than a measure specifically targeted at Russia. Last weekend Moscow announced its own list of US citizens allegedly implicated in human rights abuses, who would be denied entry to Russia.

"On the surface it looks like a bad dispute, but actually we see the actions of the Obama administration as proof that it is committed to the reset," says Dmitry Suslov, an expert with the Council on Foreign and Defense Policies, an influential Moscow think tank. "The Senate bill is purely anti-Russian, and for the time being at least, Obama has managed to blunt this. It's greatly appreciated in Moscow.... We know that if any of the current Republican presidential nominees makes it to the White House, things will go very badly for the US-Russian relationship."

#### Extinction

**Collins & Rojansky, 10** – \* U.S. Ambassador to the Russian Federation from 1997 to 2001, AND \*\*deputy director of the Russia and Eurasia Program at the Carnegie Endowment (8/18/10, James F. Collins, Matthew Rojansky, Foreign Policy, “Why Russia Matters,” http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=41409, JMP)

A year and a half after Barack Obama hit the "reset" button with Russia, the **reconciliation is still fragile, incomplete, and politically divisive**. Sure, Russia is no easy ally for the United States. Authoritarian yet insecure, economically mighty yet technologically backward, the country has proven a challenge for U.S. presidents since the end of the Cold War. Recent news hasn't helped: The arrest in July of a former deputy prime minister and leader of the Solidarity opposition movement, Boris Nemtsov, provoked some of the harshest criticism of Russia yet from the Obama administration. Then last Wednesday, Russia announced that it had moved anti-aircraft missiles into Abkhazia, the region that broke off from Georgia during the August 2008 war. The announcement was hardly welcome news for the United States, which has tried to defuse tensions there for the last 24 months.

Yet however challenging this partnership may be, Washington can't afford not to work with Moscow. Ronald Reagan popularized the phrase, "Trust, but verify" -- a good guiding principle for Cold War arms negotiators, and still apt for today. Engagement is the only way forward. Here are 10 reasons why:

1. **Russia's nukes are still an existential threat.**

Twenty years after the fall of the Berlin Wall, Russia has thousands of nuclear weapons in stockpile and hundreds still on hair-trigger alert aimed at U.S. cities. This threat will not go away on its own; cutting down the arsenal will require direct, bilateral arms control talks between Russia and the United States. New START, the strategic nuclear weapons treaty now up for debate in the Senate, is the latest in a long line of bilateral arms control agreements between the countries dating back to the height of the Cold War. To this day, it remains the only mechanism granting U.S. inspectors access to secret Russian nuclear sites. The original START agreement was essential for reining in the runaway Cold War nuclear buildup, and New START promises to cut deployed strategic arsenals by a further 30 percent from a current limit of 2,200 to 1,550 on each side. Even more, President Obama and his Russian counterpart, Dmitry Medvedev, have agreed to a long-term goal of eliminating nuclear weapons entirely. But they can only do that by working together.

2. **Russia is a swing vote on the international stage.**

As one of the five permanent members of the U.N. Security Council, Moscow holds veto power over any resolution that the body might seek to pass -- including recent efforts to levy tougher sanctions on Iran or, in 2009, against North Korea following that country's second nuclear test. Russian support for such resolutions can also help persuade China and others not to block them. The post-reset relationship between Moscow and Washington works like a force multiplier for U.S. diplomacy. Russia plays an equally crucial role in the G-8 and G-20 economic groups, helping to formulate a coordinated approach in response to economic threats. In 2008, for example, Russia supported a G-20 resolution promising to refrain from protectionism and avoid new barriers to investment or trade.

3. Russia is big.

The country's borders span across Europe, Central and East Asia, and the Arctic -- all regions where the United States has important interests and where it cannot afford destructive competition. With an ongoing counterinsurgency campaign in Afghanistan, the United States has a strong interest in Central Asian stability and relies on Russia not only for direct assistance with logistics and information sharing, but to help manage threats like the recent political upheaval and sectarian violence in Kyrgyzstan. In the former Soviet space, Moscow's historical ties to newly independent states are still fresh and powerful. Moscow is the linchpin to resolving "frozen conflicts" that prevent countries like Moldova, Georgia, and Azerbaijan from prospering economically and moving toward European Union membership. Recently, for example, Moscow signaled renewed interest in resolving frozen conflicts in Nagorno-Karabakh and Transnistria. And despite recent troop movements into Abkhazia, a negotiated settlement is still very possible, one that returns some territory to Georgia but preserves its autonomous status, along with that of its fellow breakaway republic, South Ossetia.

4. Russia's environment matters.

As the catastrophic fires across Western Russia have dramatically illustrated, Russia is both a victim of global climate change and a steward of natural resources -- including many of the forests now badly burned -- **needed to reverse the global warming trend.** With more than one-tenth of the world's total landmass, vast freshwater and ocean resources, plus deposits of nearly every element on the periodic table, Russia is an indispensable partner in the responsible stewardship of the global environment. On climate change, there is work to be done, but progress is evident. Russia today is the world's fourth-largest carbon emitter, but as a signatory to the Copenhagen Accord, it has pledged to reduce emissions to 20 to 25 percent below 1990 levels. Another black spot is Russia's use of "flaring" -- a technique that burns natural gas into the open atmosphere during oil extraction, but Medvedev agreed to capture 95 percent of the gas currently released through flaring. Last year he also signed Russia's first law on energy efficiency, which takes such steps as requiring goods to be marked according to their energy efficiency and banning incandescent light bulbs after 2014. True, most of Russia's other commitments are short on deadlines and concrete deliverables. But like China's cleanup for the Beijing Olympics, Moscow could transform resolve into reality with surprising speed, given the right amount of international engagement. And in the meantime, Russia's natural climate-cleaning properties are vast; the Siberian provinces alone contain more clean oxygen-producing forests and reserves of freshwater than continental Europe.

5. Russia is rich.

As the "R" in the famous BRIC grouping of emerging economies, Russia is the 12th-largest market in world, with the third-largest foreign currency reserves. And the country's role in world markets is only growing. Russia is a big player in commodity trading, the country boasts a volatile but increasingly attractive stock exchange, and it is open to foreign investment -- even in state-owned industries. Russian businesses are increasingly looking abroad to form strategic partnerships, acquire assets, and sell their products. And as a country that felt the global financial crisis viscerally -- economic growth fell by almost 8 percent in 2009 -- Russia has a strong interest in making sure there is no repeat. Despite occasional retrenchments, such as the ban on grain exports after the summer fires, Russia is committed to becoming a free-trading World Trade Organization member, and wants more access to U.S. and European technology and management know-how to drive its modernization. Excessive bureaucracy and widespread corruption are the biggest challenges to Russia's further economic growth, but these are already top talking points in Medvedev's modernization drive, and engagement with more transparent Western countries such as the United States can only help.

6. One word: energy.

The American way of life depends on stable and predictable commodity prices -- gasoline, natural gas, and coal in particular -- and Russia plays a large role in the global production and pricing of these fossil fuels. Russia alone possesses roughly one-quarter of the world's known gas reserves, and it is currently responsible for over a fifth of global exports. It is the second largest oil-producing state after Saudi Arabia and has the second-largest coal reserves after the United States. The even better news for Washington is that Russia is not a member of OPEC, the cartel of oil-producing countries. This gives the country far more freedom to focus on increasing exports rather than reducing them to keep prices down. When it comes to bringing supply to market, many will no doubt remember the so-called gas wars between Russia and Ukraine and Russia and Belarus that left Eastern Europe in the cold several times in recent years. Much of the trouble is attributable to the legacy of Soviet energy infrastructure in Russia's western neighbors, which put a choke-hold on Russia's gas pipelines. Moscow is currently working with the United States, China, and Western Europe to find a way around this problem, which will entail building new pipelines through the Baltic Sea, Black Sea and Siberia.

7. **Russia is a staunch ally in the war on terror** (and other scourges).

Even during the dark days after the 2008 Russia-Georgia war, Moscow and Washington cooperated effectively on counterterrorism, counternarcotics, infectious disease prevention and response, and other shared security priorities. Recently, the two have worked together under the auspices of the Bilateral Presidential Commission to coordinate relief strategies for catastrophes such as the Haiti earthquake and the violence in Kyrgyzstan. Both Washington and Moscow recognize that swift, well-organized responses to such crises are key to preventing weaknesses from being exploited -- for example by extremist groups who are happy to fill the vacuum of government authority. Russia is also a critical partner in U.S. law enforcement efforts to defeat organized crime and terrorism financing. The two countries are currently working to map smuggling routes in Central Asia. And Russia has shared information with the United States on the informal financial networks used to fund Taliban and Afghan warlords.

8. The roads to Tehran and Pyongyang go through Moscow.

Russia maintains unique relationships with Iran and North Korea -- both top concerns on Washington's nuclear nonproliferation radar. In the past, the Kremlin has used its leverage to keep the path open for negotiations, sending senior diplomats to Tehran and offering carrots such as civilian nuclear assistance and weapons sales (though it has deferred the sale of advanced S-300 ground-to-air missiles that could be used to blunt a U.S. or Israeli air strike). Now more than ever, Washington needs allies with that kind of leverage to help punish violators and **discourage cascading nuclear proliferation worldwide.** Leading by example on nonproliferation is also a must; as the world's biggest nuclear powers, the United States and Russia are looked to as the standard-setters. If they fail to ratify their latest modest step forward on bilateral nuclear arms control, it will be difficult to push other countries to take similar counter-proliferation measures.

9. **Russia can be a peacemaker.**

Moscow has the potential to play a role in the settlement of key regional conflicts -- or if it chooses, to obstruct progress. Russia is a member of the Middle East "Quartet," the six-party talks dealing with North Korean denuclearization, and each of the working groups addressing conflicts in the post-Soviet space, such as the OSCE Minsk group on Nagorno-Karabakh, and the 5+2 group on Transnistria. In such post-Soviet regions in particular, Russia has a unique capacity to contribute to peaceful resolution of territorial disputes by facilitating trade and economic engagement with and between former adversaries, and acting as a peacekeeper once a final settlement is reached. In the Middle East, Russia still controls a network of commercial and intelligence assets and has substantial influence with the Syrians, who should be pushed to play a more productive role in the Arab-Israeli peace process.

10. Russians buy U.S. goods.

As the U.S. economy stops and starts its way out of recession, most everyone agrees that boosting exports is a key component in the recovery. And Russia is a big market. U.S. companies such as Boeing, International Paper, and John Deere have invested billions in Russian subsidiaries and joint ventures. In all, there are more than 1,000 U.S. companies doing business there today. They are in Russia not only to take advantage of the country's vast natural resources and highly skilled workers but also to meet the demand for American-branded goods. The Russian middle class wants consumer goods and the country's firms increasingly seek advanced U.S. equipment and machinery. Between 2004 and 2008, before the financial crisis hit, U.S.-Russia trade grew by more than 100 percent to over $36 billion annually, and although that figure dropped by a third in 2009, there is potential for an even better, more balanced trade relationship in the coming decade.

In short, **Russia is indispensible**. As long as the United States participates in the global economy and has interests beyond its own borders, it will have no choice but to maintain relations with Russia. And good relations would be even better.

### 1nc fiscal cliff

#### Fiscal cliff will dominate the lame duck and barely pass now

Bruce Krasting (writer or Business Insider) 10/1, 2012 “The BEST Case Scenario For The Fiscal Cliff Is Still Ugly” http://www.businessinsider.com/war-headlines-after-the-november-election-will-prevent-cutbacks-in-military-spending-2012-10

Absent some earth shaking event between now and November, Obama is going to win, the House will remain in the hands of the Republicans and the Senate will continue to be equally divided. The war between Reds and Blues will be just as bad as it was a year ago. The day after the election, the fight over the fiscal cliff will commence. I expect it will be ugly. -I think there is zero probability that all of the issues now on the cliff will be pushed off to some future period. (Ultimate-can-kicking) Some of the cutbacks/tax increases that are now scheduled, will happen. -I put the odds on falling off the cliff without any compromises at 40%. This scenario comes about if the Reps and Dems can’t agree on anything. If that is the case, we fall very hard on January 2. (No-can-kicking) -Therefore, I see a 60% chance of a compromise that softens the consequences of the fiscal cliff, but does not eliminate it entirely. (Semi-can-kicking, but still kicking ourselves in the face) If there is to be a compromise, it will be interesting to see who gets what, and who gives up what. It might play out with the following results: I) The 2% reduction in FICA taxes is history. As of 1/1/13 every worker is getting hit with a 2% tax increase. This is a very regressive tax increase. II) The Bush tax cuts for those making more than $250k are gone. This is a very Progressive tax increase. III) The Bush tax cuts for those making less than $250k will be retained. This “centrist” compromises is the result of the “give” on #s I and II. Both sides will be able to claim that they did their best for “Middle Class Workers”. IV) The Alternative Minimum Tax will be adjusted for inflation and will be fully phased in over a period of three years. This tax will hit 40m taxpayers (up from only 4m today). This is most definitely a middle class tax increase. V) The capital gains tax rate is going to go up to at least 25%. The result of I – V is that everyone who works, or has investment income is going to be paying more. No one will escape higher taxes. Then there is the spending side of the ledger. The so-called, “sequestered” amounts. Here is where the real horse-trading will happen. Keep in mind that the timing of this critical argument debate will be in November and December. What else will be happening in those months that will influence the budget compromises? Talk of War.

#### Plan drains capital and causes an immediate fight

Szondy, ‘12

[David, freelance writer -- Gizmag, 2-16, “Feature: Small modular nuclear reactors - the future of energy?” http://www.gizmag.com/small-modular-nuclear-reactors/20860/]

The problem is that nuclear energy is the proverbial political hot potato - even in early days when the new energy source exploded onto the world scene. The tremendous amount of energy locked in the atom held the promise of a future like something out of a technological Arabian Nights. It would be a world where electricity was too cheap to meter, deserts would bloom, ships would circle the Earth on a lump of fuel the size of a baseball, planes would fly for months without landing, the sick would be healed and even cars would be atom powered. But though nuclear power did bring about incredible changes in our world, in its primary role, generating electricity for homes and industry, it ended up as less of a miracle and more of a very complicated way of boiling water.¶ Not only complicated, but expensive and potentially dangerous. Though hundreds of reactors were built all over the world and some countries, such as France, generate most of their electricity from it, nuclear power has faced continuing questions over cost, safety, waste disposal and proliferation. One hundred and four nuclear plants provide the United States with 20 percent of the nation's power, but a building permit hadn't been issued since 1978 with no new reactors coming on line since 1996 and after the uproar from the environmental movement after nuclear accidents at Three Mile Island, Chernobyl and Fukushima, it seemed unlikely that any more would ever be approved - until now. This fierce domestic opposition to nuclear power has caused many governments to take an almost schizophrenic stance regarding the atom.

#### Sustaining polcap is key

Andrew Sprung (he is the CEO of Sprung PR and hold a PhD from the University of Rochestor) 9/21, 2012 “Ezra Klein's unconvincing theory that Obama misunderstands (or misrepresents) "change," http://xpostfactoid.blogspot.com/2012/09/ezra-kleins-unconvincing-theory-that.html)

In my view, Klein is viewing this question too narrowly. Obama is well aware of the limitations of the bully pulpit, and he's got to know better than any person on the planet that presidential advocacy polarizes, entrenching the opposing party in implacable opposition to whatever the president proposes. Yet, in presenting a revamped theory of how the presidency works, he's not just feeding us a line of BS. And if Obama wins reelection, I believe that we will look back five or ten or twenty years from now and recognize that yes, Obama did change the way Washington works. Or at the very least, he kept the US on a sane policy course in a time of extreme polarization and thus gave (will have given...) the system space to self-correct, as it has in the past. Let's start with Klein's objection to Obama's characterization of how healthcare reform got done: The health-care process, which I reported on extensively, was a firmly “inside game” strategy. There were backroom deals with most every major interest group and every swing legislator.... By the time the law passed, many more Americans viewed it unfavorably than viewed it favorably — exactly the opposite of what you’d expect if health care had passed through an “outside game” strategy in which, as Obama put it, “the American people … put pressure on Congress to move these things forward.” And yet, health care passed. The inside game worked. All true, laddie. And yet, in claiming that the impetus for healthcare reform came from the outside, I don't think Obama is attempting to whitewash this long and messy process -- or is even referring to it. He is alluding to the marshaling or channeling of popular will that got him elected. The essence of Obama's primary election argument against Hillary Clinton was that he was better equipped to marshal the popular will for fundamental change -- with healthcare reform as the centerpiece -- than she was. I well remember the moment when that argument first impressed itself on me. It was in a debate in the immediate aftermath of the Iowa caucuses, on Jan. 5, 2008: Look, I think it's easier to be cynical and just say, "You know what, it can't be done because Washington's designed to resist change." But in fact there have been periods of time in our history where a president inspired the American people to do better, and I think we're in one of those moments right now. I think the American people are hungry for something different and can be mobilized around big changes -- not incremental changes, not small changes. I actually give Bill Clinton enormous credit for having balanced those budgets during those years. It did take political courage for him to do that. But we never built the majority and coalesced the American people around being able to get the other stuff done. And, you know, so the truth is actually words do inspire. Words do help people get involved. Words do help members of Congress get into power so that they can be part of a coalition to deliver health care reform, to deliver a bold energy policy. Don't discount that power, because when the American people are determined that something is going to happen, then it happens. And if they are disaffected and cynical and fearful and told that it can't be done, then it doesn't. I'm running for president because I want to tell them, yes, we can. And that's why I think they're responding in such large numbers. Cue the political science eye-roll. The American people were not "determined" that healthcare reform per se had to occur. You can't read the results of the 2008 wave election as a "mandate" for a specific policy. In the aftermath, the electoral tide went back out with a vengeance. But it's also true that in two years of campaigning Obama's words did inspire people, that the American people were hungry for change after Bush, that Obama made a broad and conceptually coherent case for moving the center of American politics back to the left with a renewed commitment to shared prosperity and investment in the common good, and that healthcare reform was at the center of that case. True too that the results of that election gave him enough of a majority to persist, even when relentless Republican misinformation and bad-faith negotiation and delay eroded public support. Obama also used the bully pulpit at crucial points, if not to rally public opinion, at least to re-commit wavering Democrats -- and also to convince the public, as he enduringly has, that he was more of a good faith negotiator, more willing to compromise, than the Republicans. Those pressure points were the September 2009 speech he gave to a joint session of Congress, and the remarkable eight-hour symposium he staged with the leadership of both parties in late February 2010 to showcase the extent to which the ACA incorporated past Republican proposals and met goals allegedly shared by both parties, as well as his own bend-over-backwards willingness to incorporate any Republican ideas that could reasonably be cast as advancing those goals. In a series of posts about Ronald Reagan, Brendhan Nyhan has demonstrated that presidential rhetoric generally does not sway public opinion. Savvy politicians channel public opinion; transformative ones seize an opportunity when their basic narrative of where the country needs to go aligns with a shift in public opinion, usually in response to recent setbacks or turmoil. Obama, like Reagan, effected major change in his first two years because he caught such a wave -- he amassed the political capital, and he spent it, and we got what he paid for. The force from outside -- a wave election -- empowered Obama to work change from inside in a system that reached a new peak of dysfunctionality. Klein's also objects to Obama's pitch for how to effect change going forward. In 2011, he notes, Obama highlighted the substantial change won from the messy inside game of legislating, touting the long list of legislative accomplishments of the 111th Congress. In election season, he has reverted to a keynote of his 2008 campaign: change comes from you, the electorate; it happens when ”the American people … put pressure on Congress to move these things forward.” Klein regards this as election season hooey: But while this theory of change might play better, it’s the precise theory of change that the last few years have shattered. Whatever you want to say about the inside game, it worked. Legislation passed. But after the midterm elections, it stopped working. And so the White House moved towards an outside game strategy, where ”the American people … put pressure on Congress to move these things forward.” Perhaps the most public example was Obama’s July 2011 speech, in which he said: I’m asking you all to make your voice heard. If you want a balanced approach to reducing the deficit, let your member of Congress know. If you believe we can solve this problem through compromise, send that message. So many Americans responded that Congress’s Web site crashed. But Obama didn’t get his “balanced approach,” which meant a deal including taxes. Klein goes on to recount that throughout the past year of confrontation with the GOP, pushing a jobs package that had broad popular support, Obama won only one minor victory, extension of the payroll tax cut. He then reverts to two political science tenets: presidential advocacy entrenches the opposition, and it can't move popular opinion. But I think he misreads Obama's pitch, strategy and record on several counts. First, he understates Obama's (and the Democrats') successes in the year of confrontation that has followed the debt ceiling debacle. He writes off the payroll tax cut and unemployment benefit extension as small beer. But this was actually a near-total victory in two stages against entrenched opposition, and it won Obama some vital back-door stimulus for the second year running in the wake of the GOP House takeover. It was followed by a similar GOP cave-in on maintaining low student loan interest rates -- and then again, by the collapse of the House GOP effort to renege on the Budget Control Act and impose still more spending cuts. Presidential rhetoric may not change the public mind. But when it's in sync with voter's propensities, it can deploy public opinion to bring pressure to bear on the opposition. Second, it's true that under threat of GOP debt ceiling extortion, Obama successfully marshaled public opinion in favor of his "balanced" approach to deficit reduction but wasn't able to use that pressure to move the GOP off their no-new-taxes intransigence. But that battle ain't over yet, and popular support for Obama's position is political capital that's still in the bank. In the upcoming fiscal cliff negotiations, Obama, if he wins reelection, will have the whip hand, given the expiration of the Bush tax cuts and Republican teeth-gnashing over the defense cuts in the sequester. Speaking of which, Obama's refusal to intervene in the supercommittee negotiations as Republicans stonewalled once again over any tax hikes banked him further capital in this upcoming fight. Republicans are screaming much louder than Democrats about the sequester, disastrous though the cuts may be on the domestic side. Third, it's rational for Obama to recast his bid for change in election season, because of course he's seeking further "change" from the outside, i.e., more Democrats elected to Congress. He's not going to win a mandate as in 2008, or, most likely, majorities in both houses of Congress. But he has to make the pitch for being granted renewed tools to advance his agenda. Finally, a key part of Obama's "you are the change" pitch in his convention speech was a frank call to play defense -- to protect the changes wrought in his first term and fend off the further capture of the electoral process and the nation's resources by the oligarchy the GOP represents: If you turn away now – if you buy into the cynicism that the change we fought for isn’t possible … well, change will not happen. If you give up on the idea that your voice can make a difference, then other voices will fill the void: lobbyists and special interests; the people with the $10 million checks who are trying to buy this election and those who are making it harder for you to vote; Washington politicians who want to decide who you can marry, or control health-care choices that women should make for themselves.

#### Impact is global econ collapse

Harold Mandel (writer for the Examiner) 9/27, 2012 “Fitch says fiscal cliff could set off global recession (Video)” http://www.examiner.com/article/fitch-says-fiscal-cliff-could-set-off-global-recession

The ratings agency stated, "The U.S. fiscal cliff represents the single biggest near-term threat to a global economic recovery." Fitch has gone on to warn, “A U.S. fiscal shock would be exported to the rest of the world via a sharply weaker U.S. dollar and asset prices, lower U.S. price and wage inflation and heightened risk of deflation, and the impact on commodity prices.” In the meantime leading U.S. executives have less confidence in the business outlook now than at any time in the past three years, with a primary reason being fear of gridlock in Washington over the fiscal deficit and tax policy. And so unless the fiscal cliff is confronted and avoided this could be bad news for everyone.

#### Extinction

**Tilford 2008** – PhD in history from George Washington University, served for 32 years as a military officer and analyst with the Air Force and Army (Earl, “Critical mass: economic leadership or dictatorship”, Cedartown Standard, lexis)

Could it happen again? Bourgeois democracy requires a vibrant capitalist system. Without it, the role of the individual shrinks as government expands. At the very least, the dimensions of the U.S. government economic intervention will foster a growth in bureaucracy to administer the multi-faceted programs necessary for implementation. Bureaucracies, once established, inevitably become self-serving and self-perpetuating. Will this lead to “socialism” as some conservative economic prognosticators suggest? Perhaps. But so is the possibility of dictatorship. If the American economy collapses, especially in wartime, there remains that possibility. And if that happens the American democratic era may be over. If the world economies collapse, totalitarianism will almost certainly return to Russia, which already is well along that path in any event. Fragile democracies in South America and Eastern Europe could crumble. A global economic collapse will also increase the chance of global conflict. As economic systems shut down, so will the distribution systems for resources like petroleum and food. It is certainly within the realm of possibility that nations perceiving themselves in peril will, if they have the military capability, use force, just as Japan and Nazi Germany did in the mid-to-late 1930s. Every nation in the world needs access to food and water. Industrial nations—the world powers of North America, Europe, and Asia—need access to energy. When the world economy runs smoothly, reciprocal trade meets these needs. If the world economy collapses, the use of military force becomes a more likely alternative. And given the increasingly rapid rate at which world affairs move; the world could devolve to that point very quickly.

### 1nc states cp

#### Counterplan: the 50 state governments and relevant sub-federal actors should increase production cost incentives for electricity from small modular reactors in the United States.

#### Solves commercialization and spills over

**Rosner, 11** - Robert Rosner is an astrophysicist and founding director of the Energy Policy Institute at Chicago. He was the director of Argonne National Laboratory from 2005 to 2009 (Robert, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.” November, <http://epic.uchicago.edu/sites/epic.uchicago.edu/files/uploads/SMRWhite_Paper_Dec.14.2011copy.pdf>)

Production Cost Incentive: A production cost incentive is a performance-based incentive. With a production cost incentive, the government incentive would be triggered only when the project successfully operates. The project sponsors would assume full responsibility for the upfront capital cost and would assume the full risk for project construction. The production cost incentive would establish a target price, a so-called “market-based benchmark.” Any savings in energy generation costs over the target price would accrue to the generator. Thus, a production cost incentive would provide a strong motivation for cost control and learning improvements, since any gains greater than target levels would enhance project net cash flow. Initial SMR deployments, without the benefits of learning, will have significantly higher costs than fully commercialized SMR plants and thus would benefit from production cost incentives. Because any production cost differential would decline rapidly due to the combined effect of module manufacturing rates and learning experience, the financial incentive could be set at a declining rate, and the level would be determined on a plant-by-plant basis, based on the achievement of cost reduction targets. 43 The key design parameters for the incentive include the following: 1. The magnitude of the deployment incentive should decline with the number of SMR modules and should phase out after the fleet of LEAD and FOAK plants has been deployed. 2. The incentive should be market-based rather than cost-based; the incentive should take into account not only the cost of SMRs but also the cost of competing technologies and be set accordingly. 3. The deployment incentive could take several forms, including a direct payment to offset a portion of production costs or a production tax credit.

### 1nc advantage cp

#### The Department of Defense should obtain, through alternative financing, electricity from space solar power for military bases in the United States.

#### Counterplan leads to rapid commercial development

**NSSO 7** (National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf)

FINDING:The SBSP Study Group found that industry has stated that the #1 driver and requirement for generating industry interest and investment in developing the initial operational SBSP systems is acquiring an anchor tenant customer, or customers, that are willing to sign contracts for high‐value SBSP services. Industry is particularly interested in the possibility that the DoD might be willing to pay for SBSP services delivered to the warfighter in forward bases in amounts of 5‐50 MWe continuous, at a price of $1 or more per kilowatt‐hour.  o Recommendation:  The SBSP Study Group recommends that the DoD should immediately conduct a requirements analysis of underlying long‐term DoD demand for secure, reliable, and mobile energy delivery to the war‐fighter, what the DoD might be willing to pay for a SBSP service delivered to the warfighter and under what terms and conditions, and evaluate the appropriateness and effectiveness of various approaches to signing up as an anchor tenant customer of a commercially‐delivered service, such as the NextView acquisition approach pioneered by the National GeoSpatial‐imaging Agency. FINDING: The SBSP Study Group found that even with the DoD as an anchor tenant customer at a price of $1‐2 per kilowatt hour for 5‐50 megawatts continuous power for the warfighter, when considering the risks of implementing a new unproven space technology and other major business risks, the business case for SBSP still does not appear to close in 2007 with current capabilities (primarily launch costs). This study did not have the resources to adequately assess the economic viability of SBSP given current or projected capabilities, and this must be part of any future agenda to further develop this concept. Past investigations of the SBSP concept have indicated that the costs are dominated by costs of installation, which depend on the cost of launch (dollars per kilogram) and assembly and on how light the components can be made (kilograms per kilowatt). Existing launch infrastructure cannot close the business case, and any assessment made based upon new launch vehicles and formats are speculative. Greater clarity and resolution is required to set proper targets for technology development and private capital engagement. Ideally SBSP would want to be cost‐competitive with other baseload suppliers in developing markets which cannot afford to spend a huge portion of their GDP on energy (4c/kWh), and these requirements are extremely stringent, but other niche export markets may provide more relaxed criteria (35c/kWh), and some customers, such as DoD, appear to be spending more than $1/kWh in forward deployed locations. It would be helpful to develop a series of curves which examine technology targets for various markets, in addition to the sensitivities and opportunities for development. Some work by the European Space Agency (ESA) has suggested that in an “apples‐to‐apples” comparison, SBSP may already be competitive with large‐scale  terrestrial solar baseload power. A great range of opinions were expressed during the study regarding the near‐term profitability.  It is instructive to note that that there are American companies that have or are actively marketed SBSP at home and abroad, while another group feels the technology is sufficiently mature to create a dedicated public‐private partnership based upon the COMSAT model and has authored draft legislation to that effect. • The business case is much more likely to close in the near future if the U.S. Government agrees to: o Sign up as an anchor tenant customer, and o Make appropriate technology investment and risk‐reduction efforts by the U.S. Government, and o Provide appropriate financial incentives to the SBSP industry that are similar to the significant incentives that Federal and State Governments are providing for private industry investments in other clean and renewable power sources. • The business case may close in the near future with appropriate technology investment and risk‐reduction efforts by the U.S. Government, and with appropriate financial incentives to industry. Federal and State Governments are providing significant financial incentives for private industry investments in other clean and renewable power sources. o Recommendation: The SBSP Study Group recommends that in order to reduce risk and to promote development of SBSP, the U.S. Government should increase and acceler

ate its investments in the development and demonstration of key component, subsystem, and system level technologies that will be required for the creation of operational and scalable SBSP systems. Finding: The SBSP Study Group found that a small amount of entry capital by the US Government is likely to catalyze substantially more investment by the private sector. This opinion was expressed many times over from energy and aerospace companies alike. Indeed, there is anecdotal evidence that even the activity of this intermim study has already provoked significant by at least three major aerospace companies. Should the United States put some dollars in for a study or demonstration, it is likely to catalyze significant amounts of internal research and development. Study leaders likewise heard that the DoD could have a catalytic role by sponsoring prizes or signaling its willingness to become the anchor customer for the product.

#### Solves supply vulnerability

**NSSO, 7** (National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, <http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf>)

For the DoD specifically, beamed energy from space in quantities greater than 5 MWe has the potential to be a disruptive game changer on the battlefield. SBSP and its enabling wireless power transmission technology could facilitate extremely flexible “energy on demand” for combat units and installations across an entire theater, while significantly reducing dependence on vulnerable over‐land fuel deliveries. SBSP could also enable entirely new force structures and capabilities such as ultra long‐endurance airborne or terrestrial surveillance or combat systems to include the individual soldier himself. More routinely, SBSP could provide the ability to deliver rapid and sustainable humanitarian energy to a disaster area or to a local population undergoing nation‐building activities. **SBSP could also facilitate base “islanding”** such that each installation has the ability to operate independent of vulnerable ground‐ based energy delivery infrastructures. In addition to helping American and Allied defense establishments remain relevant over the entire 21st Century through more secure supply lines, perhaps the greatest military benefit of SBSP is to lessen the chances of conflict due to energy scarcity by providing access to a strategically security energy supply.

### 1nc solvency

#### NRC is conducting SMR assessments with industry participation, solves commercialization. Letting their demanding review process finish before giving incentives is key to solvency

Heft, ‘11

[Gordon, Black & Veatch, “Small Modular Reactors Make Headway In Many Countries: Design Certification Starts Soon,” Issue No. 1, http://solutions.bv.com/small-modular-reactors-make-headway-in-many-countries/]

Small Modular Reactors (SMRs), those nuclear power plants that have the capability of being mass produced, hauled by rail and dropped in the ground, at first glance sound like something from the futuristic pages of Popular Science magazine. But look out – the first proposals head for design certification as early as next year. Already, the U.S. Nuclear Regulatory Commission (NRC) is holding discussions with various designers on what are called topical reports. It is a “meet and discussion” time that allows the subjects addressed in the topical reports (e.g., security, passive safety systems) to get an early review by the NRC and to see what kinds of questions or concerns the NRC raises. Call it an early-stage vetting opportunity. “SMRs have many advantages, including the passive cooling systems that have simplicity and safety,” said Larry Drbal, Chief Engineer, Nuclear for Black & Veatch. “It is really an interesting, exciting concept.” The notion of using nuclear power in a very small manner is certainly not new, considering several countries have naval fleets that are nuclear powered. But using SMRs to generate electrical power in small quantities – 10 megawatts to 300 MW – is definitely new and ground-breaking, Drbal said. Currently, there are four small reactors operating in a remote area of Siberia and a floating barge equipped with two small reactors under construction in Russia, with operation expected in 2013 near the city of Viluchinsk. Drbal sees SMRs as gaining much traction in the next few years. Although the design certification documents (DCDs) may take five years for NRC review, he said that utilities could also submit COLAs (combined construction and operating license applications) to the NRC in parallel with the DCD. By the time the DCD receives NRC approval, the COLA approval could soon follow, and construction could quickly begin. “One developer is saying they expect to have their first SMR operating commercially by 2020,” Drbal noted. Advantages to SMRs Drbal has no problem reeling off a laundry list of advantages he sees to this new way of viewing nuclear power. “All components can be built in-country and then hauled by truck, rail or barge to the site. These modules can be mass produced, which gains factory-like efficiencies. Since they are modular, they can be built to match the load growth of a given region, and when you need additional power, you add another module, just like what we do with combined cycle units.” Drbal says SMRs will likely be used in remote locations, where it is difficult to generate power and erect transmission lines. Because the generation size is so much smaller than a full-sized nuclear plant, the load output would be more compatible with the electric grid size. The designs also promise longer fuel cycles, and when it does come time to refuel, it may be a matter of pulling out one module and dropping in a new one for some SMR designs. Financially, SMRs come with a much smaller price tag. While owners are probably looking upwards at $1 billion, Drbal estimates, that is still dwarfed by the $8 billion price that comes with the full-sized brethren. With the smaller size also comes a smaller staff, partially reduced security needs, less operating maintenance, decreased financial risk, and perhaps even less emergency planning. The designs also are “passive,” meaning less safety-related pumps, motors, piping and other apparatus. International Interest in SMRs Many countries are looking at developing SMRs – China, South Korea, Argentina, Russia, the U.S., South Africa and France, just to name a few. The International Atomic Energy Association projects that 1,000 such reactors could be in commercial operation in the next 30 years – reaching isolated areas and small cities. There are a variety of different designs being offered by the global nuclear community, ranging from scaled-down PWRs (pressurized water reactors) to liquid metal-cooled (e.g., sodium) fast reactors to high-temperature gas-cooled reactors. “The NRC is first looking at the PWR designs, since that is what they are used to examining,” Drbal noted. “We expect the first two design certification applications to go before the NRC for review beginning in 2012.” The review process is meticulous but is continually ongoing during the five-year period, although SMR developers believe the NRC review time will be less because their designs are smaller, passive and simpler. There are many SMR generic licensing issues that will require resolution, including emergency planning, passive safety systems, staffing, physical security, financial issues, decommissioning and many more. These issues are being addressed with the NRC by the industry, technical societies, the government and other organizations. “The NRC will do a very detailed analysis. They will question everything – all assumptions, all calculations,” Drbal said. “They will ask for documentation, data and proof on literally hundreds of items. And after you answer those questions, they’ll ask more. They will also do their own analyses. Then there is a public comment period, which will generate more questions and discussions. It just takes time.” The fact that all of this technology is new – and in some cases, unproven – makes it even more time-consuming. There are few existing prototypes to gather data from, and no commercial operations to point to as examples. Still, Drbal says he has no doubt that SMR designs will be moving forward quickly in the upcoming years.

#### Domestic SMR construction is inevitable, but accelerating it during the review process leads to catastrophic accidents

Wang, 12

[Ucilia, Forbes, 1-20, “Feds To Finance Small Nuclear Reactor Designs,” http://www.forbes.com/sites/uciliawang/2012/01/20/feds-to-finance-small-nuclear-reactor-designs/]

The U.S. Department of Energy on Friday announced a plan to support the design of so-called “small modular nuclear reactors” and popularize their use for power generation. The plan is to fund two reactor designs that will become available for licensing and production by 2022. The department is first asking for advice from the power industry on crafting the details of this project, and it hasn’t said how much it would dole out. But whoever wins the contracts to design the reactors will have to pony up money as well. Small reactors are generally about one-third the size of existing nuclear reactors, and a power plant with small reactors promises to be cheaper to build and easier to obtain permits more quickly than a full-size nuclear power plant, proponents say. Utilities should have more flexibility in modifying the size of a power plant with small reactors – if they need more power, then they can add more reactors over time. Nuclear reactors have historically been designed to be 1-gigawatt or more each because such scale helps to drive down the manufacturing and installation costs. Small reactors can be economical, too, advocates say, because they can be shipped more easily and cheaply around the world. “We think (small, modular nuclear) solves a lot of issues in terms of investments and electricity infrastructure,” Chu said at a press conference a year ago. “And it’s a way for the United States to regain its leadership in nuclear.” Several startups and major power equipment makers are working on small modular nuclear reactors. They include TerraPower, which is backed by Bill Gates and recently received funding from Indian conglomerate Reliance Industries. TerraPower also has been talking to the governments of China, India and Russia, basically countries where nuclear power won’t likely receive the kind of intense opposition that you’ll find in the United States, Germany or Japan. Other venture capital-funded startups include NuScale Power and Hyperion Power Generation (see a list from GigaOm). These companies aren’t just working on shrinking the size of the reactors. They also are investigating the use of different fuels and ways to reduce nuclear waste, for example. Following the energy department’s announcement Friday morning, Westinghouse Electric Co. issued a statement to say it intends to apply for the funding. Westinghouse already is in the nuclear reactor design business. It received approval from the Nuclear Regulatory Commission for a large, 1,154-megawatt nuclear reactor called AP1000 last month. The energy department funded part of the project to design AP1000. Just because small nuclear reactors promise many economic and environmental benefits (they don’t produce dirty air like coal or natural gas power plants do) doesn’t mean they can be developed and made more quickly or cheaply, however. Technology companies also will have to prove that their small nuclear reactors can be just as safe if not safer than the conventional, large-scale nuclear reactors today. The Fukushima nuclear power plant disaster in Japan has shown that a misstep in designing and operating a nuclear plant can have a far greater and more devastating impact than a mistake in running other types of power plants. That means nuclear power companies — and the government — will have to do a lot more to prove that nuclear power should remain an important part of the country’s energy mix.

Extinction

Lendman, ‘11

[Stephen, Research Associate -- Center for Research on Globalization, 3-13, “Nuclear Meltdown in Japan,” http://www.thepeoplesvoice.org/TPV3/Voices.php/2011/03/13/nuclear-meltdown-in-japan]

For years, Helen Caldicott warned it's coming. In her 1978 book, "Nuclear Madness," she said: "As a physician, I contend that nuclear technology threatens life on our planet with extinction. If present trends continue, the air we breathe, the food we eat, and the water we drink will soon be contaminated with enough radioactive pollutants to pose a potential health hazard far greater than any plague humanity has ever experienced." More below on the inevitable dangers from commercial nuclear power proliferation, besides added military ones. On March 11, New York Times writer Martin Fackler headlined, "Powerful Quake and Tsunami Devastate Northern Japan," saying: "The 8.9-magnitude earthquake (Japan's strongest ever) set off a devastating tsunami that sent walls of water (six meters high) washing over coastal cities in the north." According to Japan's Meteorological Survey, it was 9.0. The Sendai port city and other areas experienced heavy damage. "Thousands of homes were destroyed, many roads were impassable, trains and buses (stopped) running, and power and cellphones remained down. On Saturday morning, the JR rail company" reported three trains missing. Many passengers are unaccounted for. Striking at 2:46PM Tokyo time, it caused vast destruction, shook city skyscrapers, buckled highways, ignited fires, terrified millions, annihilated areas near Sendai, possibly killed thousands, and caused a nuclear meltdown, its potential catastrophic effects far exceeding quake and tsunami devastation, almost minor by comparison under a worst case scenario. On March 12, Times writer Matthew Wald headlined, "Explosion Seen at Damaged Japan Nuclear Plant," saying: "Japanese officials (ordered evacuations) for people living near two nuclear power plants whose cooling systems broke down," releasing radioactive material, perhaps in far greater amounts than reported. NHK television and Jiji said the 40-year old Fukushima plant's outer structure housing the reactor "appeared to have blown off, which could suggest the containment building had already been breached." Japan's nuclear regulating agency said radioactive levels inside were 1,000 times above normal. Reuters said the 1995 Kobe quake caused $100 billion in damage, up to then the most costly ever natural disaster. This time, from quake and tsunami damage alone, that figure will be dwarfed. Moreover, under a worst case core meltdown, all bets are off as the entire region and beyond will be threatened with permanent contamination, making the most affected areas unsafe to live in. On March 12, Stratfor Global Intelligence issued a "Red Alert: Nuclear Meltdown at Quake-Damaged Japanese Plant," saying: Fukushima Daiichi "nuclear power plant in Okuma, Japan, appears to have caused a reactor meltdown." Stratfor downplayed its seriousness, adding that such an event "does not necessarily mean a nuclear disaster," that already may have happened - the ultimate nightmare short of nuclear winter. According to Stratfor, "(A)s long as the reactor core, which is specifically designed to contain high levels of heat, pressure and radiation, remains intact, the melted fuel can be dealt with. If the (core's) breached but the containment facility built around (it) remains intact, the melted fuel can be....entombed within specialized concrete" as at Chernobyl in 1986. In fact, that disaster killed nearly one million people worldwide from nuclear radiation exposure. In their book titled, "Chernobyl: Consequences of the Catastrophe for People and the Environment," Alexey Yablokov, Vassily Nesterenko and Alexey Nesterenko said: "For the past 23 years, it has been clear that there is a danger greater than nuclear weapons concealed within nuclear power. Emissions from this one reactor exceeded a hundred-fold the radioactive contamination of the bombs dropped on Hiroshima and Nagasaki." "No citizen of any country can be assured that he or she can be protected from radioactive contamination. One nuclear reactor can pollute half the globe. Chernobyl fallout covers the entire Northern Hemisphere." Stratfor explained that if Fukushima's floor cracked, "it is highly likely that the melting fuel will burn through (its) containment system and enter the ground. This has never happened before," at least not reported. If now occurring, "containment goes from being merely dangerous, time consuming and expensive to nearly impossible," making the quake, aftershocks, and tsunamis seem mild by comparison. Potentially, millions of lives will be jeopardized. Japanese officials said Fukushima's reactor container wasn't breached. Stratfor and others said it was, making the potential calamity far worse than reported. Japan's Nuclear and Industrial Safety Agency (NISA) said the explosion at Fukushima's Saiichi No. 1 facility could only have been caused by a core meltdown. In fact, 3 or more reactors are affected or at risk. Events are fluid and developing, but remain very serious. The possibility of an extreme catastrophe can't be discounted. Moreover, independent nuclear safety analyst John Large told Al Jazeera that by venting radioactive steam from the inner reactor to the outer dome, a reaction may have occurred, causing the explosion. "When I look at the size of the explosion," he said, "it is my opinion that there could be a very large leak (because) fuel continues to generate heat." Already, Fukushima way exceeds Three Mile Island that experienced a partial core meltdown in Unit 2. Finally it was brought under control, but coverup and denial concealed full details until much later. According to anti-nuclear activist Harvey Wasserman, Japan's quake fallout may cause nuclear disaster, saying: "This is a very serious situation. If the cooling system fails (apparently it has at two or more plants), the super-heated radioactive fuel rods will melt, and (if so) you could conceivably have an explosion," that, in fact, occurred. As a result, massive radiation releases may follow, impacting the entire region. "It could be, literally, an apocalyptic event. The reactor could blow." If so, Russia, China, Korea and most parts of Western Asia will be affected. Many thousands will die, potentially millions under a worse case scenario, including far outside East Asia. Moreover, at least five reactors are at risk. Already, a 20-mile wide radius was evacuated. What happened in Japan can occur anywhere. Yet Obama's proposed budget includes $36 billion for new reactors, a shocking disregard for global safety. Calling Fukushima an "apocalyptic event," Wasserman said "(t)hese nuclear plants have to be shut," let alone budget billions for new ones. It's unthinkable, he said. If a similar disaster struck California, nuclear fallout would affect all America, Canada, Mexico, Central America, and parts of South America. Nuclear Power: A Technology from Hell Nuclear expert Helen Caldicott agrees, telling this writer by phone that a potential regional catastrophe is unfolding. Over 30 years ago, she warned of its inevitability. Her 2006 book titled, "Nuclear Power is Not the Answer" explained that contrary to government and industry propaganda, even during normal operations, nuclear power generation causes significant discharges of greenhouse gas emissions, as well as hundreds of thousands of curies of deadly radioactive gases and other radioactive elements into the environment every year. Moreover, nuclear plants are atom bomb factories. A 1000 megawatt reactor produces 500 pounds of plutonium annually. Only 10 are needed for a bomb able to devastate a large city, besides causing permanent radiation contamination. Nuclear Power not Cleaner and Greener Just the opposite, in fact. Although a nuclear power plant releases no carbon dioxide (CO2), the primary greenhouse gas, a vast infrastructure is required. Called the nuclear fuel cycle, it uses large amounts of fossil fuels. Each cycle stage exacerbates the problem, starting with the enormous cost of mining and milling uranium, needing fossil fuel to do it. How then to dispose of mill tailings, produced in the extraction process. It requires great amounts of greenhouse emitting fuels to remediate. Moreover, other nuclear cycle steps also use fossil fuels, including converting uranium to hexafluoride gas prior to enrichment, the enrichment process itself, and conversion of enriched uranium hexafluoride gas to fuel pellets. In addition, nuclear power plant construction, dismantling and cleanup at the end of their useful life require large amounts of energy. There's more, including contaminated cooling water, nuclear waste, its handling, transportation and disposal/storage, problems so far unresolved. Moreover, nuclear power costs and risks are so enormous that the industry couldn't exist without billions of government subsidized funding annually. The Unaddressed Human Toll from Normal Operations Affected are uranium miners, industry workers, and potentially everyone living close to nuclear reactors that routinely emit harmful radioactive releases daily, harming human health over time, causing illness and early death. The link between radiation exposure and disease is irrefutable, depending only on the amount of cumulative exposure over time, Caldicott saying: "If a regulatory gene is biochemically altered by radiation exposure, the cell will begin to incubate cancer, during a 'latent period of carcinogenesis,' lasting from two to sixty years." In fact, a single gene mutation can prove fatal. No amount of radiation exposure is safe. Moreover, when combined with about 80,000 commonly used toxic chemicals and contaminated GMO foods and ingredients, it causes 80% of known cancers, putting everyone at risk everywhere. Further, the combined effects of allowable radiation exposure, uranium mining, milling operations, enrichment, and fuel fabrication can be devastating to those exposed. Besides the insoluble waste storage/disposal problem, nuclear accidents happen and catastrophic ones are inevitable. Inevitable Meltdowns Caldicott and other experts agree they're certain in one or more of the hundreds of reactors operating globally, many years after their scheduled shutdown dates unsafely. Combined with human error, imprudently minimizing operating costs, internal sabotage, or the effects of a high-magnitude quake and/or tsunami, an eventual catastrophe is certain. Aging plants alone, like Japan's Fukushima facility, pose unacceptable risks based on their record of near-misses and meltdowns, resulting from human error, old equipment, shoddy maintenance, and poor regulatory oversight. However, under optimum operating conditions, all nuclear plants are unsafe. Like any machine or facility, they're vulnerable to breakdowns, that if serious enough can cause enormous, possibly catastrophic, harm. Add nuclear war to the mix, also potentially inevitable according to some experts, by accident or intent, including Steven Starr saying: "Only a single failure of nuclear deterrence is required to start a nuclear war," the consequences of which "would be profound, potentially killing "tens of millions of people, and caus(ing) long-term, catastrophic disruptions of the global climate and massive destruction of Earth's protective ozone layer. The result would be a global nuclear famine that could kill up to one billion people." Worse still is nuclear winter, the ultimate nightmare, able to end all life if it happens. It's nuclear proliferation's unacceptable risk, a clear and present danger as long as nuclear weapons and commercial dependency exist. In 1946, Enstein knew it, saying: "Our world faces a crisis as yet unperceived by those possessing the power to make great decisions for good and evil. The unleashed power of the atom has changed everything save our modes of thinking, and thus we drift toward unparalleled catastrophe." He envisioned two choices - abolish all forms of nuclear power or face extinction. No one listened. The Doomsday Clock keeps ticking.

#### Transparent public engagement in this process is key to manage concerns and prevent visceral public backlash – turns case

Guy, 12

[Megan, investment professional at Angeleno Group, a growth equity investment firm focused on next generation energy and natural resources companies, holds an MBA from the Stanford Graduate School of Business and a Masters of Science from Stanford’s Emmett Interdisciplinary Program in Environment and Resources, Stanford Energy Journal, Spring, “NEW STRATEGIES FOR PUBLIC ENGAGEMENT,” http://energyclub.stanford.edu/index.php/Journal/Public\_Engagement\_by\_Megan\_Guy]

To shift public sentiment in its favor, proponents of nuclear energy must work against two critical factors: the psychology of risk and public distrust of institutions. On a purely quantitative basis, the risk of death or substantial harm from radiation exposure rates far below that of numerous other hazards (e.g., driving a car, being struck by lightning). Yet these figures are largely irrelevant when it comes to risk perception. Paul Slovic’s work has identified numerous qualitative factors that shape how a person understands and experiences risk: hazards that a person is involuntarily exposed to, is unfamiliar with, or which have potentially catastrophic consequences dramatically elevate perceived risk above actual risk. A nuclear accident–unexpected, technical, and “black box” in nature, conjuring images of radiation sickness and desolation–satisfies each of these criteria, activating the darkest recesses of the imagination and yielding, for many, an unacceptable level of perceived risk. Institutional distrust also undermines public confidence in nuclear energy, which has long been perceived as the domain of academics, experts, and bureaucrats. The history of nuclear crises provides plenty of evidence to illustrate that this may be well-founded. For example, the Soviet government did not publicly acknowledge the Chernobyl accident until elevated radiation levels were detected in Sweden two days after the accident occurred. During the Three Mile Island crisis, poor communication from Metropolitan Edison and state and Nuclear Regulatory Commission (NRC) officials led to conflicting public statements that heightened public confusion and alarm. And most recently, in the initial days of the Fukushima disaster the NRC perceived the accident to be much more severe than the Japanese government acknowledged. Governmental distrust and public turmoil grew rapidly among the Japanese citizenry when the Americans advocated for more drastic containment and evacuation measures than the Japanese were recommending. As such, few were surprised when an overly close relationship between Japanese regulators and TEPCO came to light in the following weeks. Similar concerns are present in the U.S., where they are compounded by a large segment of the public that is already disillusioned and suspicious of government, corporations, and expertise in the wake of the financial crisis and other recent events. If nuclear power is to play a meaningful role in addressing the world’s future energy needs, it must do a better job of engaging public support by rebuilding institutional trust and mitigating risk perception through education. Neither is easy (nor by any means guaranteed), but actions that improve controls, engagement, and transparency are all steps in the right direction. Regulatory regimes must be structured to incentivize regulators, operators, and citizens to identify and elevate safety concerns. Industry should work with regulators to develop a collaborative culture of openness and continuous improvement. For example, current technology enables real-time monitoring and analytics at a plant level. Real-time information sharing across fleets and among operators and regulators could accelerate learning and reduce costs across the industry, particularly as existing plants age and require increased maintenance. Most importantly, voicing a concern or identifying a problem must not be stigmatized. Rather, it should be rewarded to encourage candid assessment and communication. Although the fear associated with a potential nuclear accident can never be eliminated, it can be lessened through increasing the public’s understanding of, and familiarity with, nuclear science and safety processes. All stakeholders would be well served by collaboratively formulating, refining, and disseminating a proactive crisis management plan. Clearly this has limitations – every incident is different and inherently unpredictable – but by setting some expectations in advance and establishing clear channels of communication, citizens, operators, and regulators can build trust and lessen panic. Finally, the industry needs new methods of public engagement to expand the discussion to a broader audience: rather than branding individuals and regions as pro- or anti-nuclear, the industry would be better served by engaging in conversation, using expert knowledge to creatively facilitate a dialogue rather than to advocate a particular point at all costs. For example, Bill Gates’ TED Talk on energy (which features TerraPower’s Traveling Wave Reactor) has been viewed and debated by over one million people. This figure is certainly orders of magnitude greater than the number of individuals who have read any industry white paper or NRC report. People are far more likely to trust sources that both acknowledge weaknesses in their own positions, and also encourage their audiences to think critically, than those who view the world in black and white. From a technology perspective, the future of nuclear energy looks very bright – but without better strategies for public engagement, this renaissance may end before it truly begins.

#### Rushing SMR licensing increases liability cases—turns viability and supercharges the safety link

Feinstein, ‘11

[Dianne, US Senator, “AN EXAMINATION OF THE SAFETY AND ECONOMICS OF LIGHT WATER SMALL MODULAR REACTORS: HEARING before a SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION, SPECIAL HEARING, JULY 14, 2011--WASHINGTON DC,” http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72251/html/CHRG-112shrg72251.htm]

The Fukushima crisis also demonstrated the potential danger of storing spent fuel in pools on site, and yet the proposed SMR designs do not appear to make any improvements in this method of spent-fuel storage. Bluntly, I'm struggling to reconcile the lessons of Fukushima with the principal design premise of SMRs, and so I look forward to witnesses addressing these issues today. This hearing is not about spent fuel, but it's hard to have a hearing on new nuclear power without considering the issue of what we do with the waste. This country has not--and I stress not--done a good job dealing with defense or commercial nuclear waste. That's simply a fact. Today, we have no national policy to address our commercial spent nuclear fuel, and we store it at every nuclear plant in the country in pools and dry casks for decades without end. Yet, today we're considering investing $452 million in LW SMRs that will result in more spent fuel stored at sites with no permanent storage for waste. By law, the Federal Government must take this waste and store it permanently but, today, the Federal Government is being sued and is making payments for lost cases because it cannot fulfill that obligation. This is not inexpensive. The Government Accountability Office estimates that we face $12.3 billion in liability through 2020 if we fail to take the spent fuel from utilities. That's $12.3 billion of liability. Now, that's a very deep concern and should concern every one of us in this Congress. Presumably, building new plants licensed under the SMR program would only increase this liability. While we discuss the specific safety and economic issues of LW SMRs, I continue to view these issues with the absence of a spent-fuel policy. I visited our two reactors in California and, candidly, I don't know how the NRC can say it's fine to keep re-racking spent fuels, adding more rods, keeping them there in California for 24 years, transferring to dry casks, most of which are designed for transportation to permanent storage, and we have no permanent storage. We have no repository. We have no regional storage. We have no permanent storage, and yet we're looking at a new start. So I'm struggling to understand how these reactors will also be economical. The central premise I've been given is that for SMRs to be economical, they must offset the loss of economies of scale with economies of manufacturing.

### 1nc grid advantage

#### The status quo solves – substantial new upgrades, backup generators and microgrid adoption

**Aimone, 9/12**/12 - Director Business Enterprise Integration Office of the Deputy Under Secretary of Defense (Installations and Environment) (Michael, Congressional Testimony, <http://homeland.house.gov/sites/homeland.house.gov/files/Testimony%20-%20Aimone.pdf>)

DoD’s facility energy strategy is also focused heavily on grid security in the name of mission assurance. Although the Department’s fixed installations traditionally served largely as a platform for training and deployment of forces, in recent years they have begun to provide direct support for combat operations, such as unmanned aerial vehicles (UAVs) flown in Afghanistan from fixed installations here in the United States. Our fixed installations also serve as staging platforms for humanitarian and homeland defense missions. These installations are largely dependent on a commercial power grid that is vulnerable to disruption due to aging infrastructure, weather-related events, and potential kinetic, cyber attack. In 2008, the Defense 2 Science Board warned that DoD’s reliance on a fragile power grid to deliver electricity to its bases places critical missions at risk. 1

Standby Power Generation

Currently, DoD ensures that it can continue mission critical activities on base largely through its fleet of on-site power generation equipment. This equipment is connected to essential mission systems and automatically operates in the event of a commercial grid outage. In addition, each installation has standby generators in storage for repositioning as required. Facility power production specialists ensure that the generators are primed and ready to work, and that they are maintained and fueled during an emergency. With careful maintenance these generators can bridge the gap for even a lengthy outage. As further back up to this installed equipment, DoD maintains a strategic stockpile of electrical power generators and support equipment that is kept in operational readiness. For example, during Hurricane Katrina, the Air Force transported more than 2 megawatts of specialized diesel generators from Florida, where they were stored, to Keesler Air Force Base in Mississippi, to support base recovery.

Next Generation Microgrids

Although the Department will continue to maintain its fleet of on-site and mobile backup generators, we are moving aggressively to adopt next generation microgrids. Advanced microgrids, combined with on-site energy generation (e.g., solar or geothermal) and energy storage, offer a more robust and cost effective approach to ensuring installation energy security than the current solution (backup generators). Although microgrid systems are in use today, they are relatively unsophisticated, with limited ability to integrate renewable and other distributed energy sources, little or no energy storage capability, uncontrolled load demands, and “dumb” distribution that is subject to excessive energy losses. By contrast, we envision advanced (or “smart”) microgrids as local power networks that can utilize distributed energy, manage local energy supply and demand, and operate seamlessly both in parallel to the grid and in “island” mode. Advanced microgrids are a “triple play” for DoD’s installations: First, they will facilitate the incorporation of renewable and other on-site energy generation. Second, they will reduce installation energy costs on a day-to-day basis by allowing for load balancing and demand response—i.e., the ability to curtail load or increase on-site generation in response to a request from the grid operator. Third, and most importantly, the combination of on-site energy and storage, together with the microgrid’s ability to manage local energy supply and demand, will allow an installation to shed non-essential loads and maintain mission-critical loads if and when the grid goes down.

DoD’s Installation Energy Test Bed, run out of the Department’s Installations and Environment office, is funding ten demonstrations of microgrid and storage technologies to evaluate the benefits and risks of alternative approaches and configurations. The Test Bed is working with multiple vendors so as to allow DoD to capture the benefits of competition. Demonstrations are underway at Twentynine Palms, CA (General Electric’s advanced microgrid system); Fort Bliss, TX (Lockheed Martin); Joint Base McGuire-Dix-Lakehurst, NJ (United Technologies); Fort Sill, OK (Eaton); and several other installations.

#### PATCOM isn’t on the US grid – the 1ac cx

#### Can't solve grid—too many operational burdens

Parthemore & Rogers, ‘10

[Christine, Fellow, Will, Bacevich Fellow, Center for New American Security, “Nuclear Reactors on Military Bases May Be Risky,” Center for a New American Security, 5-20, http://www.cnas.org/node/4502]

Many serious complications must be weighed as well. Military base personnel often do not have the necessary training in nuclear reactor management, oversight and regulatory credentials. Nuclear reactors would necessitate additional qualified personnel and improved physical security requirements to meet the 24/7 operations needs. As with siting for all energy production, local public resistance could be problematic. When considering the impact of a reactor casualty, the resulting impact on the operational mission effectiveness of the tenant commands on the base must also be considered so as to avoid a single point vulnerability that disables all military operations on site. And while many private companies are touting new designs for small reactors that would work well in this capacity, the technology may still be years away from fully meeting technical requirements and federal regulatory standards.13 Proliferation considerations would also need to be part of any adjudication of what types of reactors are most suitable for these purposes.

#### Aff Doesn’t solve grid vulnerability

Baker, 6-22-12

[Matthew, American Security Project, “Do Small Modular Reactors Present a Serious Option for the Military’s Energy Needs?” http://americansecurityproject.org/blog/2012/do-small-modular-reactors-present-a-serious-option-for-the-militarys-energy-needs/]

The speakers at the DESC briefing suggested a surge is needed in SMR production to combat a major vulnerability in America’s national security: possible attacks to the power grid. Such attacks could cause blackouts for over a year according to Congressman Bartlett, leading to blackouts never before experienced in the United States. In such an event the U.S. military would still need to function 24/7. Current predictions made by the DESC suggest that up to 90% of the US military’s energy needs could be supplied by SMRs.¶ Congressman Bartlett also pointed out that current military bases such as Guam – which is fueled by the transport of diesel – are extremely vulnerable should the energy transport system be disrupted. Fuel supplies are even more unstable in Afghanistan, where one out of every twenty-four convoys results in a casualty. According to Congressman Bartlett, SMRs could make such bases energy self-sufficient.¶ Unfortunately all the hype surrounding SMRs seems to have made the proponents of SMR technology oblivious to some of its huge flaws.¶ Firstly like large reactors, one of the biggest qualms that the public has to nuclear is problems associated with nuclear waste. A more decentralized production of nuclear waste inevitably resulting from an increase in SMRs production was not even discussed. The danger of transporting gas into some military bases in the Middle East is already extremely volatile; dangers of an attack on the transit of nuclear waste would be devastating.¶ Secondly, SMRs pose many of the same problems that regular nuclear facilities face, sometimes to a larger degree. Because SMRs are smaller than conventional reactors and can be installed underground, they can be more difficult to access should an emergency occur. There are also reports that because the upfront costs of nuclear reactors go up as surface area per kilowatt of capacity decreases, SMRs will in fact be more expensive than conventional reactors.¶ Thirdly, some supporters of SMR technology seem to have a skewed opinion of public perception toward nuclear energy. Commissioner of the U.S. Nuclear Regulatory Commission, William C. Ostendorff, didn’t seem to think that the recent Fukushima disaster would have any impact on the development on SMRs. Opinion polls suggest Americans are more likely to think that the costs of nuclear outweigh its benefits since the Fukushima disaster. For SMRs to be the philosopher’s stone of the military’s energy needs the public needs to be on board.¶ The DESC’s briefing did illustrate the hype that the nuclear community has surrounding SMRs, highlighting some pressing issues surrounding the military’s energy vulnerability. But proponents of SMRs need to be more realistic about the flaws associated with SMRs and realize that the negative impacts of nuclear technology are more costly than its benefits.

**No civil war impact – Pinkerton says wonder weapons which don’t exist and their internal link is about solar flares which they don’t solve**

**Cyberattacks won’t occur on sensitive targets**

Martin C. **LIBICKI** 20**09** (Senior Policy Analyst – RAND Corporation, “Cyberdeterrence and Cyberwar” <http://www.rand.org/pubs/monographs/2009/RAND_MG877.pdf>)

Some targets may be too risky or messy to be good targets. The risky targets include nuclear command-and-control systems (lest nervous adversaries conclude that they must use it or lose it) and space systems (many of which are also strategic). Targets that give pause because of the mess their confusion may cause include those whose malfunctioning may lead to civilian deaths, those whose disruption can create vast environmental damage, and those whose integrity and accuracy can be very difficult to restore when peace resumes (e.g., managers of bank and billing records). It would be good to think that such systems are unassailable (or at least engineered to fail safely) precisely because they are sensitive. Might a better reason to leave targets untouched be that restraint might persuade the other side to do likewise, thereby limiting mutual destruction? 13 Mutually respected safe zones may even provide a path for both sides to de-escalate.

**No transition wars: Only one transition war in history**

**Macdonald and Parent 11** (Paul, **Assistant Professor of Political Science at Williams College, and Joseph, Assistant Professor of Political Science at the University of Miami. “Graceful Decline? The Surprising Success of Great Power Retrenchment”. International Security** Spring 2011, Vol. 35, No. 4, Pages 7-44.)

Based on our universe of cases, the predictions of retrenchment pessimists receive little support. In contrast to arguments that retrenchment is rare, we find that great powers facing acute relative decline adopted retrenchment in at least eleven and at most fifteen of the eighteen cases, a range of 61–83 percent. By any accounting, a majority of the countries in these cases retrenched shortly after their ordinal transition. Nor does the evidence support the view that domestic interests constrain retrenchment. Every one of the great powers in our sample that chose to retrench did so within five years of the ordinal transition. This suggests timely responses to external constraints rather than domestic intransigence. Moreover, there does not appear to be a strong connection between regime type and retrenchment. Democracies account for about two-thirds of the great powers in our study, and are slightly more likely to face acute relative declines, accounting for thirteen of our eighteen cases, or 72 percent. Of the twelve democracies, seven retrenched, two did not, and three are debatable, yielding parameters from 58 to 83 percent. There are only three cases of autocracy, which makes comparison among groups difficult, but of these, two retrenched and one case is arguable, producing a range of 67–100 percent.59 In short, evidence at the coarse-grained level tentatively supports the neorealist approach outlined above: during acute relative decline, a significant majority of great powers of differing regime types elected to retrench. Wars, preventive or otherwise, do not appear to be a common fate for declining states, and recovery of lost rank was fairly frequent. Declining great powers found themselves embroiled in an interstate war in only four of the eighteen cases, and in **only one** of these cases—1935 United Kingdom—did the declining power go to war with the power that had just surpassed it in ordinal rank.60 In addition, in six of fifteen cases, declining great powers that adopted a policy of retrenchment managed to rebound, eventually recovering their ordinal rank from the state that surpassed them. These findings suggest that retrenching states rarely courted disaster and occasionally regained their prior position. Further, even if retrenchment was not successful, this does not prove that a preferable policy existed.61 In many cases of decline, there are few restorative solutions available; politics is often a game of unpalatable alternatives. Short of a miracle, it is hard to say what great powers such as Britain, France, or the Soviet Union could have done to stay aloft, even with the benefit of hindsight.

**Taiwan war won’t happen since nobody cares anymore. They ignore new political shifts**

**Saunders and Kastner 2009** – \*Senior Research Fellow at the Institute for National Strategic Studies at the National

Defense University, \*Assistant Professor in the Department of Government and Politics

at the University of Maryland and former China Security Fellow at the Institute for National

Strategic Studies (Phillip and Scott, International Security, 33.4, “Bridge over troubled water? Envisioning a China-Taiwan peace agreement”, http://www.mitpressjournals.org/doi/pdf/10.1162/isec.2009.33.4.87, WEA)

Most observers agree that the issue of Taiwan’s status is not ripe for resolution. China remains committed to the ultimate goal of unification and refuses to renounce the use of force to prevent Taiwan independence. Former President Jiang Zemin emphasized the goal of unification, and China’s policies sometimes implied a timetable for achievement of that objective.2 China’s policy toward the Taiwan issue, however, has undergone a significant shift under President Hu Jintao, who has emphasized the short-to-medium-term goal of deterring Taiwan independence, postponing unification into the indefinite future.3

On Taiwan, public opinion polls consistently show strong (more than 75 percent) public support for maintaining the status quo. Only a small percentage favors either immediate independence or immediate unification with China.4 Although this polling reflects conditional preferences that factor in the likelihood of China using force if Taiwan were to declare independence,5 it accurately reflects the widespread view on Taiwan that permanent resolution of the issue of Taiwan’s status is not presently possible. While the Democratic Progressive Party (DPP) has sought to mobilize voters by highlighting Taiwan’s separate identity and sought ways to emphasize Taiwan’s sovereignty during President Chen Shui-bian’s term in office, the KMT has adjusted the emphasis in its cross-strait policy to more closely match the views of mainstream Taiwan voters. In the 2008 presidential campaign, KMT candidate (and eventual victor) Ma Ying-jeou articulated “three nos” that would govern policy toward China in his administration. These were a pledge that there would be no pursuit of de jure independence, no negotiations with the mainland about unification, and no use of force.6 President Ma reiterated these points in his May 20, 2008, inaugural address.

Collectively, these positions suggest that China and Taiwan may be prepared to defer the issue of Taiwan’s status for resolution at some point in the future. **Both sides have expressed the desire to improve relations, expand cross-strait contacts, and negotiate a peace agreement** between Taipei and Beijing. These goals were articulated in the joint press communiqué issued following KMT Chairman Lien Chan’s April 2005 meeting with Chinese President Hu Jintao.7 Hu Jintao reiterated China’s willingness to negotiate a peace agreement with Taiwan in his statements at the October 2007 17th Party Congress: “On the basis of the one-China principle, let us discuss a formal end to the state of hostility between the two sides, reach a peace agreement, construct a framework for peaceful development of cross-straits relations, and thus usher in a new phase of peaceful development.”8 Both candidates in Taiwan’s 2008 presidential election called for negotiation of a peace agreement with Beijing, and President Ma repeated the call in his inaugural address.9 Upon assuming office, Ma moved quickly to restart dialogue between Taiwan’s Straits Exchange Foundation (SEF) and the PRC’s Association for Relations Across the Taiwan Straits (ARATS), the semiofficial bodies that previously served as vehicles for cross-strait dialogue.10

#### Other bases check

**Fontaine 11/24/2010** [Scott—staff writer for the Air Force Times, “Schwartz: AF ready to respond to Korea attack”, http://www.airforcetimes.com/news/2010/11/air-force-schwartz-ready-to-respond-to-korea-attack-112410w/, accessed November 24, 2010, ZR]  
  
The Air Force stands ready to respond if hostilities between North Korea and South Korea escalate, the service’s top uniformed officer said, but American fighter jets remained at their normal alert status a day after a North Korean artillery attack.  
The North fired artillery shells at the island of Yeonpyeong on Tuesday, killing two people and dramatically raising tensions between American-allied South Korea and the nuclear-armed north.  
Air Force Chief of Staff Gen. Norton Schwartz, in a meeting with reporters later that morning, said his service has plenty of firepower in the region and listed the bases from which the service could send planes for a response: Osan Air Base and Kunsan Air Base in South Korea, Kadena Air Base on Okinawa, bases on mainland Japan and bases in the Pacific.

#### Andersen base

**Kan & Niksch 10** [Shirley A. Kan & Larry A. Niksch—specialists in East Asian Affairs, 1/7, Congressional Research Service, “Guam: U.S. Defense Deployments” , accessed November 24, 2010, ZR]  
  
In 2002, the Commander of Pacific Air Forces publicly detailed his request for basing aircraft in Guam. In addition to munition stockpiles and jet fuel, he reportedly requested F-22 stealth fighters, 767 tankers, C-17 transports, bombers, and Global Hawk reconnaissance drones.4 In March 2003, after a new Air Expeditionary Wing was activated at Guam’s Andersen Air Force Base, B-1 and B-52 bombers deployed temporarily on a rotational basis from air bases in Texas and Louisiana as U.S. forces prepared for war against Iraq. Beyond rotation of aircraft, the Air Force began continuous deployment of aircraft into Guam. As part of this build-up, the first B-52 bombers (stationed out of Minot Air Force Base in North Dakota) to deploy to Andersen arrived in February 2004.5 In April 2005, the Commander of Pacific Air Forces said that B-2 stealth bombers started to fly out of Andersen. In April 2005, F-15 fighters temporarily deployed to Andersen from Idaho. An Air Force official said in 2006 that the Air Force plans to station KC-135 tankers on Guam. In May 2007, the Air Force announced the deployment of 18 F-16 fighters to Guam for four months. In the summer of 2008, several F-22 fighters, based in Alaska since 2007, began deployments to Guam. Also, Andersen Air Force Base plans to have four to six Global Hawks for an Intelligence, Surveillance, and Reconnaissance (ISR) Strike Task Force by 2009. However, in March 2007, the Navy decided not to homeport the aircraft carrier USS Carl Vinson at Guam. Nonetheless, by 2009, the Navy had a plan for a transient berth in Apra Harbor to support an aircraft carrier for up to three weeks at least twice a year.6

#### CGS now

**Brown, 2-3-2010**

[Peter J Brown, Asia Times Online , " US's strike threat catches China off guard," 2/3/10, http://www.atimes.com/atimes/China/LB04Ad01.html)

The United States plans to unveil later this decade a new conventional "Prompt Global Strike" (C-PGS) system. It will enable the US to instantly carry out a massive conventional attack anywhere in the world in an hour or less. Research and development work by the US Department of Defense (DoD) on C-PGS began almost two decades ago, and this shifted into high gear in 2003. Instead of delivering a nuclear warhead, a new US-based missile and/or some other unmanned delivery vehicle may carry a conventional warhead that is able to destroy a distant target in less than an hour. The DoD issued the 2010 Quadrennial Defense Review (QDR) on February 1 - which is mandated by the US Congress. It specifically mentions C-PGS prototypes as well as other "long-range strike" capabilities. "The US cannot take its current dominance for granted and needs to invest in the programs, platforms, and personnel that will ensure that dominance's persistence," wrote US Secretary of Defense Robert Gates in a commentary accompanying the 2010 QDR entitled, "A Balanced Strategy: Reprogramming the Pentagon For a New Age".

#### Obviates need for basing and heg

**Scheel, 2003** [LYNN I. SCHEEL, Major in the US Air Force, LONG-RANGE STRIKE – CONCEPTS AND DOCTRINAL IMPLICATIONS OF FUTURE AIRPOWER CAPABILITIES, A THESIS PRESENTED TO THE FACULTY OF THE SCHOOL OF ADVANCED AIR AND SPACE STUDIES FOR COMPLETION OF GRADUATION REQUIREMENTS, AIR UNIVERSITY, JUNE 2003]

The language of the current NSS is unambiguous. The US will do what it must to ensure its own security. Developing an advanced long-range strike system will provide the President with an additional military option that is not hamstrung by access to foreign bases or unpredictable diplomatic wrangling. Such a strike option will not only help to ensure American security by exercising its capabilities when necessary, but also its very existence will provide a substantial deterrent and coercive element in the diplomatic struggle to arrive at agreeable solutions without the actual use of force. In 1997, while testifying before the House National Security Subcommittee on Military Procurement in support of additional B-2 procurement, Eliot Cohen, a widely respected expert on strategic studies, voiced the following opinion: What deters potential opponents of the United States from acting contrary to our interests and policy? I would say, “the knowledge that the United States has the capability to deliver military blows against which there is no defense, and which it has the will to use, even without the support of any other nation on earth.” . . . In the new age in which we find ourselves, such a characteristic is particularly desirable.19 Although Cohen’s testimony was for additional B-2s, the same argument can be applied even more strenuously for a new long-range strike system with increased capability against anti-access threats. The effect long-range strike may have on an adversary’s strategic calculus cannot be ignored. Herein may lay the true value of the long-range strike system—its real worth lies in the strategic influence of its mere existence even more than its actual value when employed. Although this carries the scent of nuclear deterrence, long-range strike will perhapsexceed the deterrent capability of nuclear weapons due to the increased likelihood of use, hence raising the credibility of the coercive element. To sum up this section, it is evident there are still limitations to what the Air Force can presently do regarding global strike based on the current weapon system inventory and capabilities. Access to foreign bases is a compelling concern and must not be ignored or marginalized and our national security strategy dictates improving our capabilities to preemptively strike an adversary posing a threat to our national security. In the words of a defense industry “think tank” analysis, “…the U.S. will be best served by the creation of an agile, access-insensitive military force that can project sustained, precise, and survivable military power across great distances with little preparation or reliance on external political or military support.”20 With justification for long-range strike evident, this chapter will now examine the system options and capabilities.

#### Solves China

**Sugden, 2009**

[Bruce M., consultant for the Department of Defense and commercial clients on combating weapons of mass destruction, future global strike force structure alternatives, nuclear policy and strategy & MA in international relations and public policy studies at the University of Chicago & former U.S. Air Force missile launch officer, “Speed Kills: Analyzing the Deployment of Conventional Ballistic Missiles,” International Security, Vol. 34, No. 1, Summer]

The argument for CBMs in the expanded mission is twofold. One rationale is that an adversary’s defense of a critical capability may pose serious risk to aircraft and aircrews attempting to bomb the target, but a weapon traveling at ballistic speed is guaranteed to penetrate most, if not all, defenses. Thus, CBMs would increase the probability of destroying heavily defended targets, such as those on the coast of the People’s Republic of China opposite Taiwan.19 CBMs could also play a role in opening the door to manned aircraft as part of a major combat operation. There would be a greater requirement for CBMs and large-scale PGS missions to defeat defensive systems and enable entry for U.S. strike aircraft under two conditions. First, the long-term international security environment will be marked by a greater diffusion of anti-access and area-denial weapons systems, mobile targets, and hard and deeply buried targets compared with today. 20 Anti-access and area-denial systems increase the distance between targets and areas from which the United States can operate its military forces with impunity. Command and control centers for these systems might be mobile or deep and hardened against many direct attack options. The second condition is that area-denial weapons technology overturns the dominance of stealth technology. These conditions would put a premium on defense penetration; persistence and high volume of ªre; intelligence, surveillance, and reconnaissance and target acquisition; payload flexibility; throw weight; and increased transparency regarding ballistic missile payloads. This option for CBMs will require developing and fielding capabilities that are unavailable in the near term. Thus, this analysis considers the use of CBMs in expanded PGS missions to be a long-term option. The near-term PGS mission and CBM options, such as CTM, do not focus on major combat operations; they are stand-alone, limited, prompt strike options. The second rationale for CBMs in an expanded mission is that a wider array of conventional strike options will allow the United States to avoid crossing the nuclear threshold; they will provide usable tools for escalation that are proportionate to the threat that needs to be deterred or defeated. In contrast, the use of nuclear weapons against most anticipated non-WMD threats is deemed disproportionate. Using nuclear weapons, even against WMD targets, will engender a host of undesired political consequences.21 Therefore, the threat to launch a conventional strike would be more credible, which is conducive to managing the escalation of the use of force below the nuclear threshold and to ensuring the success of deterrence. This line of thinking echoes the Cold War doctrine of flexible response, wherein the United States and its allies were prepared to flight at all levels of war to deter the Soviet Union from all forms of military aggression.22 A U.S. Department of Defense official, for example, declared in a 2002 briefing on the Nuclear Posture Review that “the non-nuclear strike forces, we believe, have the potential, if fully exploited, fully developed, to reduce our dependency on nuclear forces for the offensive-strike leg.”23 the counternuclear mission. Some CBM proponents argue that longterm CBMs might be used in a large-scale, counterforce role to defeat nuclear forces. For example, U.S. CBMs could nullify a nuclear strategy that China might employ to deter U.S. intervention in a Taiwan Strait conflict. Many of China’s nuclear-armed intercontinental ballistic missiles (ICBMs) are based at fixed sites, and U.S. CBMs could be used to undertake a preventive or preemptive strike against their silos or soft-site launch pads, or to functionally defeat their exit from secure storage sites.24

## 2nc

### spacecol

#### SSP is the only technology that generates enough capital for space colonization

**Globus**, Senior Research Associate for Human Factors Research and Technology at [San Jose State University](http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/1999/11/05/MN100636.DTL) at [NASA Ames Research Center](http://www.arc.nasa.gov/), former visiting research associate at the [Molecular Engineering Laboratory](http://chemistry.ucsc.edu/) in the chemistry department of the University of California at Santa Cruz, co-recipient of the [1997 Feynman Prize in Nanotechnology for Theoretical Work](http://www.foresight.org/FI/1997Feynman.html), member of the governing board of education for the [Space Colonization Training Center (SCTC)](http://65.209.148.2/Jims/modern/S.C.T.CFuture_home.html), Member of the board of directors of the [National Space Society](http://www.nss.org/), Chairman of the [National Space Society](http://www.nss.org/) Space Settlement Advocacy Committee, Honorary Foreign Member (Scientist) of the Romanian [The Educational Society for Physics, Informatics, Chemistry and Mathematics in Biology](http://www.bifmc.lx.ro/), Member of the program committee of the NASA/DoD Evolvable Hardware Conference [EH-2005](http://ic.arc.nasa.gov/projects/eh2005/), Member of the program committee for the [2002 and 2004 NASA Ames Research Center RoboSphere Workshops](http://robosphere.arc.nasa.gov/), Member of the program committee for the [2004 NASA/DoD Conference on Evolvable Hardware](http://ehw.jpl.nasa.gov/events/nasaeh04/), Co-chair of the\ [Fifth and Sixth Foresight Conferences on Molecular Nanotechnology](http://www.foresight.org/conference), and Chairman of the NAS [workshop on computational molecular nanotechnology](http://www.nas.nasa.gov/nanotechnology/workshop/index.html), and Yager, **2K2** (Al and Bryan, July 10, Space settlements: A Design Study, page @ http://www.nas.nasa.gov/About/Education/SpaceSettlement/75SummerStudy/Table\_of\_Contents1.html)

An important goal for the design for space colonization is that it be commercially productive to an extent that it can attract capital. It is rather striking then that the study group has been able to envision only one major economic enterprise sufficiently grand to meet that goal. No alternative to the manufacture of solar power satellites was conceived, and although their manufacture is likely to be extremely valuable and attractive to investors on Earth, it is a definite weakness of the design to depend entirely on this one particular enterprise. A number of valuable smaller scale manufactures has already been mentioned in chapter 2 and, of course, new colonies will be built, but these do not promise to generate the income necessary to sustain a growing space community.

#### Space colonization is impossible --- humans can’t adjust

Theunis **Piersma 10**, professor of animal ecology at the University of Groningen in the Netherlands and senior research scientist at the Royal Netherlands Institute for Sea Research in Den Burg, “Why space is the impossible frontier,” NewScientist, 11-16-10, <http://www.newscientist.com/article/mg20827860.100-why-space-is-the-impossible-frontier.html>

Hawking, Obama and other proponents of long-term space travel are making a grave error. Humans cannot leave Earth for the several years that it takes to travel to Mars and back, for the simple reason that **our biology is intimately connected to Earth.**

To function properly, we need gravity. Without it, the environment is less demanding on the human body in several ways, and this shows upon the return to Earth. Remember the sight of weakened astronauts emerging after the Apollo missions? That is as nothing compared with what would happen to astronauts returning from Mars.

One of the first things to be affected is the heart, which shrinks by as much as a quarter after just one week in orbit (The New England Journal of Medicine, vol 358, p 1370). Heart atrophy leads to decreases in blood pressure and the amount of blood pushed out by the heart. In this way heart atrophy leads to reduced exercise capacity. Astronauts returning to Earth after several months in the International Space Station experience dizziness and blackouts because blood does not reach their brains in sufficient quantities.

Six weeks in bed leads to about as much atrophy of the heart as one week in space, suggesting that the atrophy is caused by both weightlessness and the concomitant reduction in exercise.

Other muscle tissue suffers too. The effects of weightlessness on the muscles of the limbs are easy to verify experimentally. Because they bear the body's weight, the "anti-gravity" muscles of the thighs and calves degenerate significantly when they are made redundant during space flight.

Despite the best attempts to give replacement exercise to crew members on the International Space Station, after six months they had still lost 13 per cent of their calf muscle volume and 32 per cent of the maximum power that their leg muscles could deliver (Journal of Applied Physiology, vol 106, p 1159).

Various metabolic changes also occur, including a decreased capacity for fat oxidation, which can lead to the build-up of fat in atrophied muscle. Space travellers also suffer deterioration of immune function both during and after their missions (Aviation, Space, and Environmental Medicine, vol 79, p 835).

Arguably the most fearsome effect on bodies is bone loss (The Lancet, vol 355, p 1569). Although the hardness and strength of bone, and the relative ease with which it fossilises, give it an appearance of permanence, bone is actually a living and remarkably flexible tissue. In the late 19th century, the German anatomist Julius Wolff discovered that bones adjust to the loads that they are placed under. A decrease in load leads to the loss of bone material, while an increase leads to thicker bone.

It is no surprise, then, that in the microgravity of space bones demineralise, especially those which normally bear the greatest load. Cosmonauts who spent half a year in space lost up to a quarter of the material in their shin bones, despite intensive exercise (The Lancet, vol 355, p 1607). Although experiments on chicken embryos on the International Space Station have established that bone formation does continue in microgravity, formation rates are overtaken by bone loss.

What is of greatest concern here is that, unlike muscle loss which levels off with time, bone loss seems to continue at a steady rate of 1 to 2 per cent for every month of weightlessness. During a three-year mission to Mars, space travellers could lose around 50 per cent of their bone material, which would make it extremely difficult to return to Earth and its gravitational forces. Bone loss during space travel certainly brings home the maxim "use it or lose it".

Bone loss is not permanent. Within six months of their return to Earth, those cosmonauts who spent half a year in space did show partial recovery of bone mass. However, even after a year of recovery, men who had been experimentally exposed to three months of total bed rest had not fully regained all the lost bone, though their calf muscles had recovered much earlier (Bone, vol 44, p 214).

Space agencies will have to become very creative in addressing the issue of bone loss during flights to Mars. There are concepts in development for spacecraft with artificial gravity, but nobody even knows what gravitational force is needed to avoid the problems. So far, boneless creatures such as jellyfish are much more likely than people to be able to return safely to Earth after multi-year space trips. For humans, gravity is a Mars bar.

The impossibility of an escape to space is just one of many examples of how our bodies, and those of our fellow organisms, are inseparable from the environments in which we live. In our futuristic ambitions we should not forget that our minds and bodies are connected to Earth as by an umbilical cord.

### 2nc solvency block

NSSO – solves the entire aff

Everything is offense—no defense of including SMRs, any case offense or defense

**Military procurement jumpstarts the civilian market for SPS**

**The Space Review 7**, (Taylor Dinerman, “Solar power satellites and space radar” <http://integrator.hanscom.af.mil/2007/July/07262007/07262007-16.htm>, July 16, 2007) // CCH

The first steps in such a program would be to begin work on an experiment to prove that power transmission in space via laser is possible. Already lasers are being used for communications in civil and military applications; taking this one step beyond to encompass power should be within the state of the art. At the same time the US Defense Department and NASA could begin joint work on a new generation of high-capacity power systems for future spacecraft. The power management and thermal control needs of a spacecraft that will carry a human crew to Mars may not be all that different from those of an SPS or an SR satellite.

The bulk of the development work on the radars themselves can be left until later in the program. Meanwhile, the US could profitably study less ambitious space radar programs such as Canada’s Radarsat. Launching one or two modest technology development satellites over the next five or ten years would be a helpful way to set the stage for a new SR program. In the long term, say, by around 2010, the GMTI radar could be replaced and supplemented by an Air Moving Target Indicator (AMTI), which would need even more power.

Instead of using a single large antenna or multiple smaller ones on the same spacecraft, a future stealthy SR could use radars on multiple satellites. Formation flying is now commonplace and coordinating multiple beams from two or three satellites in different orbits should not be that hard. The biggest problem will be to prove to Congress that the technology is ready for prime time.

Almost all of America’s major military space programs are too far along to effectively incorporate the lessons of China’s ASAT test. SR, due to repeated budget cuts, is the great exception. Other satellite programs that could be modified to incorporate the needs of the new space warfare requirements include the T-SAT Transformational Communications project and the possibly the NRO’s problem-plagued Future Imagery Architecture (FIA).

The stealthiness and robustness of all these programs, or their successors, would benefit from being able to draw electricity from a set of SPSs in GEO. The solar power satellites themselves would not necessarily have to be owned by the US government. They could be built privately based on a contract that promises that the Defense Department would buy a given amount of power at a predetermined price. This would be similar to the “power by the hour” contracts that are sometimes signed with jet engine manufacturers or the privately-financed initiative that the British RAF has established with a consortium for a new squadron of Airbus refueling tanker aircraft.

In GEO an SPS is a large and conspicuous target. A realistic new space architecture would have to find ways to give both active and passive protection to such valuable assets. At the same time, these measures must not detract from the commercial profitability of the operation. The Civil Reserve Air Fleet system is a possible model; airlines buy some planes that are modified for possible military use in an emergency and the government compensates them for the extra weight they carry while in normal commercial use.

Space solar power is, in the long run, inevitable. The Earth’s economy is going to need so much extra power over the next few decades that every new system that can be shown to be viable will be developed. If the US were to develop space solar power for military applications it would give the US civilian industry a big head start. As long as the military requirements are legitimate, there is no reason why this cannot be made into a win-win outcome.

**Cost estimates are based on old studies when solar components were much more expensive**

**Nansen 2000** - President Solar Space Industries, (Ralph, Statement to the United States Congress Subcommittee on Space Science “The Technical Feasibility of Space Solar Power” Before the Subcommittee on Space and Aeronautics, United States House of Representatives Committee on Science September 7, 2000, <http://www.spaceref.com/news/viewpr.html?pid=2571>) // CCH

The situation is much different now than it was in 1980 when the earlier studies were terminated. In the ensuing years much has changed. Other programs have sponsored research and development of several of the enabling technologies and much of the required infrastructure has been developed. Studies have continued in several countries outside of the United States and some limited activity is sustained by individuals and companies on their own funds within the United States. The development of terrestrial solar cells has caused the photovoltaic industry to grow from a very small specialty group of companies manufacturing expensive solar cells in laboratory quantities to an industry that is approaching maturity. Annual production is now well over a hundred megawatts and growing rapidly. Production processes have become automated and the number of different types of cells is greatly expanded. Thin film cells with efficiencies over 18% on metal film substrates and with inherent resistance to space radiation degradation will soon be in production. These cells will produce 1400 watts per kilogram of mass with a cost potential of 35 cents per watt. The decreased weight and cost will significantly reduce satellite cost and weight from earlier estimates.

**There are no technological barriers and the first demonstration would occur in 4 years**

**Ashworth, 08 -** Fellow of the British Interplanetary Society (Stephen, The Space Review, “In defense of the knights”, 6/23, http://www.thespacereview.com/article/1153/1)

Usually, Day’s articles are among the best-written and most informative space commentary on the market. But this time he appears to have made a number of unjustified assertions.

He writes: “Space activists, who are motivated by the desire to personally live and work in space, do not care about SSP per se […] they have latched on to SSP because it is expedient.” There may well exist people who answer to this description, but if so, they must be remarkably shortsighted. The facts are clear: fossil fuels have served civilization well in the first phase of its industrialization (approximately 1700–2000), but possess a number of problems, of which the current climate hysteria is only one; the others concern the long-term sustainability and growth of industrial energy consumption. Therefore we can predict an imminent shift of the baseload energy supply away from fossil fuels to, most likely, a mixture of artificial nuclear fission and fusion, and terrestrial and space-based solar power.

I should add that my personal chances of ever living and working in space are zero. My concern is that society should make the best strategic choices for its prosperity and growth. Given the fact that almost all the natural resources of the universe of potential economic value are extraterrestrial, I am therefore bound to argue the importance of systematic access to those resources.

SSP is not merely expedient, rather it is strategic, in the sense that it has the potential to permanently raise the whole of human civilization to a higher level of prosperity, security and spatial range. According to Day’s reading of the NSSO study, this is not for us, but only apparently for future generations, many decades in the future: “The NSSO study […] states that we are nowhere near developing practical SSP […] that the technology to implement space solar power does not currently exist… and is unlikely to exist for the next forty years.”

This came as news to me. Since SSP has been regularly used on a small scale to power satellites for forty years already (in marked contrast to the development effort that has gone into nuclear fusion), how could the NSSO have concluded that the technology “does not exist”? What actually does the NSSO report say? It reports:

“FINDING: The SBSP Study Group found that Space-Based Solar Power is a complex engineering challenge, but requires no fundamental scientific breakthroughs or new physics to become a reality.” (p.20)

“FINDING: The SBSP Study Group found that significant progress in the underlying technologies has been made since previous government examination of this topic, and the direction and pace of progress continues to be positive and in many cases accelerating.” (p.20)

This sounds promising. Does it mean we’ll be able to start work in forty years time?

“FINDING: The SBSP Study Group found that individual SBSP technologies are sufficiently mature to fly a basic proof-of-concept demonstration within 4–6 years and a substantial power demonstration as early as 2017–2020, though these are likely to cost between $5B–$10B in total. This is a serious challenge for a capable agency with a transformational agenda. A proposed spiral demonstration project can be found in Appendix B.” (p.22–23)

Turning to Appendix B, we find that its introductory paragraphs point out that significant technological progress has been achieved in the past decade, which would allow an accelerated pace of progress compared with that proposed by NASA in the late 1990s. But Day is not impressed, for his article reads: “from a technological standpoint, we are not much closer to space solar power today than we were when NASA conducted a big study of it in the 1970s.” He seems to have been reading a completely different report.

Appendix B is subheaded: “AN AGGRESSIVE AND ACHIEVABLE SBSP TECHNOLOGY DEMONSTRATOR ROADMAP: 10 Years — 10 Megawatts — $10 Billion”. It offers an updated program to build “an integrated large-scale demonstrator, to be flown in less than 10 years, at a cost of less than $10B, and delivering power to the Earth of approximately 10 megawatts.” Again, Day’s assertion that the technology is “unlikely to exist for the next forty years” is completely contradicted by the actual contents of the NSSO study report.

**The technology exists and a federal commitment will substantially drive down costs**

**The Engineer, 5** (“Solar Power From Space: Sun Seekers” 03-11-05, LN) // DCM

<This will require a significant reduction in launch costs. But the increase in launch frequencies required to build an SPS system would go some way to reducing these costs, and this reduction could well open up new markets, further decreasing prices. Companies such as California- based SpaceX are already developing low-cost launch vehicles with the aim of making access to space more affordable. But with launch costs of $15.8m (£8.2m) for SpaceX's 6,020kg payload Falcon V (£1,362 per kilo), there is still some way to go.

The concept of solar power-generating satellites is also being investigated as a means of transmitting power to bases on the Moon or Mars, where lunar eclipses and Martian dust storms would hamper the effectiveness of ground-based solar generators.

Beyond Europe and Japan, US researchers have also been looking at the concept. NASA first began studying SPS after the oil embargo of the mid- 1970s. Over the years the agency has evaluated almost 30 systems. Chief among these is the Suntower concept. Similar in principle to the European Sail Tower, it consists of a constellation of tether-based solar satellites that would initially be deployed in low Earth orbit, then moved to an elliptical Earth orbit for operation.

While the status of the core technology meant that early concepts were prohibitively expensive, studies over the past 20 years have identified a steady improvement in many key technologies.

John Mankins, manager of NASA's Exploration Systems Research and Technology division and a key advocate of SPS, puts much of this progress down to advances in exploration technology. He said that while there's currently no focused SPS programme at NASA, much of the core technology required to build an SPS system has advanced significantly in the past couple of years.

Mankins explained that important work has been done on the development of modular space structures that can be assembled and maintained in orbit by robots. The agency has been developing a range of walking and crawling robots since the late 1990s, including the anthropomorphic 'robo-naut', a highly flexible 'snake' robot, and the Skyworker mobile crane system concept.

Once an SPS system has been assembled it must still be moved into the optimum operational orbit, and Mankins said that work carried out on in- space transportation could be extremely important. 'We have made substantial investment into advanced electromagnetic propulsion that is able to move large payloads cheaply out of low Earth orbit.'

But perhaps the most important strides have been made in the improvement in the conversion efficiency rate of solar cells. 'We have developed new types of solar cell that are highly efficient and lightweight,' he said.

Like their ESA counterparts, NASA's researchers have also investigated a variety of approaches to wireless power transmission, including microwave phased arrays using magnetrons or solid state transmitters, as well as visible light transmission using solid state lasers. But Mankins said that beaming is one area in which NASA has made little progress.

The other key obstacle, he said, is the cost of access to space. 'Large space solar power systems are going to weigh so much more than anything else we're ever going to do that we've got to have really low-cost launches.' While this may remain something of a dream one proposed method of keeping launch costs down for SPS is to develop smaller concepts that use solar mirrors to concentrate the sun's rays.

Mankins said that while the technology exists to produce small-scale demonstration systems and put them into orbit with existing launchers, an economical system that sells power for profit is a couple of decades away. 'If we make the right kind of progress, you could see SPS systems by 2030 - so many technologies are being driven by the needs of exploration that there's a good foundation for it.'

But while Mankins believes that the SPS will be driven by exploration, others have claimed that the concept will be moved forward by more commercially minded industries. Prof Marty Hoffert, a leading expert in climate change from New York University's physics department, has suggested that, with co-operation from the communications and utility companies, it should be possible to piggyback space solar power systems on the ever-increasing number of low-Earth-orbiting (LEO) communications satellites.

Such a system would help share launch costs and provide access to an existing space-based infrastructure of sorts. Also, by using communications satellites in low Earth orbit, only a few hundred miles up, microwaves used to beam energy to Earth would disperse less than those beamed from geostationery orbit, enabling the construction of smaller ground-based receivers.

While there's little government backing for such a system, researchers like Hoffert believe that private sector activity could help push the concept forward. One promising host for such a project would be the Iridium Satellite System, which uses a constellation of 66 low Earth- orbiting (LEO) satellites operated by Boeing to provide its customers, including the US Department of Defence, with complete coverage of the Earth. Satellite phone company Globalstar also operates a constellation of 48 LEO satellites, while Virginia-based global data service provider Orbcomm has 30 operational LEO satellites and a licence for 17 more.

Hoffert claimed that the future of SPS depends on the willingness of electrical and telecoms companies to get involved. He said that there is a general level of ignorance in the business community about the potential of SPS, and energy technology in general. 'Engineers can solve the problem of transforming the world energy system away from fossil fuels, but it's a major challenge, and we need to be open to new ideas like space solar power,' he said.

Hoffert is one of an increasingly vocal group of engineers, physicists, atmospheric researchers and economists calling for a massive R&D programme in the US along the lines of the Manhattan & Apollo projects to develop a broad spectrum of alternative energy technologies. 'Right now decisions on the global climate/energy problem are predominantly made by economists and politicians. Good guys, sometimes, but more people need to work on this who have the expertise and skills to make something happen. Once innovative energy technologies are demonstrated convincingly, and the potential for cost-effectiveness shown, venture capitalists will pile on, as they did for computers, telecommunications, biotech and now nanotech.'

Could SPS be a compelling enough technology to make this happen? NASA's John Mankins certainly thinks so. 'The US currently generates something like 700 or 800GW, the world generates four times that. A hundred years from now it's going to take thousands of gigawatts to satisfy the world's needs. We will require a whole set of energy sources to do that and SPS could be one of the major ones.'>

**This answers assembly**

**Schwab, 05 –** director of the Homeplanet Defense Institute (Martin, Homeplanet Defense: Strategic Thought for a World in Crisis, chapter 4)

There are three key additional factors to keep in mind when considering the economic viability of SSP:

1) Launch costs would drop as demand for large volumes of material to be put into space on a frequent basis for SSP increased.

2) Communications satellites could double for space solar power, thus making SSP more cost-effective.

3) A return to the 1960s-era idea of inflatable structures as the platform for solar collection would reduce weight and therefore launch costs.

Deflated solar collectors could be folded into a compact space onboard a spacecraft and, once in orbit, inflated with gas from a pressurized container. This method was used in 1960 with the Echo 1 satellite used to bounce radio waves back to Earth. It was also used in 1996 in the Spartan Inflatable Antenna Experiment where a 14-meter antenna was inflated by a nitrogen gas canister while in orbit. Admittedly, the larger SSP satellites would be more ambitious, but if NASA were instructed to make inflatable space structures a high priority, in addition to SSP in general, the knowledge base to make low mass SPS would evolve rapidly. 161

The space entrepreneur community could likely make SSP economically viable in the near future by achieving lower launch costs than traditional military contractors offer now. As with any other satellite launches, the space debris mitigation measures discussed at the end of chapter one would need to be of the highest priority in SSP mission planning.

**Launch costs would go down immediately.**

**Eades ‘07 -** (Jeremy, “US military proposes space-based solar power station”, Futurismic Blog, 10/17, <http://futurismic.com/2007/10/17/us-military-proposes-space-based-solar-power-station/>)

A few weeks ago, Tobias [posted](http://futurismic.com/2007/09/26/military-and-eco-technology/) about the US military and eco-technology.  In it, he jokingly suggested an eco-DARPA.  As it turns out, the military seems headed in that direction, specifically with a [space-based solar power station](http://www.aviationweek.com/aw/generic/story.jsp?id=news/solar101107.xml&headline=NSSO%20Backs%20Space%20Solar%20Power%20&channel=space) that would beam energy down to the surface.

The idea is that the Pentagon has decided that energy independence is now a national security issue, and as such falls under their purview.  In addition, this orbiting power station would negate the need for long fuel supply lines.  Units could have needed energy beamed down directly from orbit.  Another benefit of having the military act as the early adopter is that prices should begin to decrease almost

#### Uncertainty and staffing offset any cost advantages

Wald, ‘11

[Matthew L., NYT, 2-12, “Administration to Push for Small ‘Modular’ Reactors,”http://www.nytimes.com/2011/02/13/science/earth/13nuke.html?pagewanted=all&\_moc.semityn.www]

Advocates say the modules can be built inexpensively and with good quality control in a central factory and then set up quickly where they are needed. But the $500 million cost of the design and approval process, steep for a product with uncertain market appeal, is a major barrier.¶ The Energy Department’s notion is that if the government provides half the money up front and signs a contract to buy power from the reactor, a utility will be persuaded to order one. That contract, because it guarantees revenue for the utility company, would make it easier for the utility to receive financing.¶ Military bases, which also must reduce their carbon footprint 28 percent, could sign such contracts as well, Energy Department officials say. Each power purchase agreement would be negotiated at a favorable rate, compensating the Energy Department for its investment.¶ If Congress approves, the Energy Department will invite companies to apply for help. At least four companies could potentially build such a reactor. One is Babcock & Wilcox, which builds reactors for nuclear submarines whose power output is more similar to the proposed reactors than to full-size reactors.¶ The company is trying to build interest in a modular reactor called mPower. It puts into a single package many components that for conventional reactors must be shipped to a site separatelyand then assembled.¶ Another possible builder is NuScale, which is trying to commercialize a design developed at Oregon State University.¶ The department also anticipates applications from Westinghouse, which builds reactors, and Holtec, which now makes nuclear equipment.¶ Experts at the Energy Department and elsewhere suggest that a small reactor could be built in an advanced factory in the United States and delivered across the globe to replace coal-fired power plants.¶ What is more, the modular reactors would provide about the same power output as coal plants that were built in the United States in the 1950s and 1960s and are now ready for retirement, planners say.¶ Still, the actual cost and reliability of modular reactors remains uncertain.¶ There are other unknowns that are likely to raise questions from the Nuclear Regulatory Commission. Rules for control-room staffing, security and even calculation of license fees are all based on big reactors and may not be appropriate to small ones, commission officials say.¶ “We may want to modify our regulations to make them a little more tailored to the uniqueness of these design types,” the commission’s chairman, Gregory B. Jaczko, told reporters on Feb. 2 at a discussion hosted by Platts, the energy information company.¶ Smaller reactors present some advantages and some drawbacks, said David Lochbaum, a nuclear expert at the Union of Concerned Scientists, which generally opposes nuclear power.¶ Mr. Lochbaum said that reactors of 1,000 or 1,500 megawatts, the output of traditional reactors, are so big that it has been difficult to match them to anticipated demand. “Either you build it early, and like ‘Field of Dreams,’ you hope the customers come, or you’re short by 1,000 or 1,500 megawatts and you hope nobody notices while you’re building your plant,” he said.¶ But since the attacks of Sept. 11, 2001, he said, all plants have had to bolster security and keep control room operators and maintenance staff on duty, increasing overhead costs to produce a relatively small amount of energy. And the cost to build small reactors is uncertain.

#### There's a reason we don’t use SMRs—reject their authors

Szondy, ‘12

[David, Gizmag, 2-16, “Feature: Small modular nuclear reactors - the future of energy?” http://www.gizmag.com/small-modular-nuclear-reactors/20860/]

As impressive as many of these reactors sound, most of them are still in one stage or another of development or approval. It is a long way from there to flipping a switch and watching the lights go on. Most of these designs have roots that go back over half a century.¶ In the 1950s, Admiral Hyman Rickover, the architect of the US nuclear fleet, pointed out that the small research reactors, the precursors of SMRs, had a lot of advantages. They were simple, small, cheap, lightweight, easy to build, very flexible in design and needed very little development. On the other hand, practical reactors must be built on schedule, need a huge amount of development spent on "apparently trivial matters", are expensive, large, heavy and complicated. In other words, there's a large gap between what is promised by a technology in the design phase and what it ends up as once it's built.¶ So it is with the current stable of SMRs. Many hold great promise, but they have yet to prove themselves. Also, they raise many questions. Will an SMR need fewer people to run it? What are its safety parameters? Will they fulfill current regulations? Will the regulations need to be changed to suit the nature of SMRs? Will evacuation zones, insurance coverage or security standards need to be altered? What about regulations regarding earthquakes?

### sps links

#### SPS has bipartisan support

**Moore 2k** (Taylor, “Renewed Interest in Space Solar Power”, EPRI Journal, Spring, academic onefile) //DH

As a result of bipartisan support from Congress and the Clinton administration, additional funding for an SPS exploratory research and technology program was authorized for fiscal year 1999 and is continuing in the current fiscal year. "Large power systems are likely to be essential for achieving ambitious space science and exploration goals, including both extra-solar system robotic probes and the development of large, permanent installations on the moon, Mars, or other targets, such as near-Earth and main-belt asteroids," says Mankins.

#### Congress supports the counterplan

**Morring, 7** (Frank, Aviation Week & Space Technology “Space Solar Power: Climate, Economy, National Security Drive Another Look At SSP; Experts see warming, economic concerns and energy security as reasons to build SSP” August 20, 2007, Proquest Search)

**Mankins = head of NASA SSP study**

Another factor that might build support in Congress and the Executive Branch is the effect building an SSP system would have on competitiveness. "Here in the U.S. we continue to be concerned about competitiveness, particularly in light of the migration of many high-tech industries overseas, and how [to] provide long-term economic and science and technology strength in the U.S. [It's] an ongoing challenge," Mankins says.

#### No cost arg—only buys electricity for net less money

**NASA, 2007** (NASA, “Space Based Solar Power as an Opportunity for Strategic Security” Phase 0 Architecture Feasibility Study, October 10, 2007)

When all indirect and support costs are included, it is estimated that the DoD currently spends over $1 per kilowatt hour for electrical power delivered to troops in forward military bases in war regions. OSD(PA&E) has computed that at a wholesale price of $2.30 a gallon, the fully burdened average price of fuel for the Army exceeds $5 a gallon. For Operation\ IRAQI FREEDOM the estimated delivered price of fuel in certain areas may approach $20 a gallon. Significant numbers of American servicemen and women are injured or killed as a result of attacks on supply convoys in Iraq. Petroleum products account for approximately 70% of delivered tonnage to U.S. forces in Iraq—total daily consumption is approximately 1.6 million gallons. Any estimated cost of battlefield energy (fuel and electricity) does not include the cost in lives of American men and women. The DoD is a potential anchor tenant customer of space‐based solar power that can be reliably delivered to U.S. troops located in forward bases in hostile territory in amounts of 5‐50 megawatts continuous at an estimated price of $1 per kilowatt hour.

### smr offense

#### The link turns the case – causes rollback

Energy Fair, 12 [Energy Fair, THE FINANCIAL RISKS OF INVESTING IN NEW NUCLEAR POWER PLANTS, www.energyfair.org.uk, March 2012 Energy Fair Email: nuclearsubsidies@gmail.com Phone: +44 (0) 1248 712962, +44 (0) 7746 290775 Web: www.energyfair.org.uk 23rdMarch 2012, http://www.nirs.org/neconomics/risks\_of\_nuclear\_investment\_published.pdf]

Political risk. Apart from the risk that politicians may decide to withdraw some or all of the subsidies for nuclear power, it is vulnerable to political action arising from events like the nuclear meltdowns in Fukushima. That disaster led to a sharp global shift in public opinion against nuclear power and it led to decisions by politicians in several different countries to close down nuclear power stations and to accelerate the roll-out of alternative sources of power. The next nuclear disaster—and the world has been averaging one such disaster every 11 years—is likely to lead to even more decisive actions by politicians, perhaps including the closing down of nuclear plants that are still under construction or are relatively new.

#### One accident turns the case -- shuts down the nuclear industry.

Squassoni, ‘8

[Sharon, Senior Associate, Nonproliferation Program -- Carnegie Endowment for International Peace, 3-12, “The Realities of Nuclear Expansion” Congressional Testimony: House Select Committee for Energy Independence and Global Warming, Washington, DC]

A few caveats with respect to projecting nuclear energy expansion are necessary. Nuclear energy is undoubtedly safer and more efficient now than when it began fifty years ago, but it still faces four fundamental challenges: waste, cost, proliferation, and safety. It is an inherently risky business. Most industry executives will admit that it will only take one significant accident to plunge the “renaissance” back into the nuclear Dark Ages. Because of this, estimates are highly uncertain. For example, the U.S. Energy Information Administration does not use its computer model to estimate nuclear energy growth because, among other things, key variables such as public attitudes and government policy are difficult to quantify and project. That said, estimates tend to extrapolate electricity consumption and demand from gross domestic product (GDP) growth, make assumptions about nuclear energy’s share of electricity production, and then estimate nuclear reactor capacity.

#### Nuclear accidents force permanent dislocations and migration.

Gilinsky, ‘12

[Victor, Former member, Nuclear Regulatory Commission, and Independent Consultant, 2-13, “Fukushima Lessons Loom Large,” http://energy.nationaljournal.com/contributors/victor-gilinsky.php]

You ask what lessons we should draw from the Fukushima experience. Let me mention what to me is the key lesson coming out of the accident, one that has not gotten nearly enough attention either in the public or at the NRC: the extensive radioactive land contamination of the area around the Fukushima site. The nuclear community likes to focus on the comparative advantage of nuclear power over other energy sources in terms of fatalities. But there are other important costs. After the accident the Japanese evacuated an area of about 1000 square kilometers in which they estimated the public radiation dose would exceed 20 mSv per year (2 rems per year). nearly ten times background. About a 100,000 persons were affected. (Perhaps three times that many were affected around the Chernobyl site but we didn't pay attention.) Because the chief contaminant is cesium 137 with a 30 year half-life, many of those Japanese evacuees can never come back to their homes. Their lives have been upended. And it could have been much worse had the winds blown differently. This is the principal safety concern about nuclear power plants--that even with effective evacuation, the evacuees may have nowhere to go back to.

#### That causes war.

Loescher, ‘2

[Gil, Senior Fellow for Forced Migration and International Security @ International Institute for Strategic Studies, Bulletin of the Atomic Scientists, “Blaming the victim: refugees and global security: the bulk of the world's refugees remain in the developing world. And the industrializedstates, more worried after September 11, are taking new steps to keep them away.; The Uprooted”, 11-1, 58:6, Lexis]

For developing countries, displaced populations are both a consequence of conflict and a cause of continuing conflict and instability. Forced displacement can obstruct peace processes, undermine attempts at economic development, and exacerbate intercommunal tensions. Refugee flows also can be a source of regional conflict, causing instability in neighboring countries, triggering external intervention, and sometimes providing armed refugee groups with base camps from which to conduct insurgency, armed resistance, and terrorist activities.

#### Accidents are likely and devastate the environment.

Kopytko & Perkins, ‘11

[Natalie, PhD Researcher in the Environment Department, University of York, John, former chief economist at a major international consulting firm, advised the World Bank, United Nations, IMF, U.S. Treasury Department, Fortune 500 corporations, and countries in Africa, Asia, Latin America, and the Middle East, his books on economics and geo-politics have sold more than 1 million copies, spent many months on the New York Times and other bestseller lists, and are published in over 30 languages, “Climate Change, Nuclear Power, and the Adaptation-Mitigation Dilemma,” Energy Policy, [Volume 39, Issue 1](http://www.sciencedirect.com/science/journal/03014215/39/1), January 2011, Pages 318–333, Science Direct]

5.5. Other environmental problems Nuclear power has the potential for catastrophic accidents and consequently widespread environmental damage, unlike any other form of energy. The potential costs of not adapting nuclear operations to climate change are exceptionally high. Safe operation during extreme climate events remains a challenge. For one, the uncertainty in predicting climate change poses a problem for safety. Historical flood levels can no longer serve as an adequate predictor of future floods. As seen in France, recent floods have exceeded design basis levels. Regardless of design parameters, storms at coastal locations continue to be a problem because they often lead to the failure of multiple systems, and despite previous experience, failures in alarm and communication systems continue to occur. In certain cases, licensees have shown a low awareness of potential problems caused by external events. Moisture build-up leads to equipment failure; nonetheless, a licensee at one site did not recognize the problem as something requiring preventative and corrective measures. In addition, after a hurricane had passed a site in Florida, the missile shield doors that protected safety related equipment were found open and according to the licensee these doors could have been open for several years. These examples indicate that licensees do not always take proper action in dealing with external events; moreover, they are not prepared for the issues that will arise due to climate change.

#### extinction.

Cairns, ‘4

[John, Department of Biology, Virginia Polytechnic Institute and State University, “Future of Life on Earth,” Ethics in Science and Environmental Politics, www.int-res.com/esepbooks/EB2Pt2.pdf]

One lesson from the five great global extinctions is that species and ecosystems come and go, but the evolutionary process continues. In short, life forms have a future on Earth, but humankind’s future depends on its stewardship of ecosystems that favor Homo sapiens. By practicing sustainability ethics, humankind can protect and preserve ecosystems that have services favorable to it. Earth has reached its present state through an estimated 4550 million years and may last for 15000 million more years. The sixth mass extinction, now underway, is unique because humankind is a major contributor to the process. Excessive damage to the ecological life support system will markedly alter civilization, as it is presently known, and might even result in human extinction. However, if humankind learns to live sustainably, the likelihood of leaving a habitable planet for posterity will dramatically increase. The 21st century represents a defining moment for humankind—will present generations become good ancestors for their descendants by living sustainably or will they leave a less habitable planet for posterity by continuing to live unsustainably?

### link

#### Butler”

the cumbersome, bureaucratic certification process of the Nuclear Regulatory Commission (NRC), often enough to scare away potential entrepreneurs and investors, is not necessarily a roadblock to success. The NRC is “responsible for licensing and regulating the operation of commercial nuclear power plants in the United States.” Military installations offer unique platforms that could likely bypass an extended certification process. With established expertise and a long safety record in nuclear reactor certification, operations, training, and maintenance, the Naval Nuclear Propulsion Program comprises the civilian and military personnel who: . . . design, build, operate, maintain, and manage the nuclear-powered ships and the many facilities that support the U.S. nuclear-powered naval fleet.”34 Bypassing the NRC and initiating SMR experimentation under ADM Hyman Rickover’s legacy umbrella of naval reactors could shorten the process to a reasonable level for Marine and naval installations.35 Finally, Marine Corps-SMR technology opens the pathway for related endeavors and synergetic undertakings

### yes meltdowns impact

#### Risks of nuclear energy are unpredictable, so you should err neg -- consensus of experts.

Perlin, ‘11

[John, historian and author of multiple books about the environment, 6-14, “Confessions of a Nuclear Power Safety Expert,” http://www.psmag.com/science/confessions-of-a-nuclear-power-safety-expert-32220/]

When Italy decided in the mid-’70s to add nuclear power to its power portfolio, young mechanical and nuclear engineer Cesare Silvi was among those attracted to the opportunities it presented. His work centered on nuclear safety issues — in particular, what might happen if something unexpected struck a power plant. Corners he saw cut there eventually soured Silvi on that endeavor. His next position — at the Italian Commission on Nuclear and Alternative Energy Sources, which included work on nuclear disarmament — eventually soured him on nuclear energy itself. “[If we] continue with nuclear power, there will definitely be worse accidents,” he argued in the wake of Japan’s Fukushima Daiichi disaster. Over the weekend, Italian voters agreed and overwhelming rejected restarting nuclear power in their country. “Why not consider Three Mile Island, Chernobyl and Fukushima as warnings of greater catastrophes to come and avoid the inevitable by shutting them down, much like changing your diet and/or lifestyle after finding out that your cholesterol or blood pressure is elevated, rather than continuing down the same path until a heart attack or stroke strikes?” In the meantime, he suggests that wrangling existing power plants requires a global response toward the dangers he predicts. “Instead of a Kyoto accord,” he says, “we will have to have some kind of multilateral nuclear agreement to deal with such threats.” In the last two decades, Silvi has gone on to acclaim in the world of solar energy, where has been president of the International Solar Energy Society and founder of the Italian Group for the History of Solar Energy. Silvi originally worked in the north of Italy as a engineer. He did not like the polluted Po River valley, where the smell from various industries near his flat — despite his boss’ assurances of “You’ll get used to it” — annoyed him. Then the 1973 Arab-Israeli War and its attendant oil crisis prompted the Italian government to consider nuclear energy, and a door opened for Silvi. The newly formed Italian National Commission on Nuclear Energy sought out young engineers like Silvi, who saw the opportunity as a means to return home to Rome. His top scores on the entrance tests won him a spot in the Directorate for Nuclear Safety and Radioactive Protection, and in 1975, the directorate tasked Silvi to examine and analyze threats to the well-being of nuclear power plants from the outside environment. “I was looking at low-possibility events, like a meteor striking the housing of a reactor or a car thrown at it by a tornado. These definitely had a small chance of happening, but the end result would have been horrific.” Plus, he says now, the proliferation of nuclear plants just adds more targets. “Many laughed at such speculation and planning,” he says, “but then again, how many would have taken seriously a recommendation of extending the height of the seawall at Fukishima another six meters? They would have questioned your sanity, if you had argued that the 10-meter barrier was inadequate. “Our problem is that we don’t know what will happen on any scale of time. Such uncertainty is OK when dealing with train trips or dinner choices. But it becomes problematic when considering the possible spread of very dangerous material that will stay deadly for hundreds, if not thousands, of years.” In his introduction to risk analysis, Silvi provides a very simple equation: R=PxC. In English, that translates to the probability of something happening (the P) times the consequences if it does (C) equals the risk to society (R). He illustrates this by comparing driving on the Italian highway, the Autostrada, with running a nuclear power station. Driving on the Autostrada has a low risk to the general population. A possibility does exist that you will crash, and perhaps die as a result, but the consequences of the accident to the general society will be next to nil. That’s why countries let almost anyone drive. So a moderately high P times a very low C equals a small risk to society as a whole. On the other hand, the chance of an earthquake and tsunami of the magnitude that hit Japan are quite remote, especially occurring in tandem, which makes for a tiny P. But the consequences — the C — of them imperiling a nuclear power plant are huge, leading to a much higher risk to society. That equation played out in the Soviet Union a quarter-century ago at Chernobyl, and the aftereffects still ripple throughout Europe. A 1,600-square-mile exclusionary zone in Ukraine and southern Belarus remains off limits. Students gestated during the Chernobyl disaster in contaminated regions as far north as Sweden and Norway have shown poorer performance in school and lower verbal IQ scores. Silvi’s sincere assessment of outside threats ultimately butted up against unfortunate human constraints. “One day,” Silvi recalls, “the boss said, ‘Figure out how far should a nuclear plant be from an airport.’ As I did my study, I found that it wasn’t too easy to protect the reactor from a plane crash. The plant can be perfect from the inside, but the problem arises: How many low-probability events that could result in devastating consequences do you protect against through proper construction before such expenditures make the plant too costly to operate? Even if we could affordably, say, pay to reinforce the plant to withstand a hit from a plane or missile, the question never leaves you — ‘Have I figured in everything that might damage the nuclear reactor over its long lifetime? “I left the field because I couldn’t do my analyses as I thought necessary. There was this nuclear power plant [the Caroso Nuclear Power Plant] in the north of Italy, along the Po River. An oil pipe broke and caught fire six kilometers from the plant. Oil also spilled into the river. It clogged the reactor’s condenser. After that, my team discovered there were four pipelines less than 500 meters from the plant. I felt it was necessary to determine what was flowing through them. “But the boss complained, ‘You’re trying to get at too many details,’ and stopped the study. It turned out that some very powerful person owned the pipelines and was hiding what was going through those pipes for tax purposes.” (Italian voters in 1987 decided to shutter all the nation’s nuclear plants and by 1990 they were closed, although the government opted to restart nuclear power in 2008. Post-Fukushima, the country has placed a moratorium on those plans and over the weekend the country’s voters decisively rejected a return to nuclear power.) So in 1981, Silvi shifted his work to nuclear disarmament with the Agency for the Promotion of European Research, and was working in that field as the Soviet Union spun out of existence. Suddenly, many Warsaw Bloc bases containing atomic arms essentially were abandoned, leaving them vulnerable to nuclear thievery. Silvi was part of a NATO delegation sent to Moscow to account for and inventory atomic supplies throughout Russia. While at the job, Silvi had an epiphany: “If we are struggling to control the spread of nuclear weapons, why should we extend the technology to civilian use?” Named a resident fellow of the East West Institute in 1986, being the first physical scientist to labor among its political scientists changed his perspective, he explained on the East West Institute’s blog. With Chernobyl then in everyone’s mind, he spent his early time there explaining how all nuclear reactors are not created equal. “With a sheet of paper and a pencil, I illustrated the difference. Cupping the curved sheet in my hand, I placed the pencil at the bottom of the curve to simulate the behavior of a western nuclear reactor. If its equilibrium changes, it rolls back and forth until it finds the stable position again. To simulate nuclear reactor such as the one in Chernobyl, I flipped the curved sheet over and placed the pencil on the top of the curve, illustrating that once equilibrium is lost, it is impossible to control. “… I soon came to the conclusion that neither international cooperation nor technological advancements would guarantee human societies to build and safely run nuclear reactors in all possible conditions on Earth (earthquakes, floods, droughts, tornadoes, wars, terrorism, climate change, tsunamis, pandemics, etc.). I am sadly reminded of this turning point in my life as I listen to the news about the earthquake, tsunami and extremely worrying nuclear crisis in Japan.” Upon leaving the Institute, he added, he moved away from nuclear energy and focused on solar energy. “Nuclear today only generates about 12 percent of the developed world’s electricity. By instituting an energy efficiency program,” Silvi suggests, “we could fill the gap caused by shutting them all down and put this malevolent genie back into the bottle. “Human history is full of madness, full of catastrophes. Imagine if we had nuclear reactors when we fought wars in the past. If you try to consider all the events that might happen over the years, you start to ask, ‘What are the benefits of such an effort, especially when you have opportunities to get electricity in many other ways?’”

### at: no smr meltdown

#### Terrorist attacks on reactors are likely -- causes rapid meltdowns without NRC oversight.

Lyman, ‘11

[Dr. Edwin, Senior Scientist -- Union of Concerned Scientists, “AN EXAMINATION OF THE SAFETY AND ECONOMICS OF LIGHT WATER SMALL MODULAR REACTORS: HEARING before a SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION, SPECIAL HEARING, JULY 14, 2011--WASHINGTON DC,” http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72251/html/CHRG-112shrg72251.htm]

--Fukushima also demonstrated how rapidly a nuclear reactor accident can progress to a core meltdown if multiple safety systems are disabled. A well-planned and executed terrorist attack could cause damage comparable to or worse than the earthquake and tsunami that initiated the Fukushima crisis, potentially in even less time. And although Osama bin Laden is gone, the terrorist threat to domestic infrastructure may actually increase over time if al Qaeda seeks to retaliate. This is the wrong time to consider reducing security requirements for nuclear powerplants, regardless of their size. However, SMR vendors have emphasized that reducing security staffing is critical for the economic viability of their projects. Christofer Mowry of B&W told the NRC in March that ``whether SMRs get deployed in large numbers or not is going to come down to operations and maintenance (O&M). And the biggest variable that we can attack directly . . . is the security issue.'' A Nuclear Energy Institute representative said in a presentation in June that ``optimal security staffing levels (for SMRs) may appreciably differ from current levels.''

#### Circumventing slower licensing processes risks accidents.

Lyman, ‘11

[Dr. Edwin, Senior Scientist -- Union of Concerned Scientists, “AN EXAMINATION OF THE SAFETY AND ECONOMICS OF LIGHT WATER SMALL MODULAR REACTORS: HEARING before a SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION, SPECIAL HEARING, JULY 14, 2011--WASHINGTON DC,” http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72251/html/CHRG-112shrg72251.htm]

Given there is no apparent capital cost benefit for SMRs, we are concerned that the industry is trying to cut the potential operating maintenance costs by asking the NRC for regulatory relief for a number of requirements. These do include reduced operator staffing for each unit and potentially reducing the number of operators that you need to monitor the safety of each individual unit. They also are interested in reducing emergency planning zone sizes and also adjusting security requirements that may end up with a reduced number of security officers. We think one of the early lessons of Fukushima is that you need to prevent serious accidents with significant margins of safety, so now is not the time to start reducing regulatory requirements for small reactors. Emergency planning zone should be maintained. Security certainly should be maintained, especially in light of potential increased threats following the potential for retaliation of the death of Osama bin Laden, and we believe that the multiple reactor issues will require additional enhancements to regulations for collocated units to make sure that you do not have interactions that can affect the safety of each site because of an accident its neighbors.

#### SMRs aren’t safer or more effective than larger reactors.

Smith, ‘11

[Gar, environmental journalist, editor of Earth Island Institute's weekly "eco-zine" The-Edge, Summer, “Don’t Mini-mize the Dangers of Nuclear Power,” http://www.earthisland.org/journal/index.php/eij/article/dont\_mini-mize\_the\_dangers\_of\_nuclear\_power/]

And that’s just a partial list. The problem with nuclear power is simple: It’s too complex. When things go wrong – as they inevitably do, because humans are fallible – the consequences can be deadly. The Fukushima disaster has severely hobbled the atomic industry’s hopes for a big-ticket nuclear renaissance. So the American Nuclear Society has proposed a mini-renaissance based on “Small Modular Reactors,” or SMRs. Cheaper, quicker to build, and small enough to fit in a garage, SMRs could power homes, factories, and military bases. South Carolina’s Savannah River National Laboratory hopes to start building SMRs at a New Mexico plant and is taking a lead role in a GE-Hitachi demonstration project. Even as Japanese engineers were working to contain the radiation risks at Fukushima, an international SMR conference in South Carolina in April attracted representatives from Westinghouse, AREVA, GE, the International Atomic Energy Agency, China National Nuclear Corp., Iraq Energy Institute, the US Army, and many US utilities. But SMRs still depend on designs that generate intense heat, employ dangerous materials (highly reactive sodium coolant), and generate nuclear waste. SMRs also retain all the risks associated with supplying, maintaining, safeguarding, and dismantling large nuclear reactors – only now those risks would be multiplied and decentralized. The planet can’t afford nuclear energy – be it mega or mini. As Dave Brower observed 30 years ago: “Is the minor convenience of allowing the present generation the luxury of doubling its energy consumption every 10 years worth the major hazard of exposing the next 20,000 generations to this lethal waste?

#### Passive safety designs are hyped and safety risks of SMR outweigh any potential benefits.

Lyman, ‘11

[Dr. Edwin, Senior Scientist -- Union of Concerned Scientists, “AN EXAMINATION OF THE SAFETY AND ECONOMICS OF LIGHT WATER SMALL MODULAR REACTORS: HEARING before a SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION, SPECIAL HEARING, JULY 14, 2011--WASHINGTON DC,” http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72251/html/CHRG-112shrg72251.htm]

Some SMR vendors emphasize their designs are passively safe, but no credible reactor design is completely passive and can shut itself down in every circumstance without need for intervention. Small reactors may have an advantage because the lower the power of a reactor, the easier it may be to cool through passive means, but accidents involving multiple small units may cause complications that could outweigh the advantages of having lower heat removal requirements for each unit. Moreover, passively safe reactors do require some equipment, such as valves that are designed to operate automatically, but are not 100 percent reliable. All passive systems will have to be equipped or should be equipped with highly reliable active backup systems in order to compensate for these uncertainties, but more backups mean generally higher costs and this poses a particular problem for SMRs, which begin with a large economic disadvantage compared to large reactors.

#### SMRs are highly vulnerable to accidents -- and colocation means they’ll be harder to forestall once they begin.

Feinstein, ‘11

[Dianne, US Senator, “AN EXAMINATION OF THE SAFETY AND ECONOMICS OF LIGHT WATER SMALL MODULAR REACTORS: HEARING before a SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION, SPECIAL HEARING, JULY 14, 2011--WASHINGTON DC,” http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72251/html/CHRG-112shrg72251.htm]

For me, one of the fundamental issues raised by events in Fukushima is whether multiple reactors should be collocated. The threat of high-level radiation exposure at one plant clearly compromised the ability of workers to adequately respond to events at nearby plants in the Daiichi site. The premise of the SMR program is that utilities could start with a small number of units and then install more as funding allowed and demand necessitated. Now, how does that premise stack up against possible problems? The Fukushima crisis also demonstrated the potential danger of storing spent fuel in pools on site, and yet the proposed SMR designs do not appear to make any improvements in this method of spent-fuel storage. Bluntly, I'm struggling to reconcile the lessons of Fukushima with the principal design premise of SMRs, and so I look forward to witnesses addressing these issues today.

### 2nc – status quo solves

#### And this new DOD strategy ends the risk of mission interruption during a significant grid outage

**Aimone, 9/12**/12 - Director Business Enterprise Integration Office of the Deputy Under Secretary of Defense (Installations and Environment) (Michael, Congressional Testimony, <http://homeland.house.gov/sites/homeland.house.gov/files/Testimony%20-%20Aimone.pdf>)

Chairman Lungren and distinguished Members of the Subcommittee. Thank you for the opportunity to testify. I was asked to address the question of how the Department of Defense (DoD) would operate during a significant outage of the commercial electric power grid. Although today’s hearing is focused on the prospect of an electromagnetic pulse (EMP) event, such an event is only one scenario for a grid outage. DoD is heavily dependent on the commercial electric power grid. The Department has two closely coordinated sets of activities that focus on the need to maintain critical mission activities in the event of a commercial grid outage. One set of activities, led by DoD’s office of homeland defense, is part of the Department’s explicit “mission assurance strategy.” The other set of activities, focused on the Department’s fixed installations and led by its Installations and Environment office, falls under DoD’s “facility energy strategy.”

Mission Assurance Strategy

The Department has long had a major focus on mitigating risks to high priority DoD facilities and infrastructure and the critical global missions they support. Toward that end, DoD recently adopted an explicit Mission Assurance Strategy, which is focused on ensuring operational continuity in an all-hazard threat environment.

This strategy entails a two-track approach. Track I includes "in-house" mitigation efforts-- activities that the Department can execute largely on its own. A key element is DoD’s Defense Critical Industry Program (DCIP)—an integrated risk management program designed to secure critical assets, infrastructure and key resources for our nation. DoD and the Department of Homeland Security (DHS) work closely together as part of DCIP. Under Track I of the Mission Assurance Strategy, DCIP will continue to update the list of DoD's most critical assets and target them for special mitigation efforts through DoD’s budget and other internal processes.

Track II of our Mission Assurance Strategy tackles the many challenges to DoD mission execution that require external collaboration with partners such as the Department of Energy (DOE), DHS and industry. Given that DoD mission execution relies heavily upon the energy surety of the communities surrounding our installations, Defense Industrial Base facilities spread across entire regions, and on private sector infrastructure that will collapse without electricity, this two-track approach can help meet the challenges to DoD mission assurance that lie far beyond our military bases.

### defense

#### Hegemony isn’t key anymore. Rivalry, stability, and deterrence claims are all false

**Friedman 10**—research fellow in defense and homeland security, Cato. PhD candidate in pol sci, MIT (Ben, Military Restraint and Defense Savings, 20 July 2010, http://www.cato.org/testimony/ct-bf-07202010.html)

Another argument for high military spending is that U.S. military hegemony underlies global stability. Our forces and alliance commitments dampen conflict between potential rivals like China and Japan, we are told, preventing them from fighting wars that would disrupt trade and cost us more than the military spending that would have prevented war. The theoretical and empirical foundation for this claim is weak. It overestimates both the American military's contribution to international stability and the danger that instability abroad poses to Americans. In Western Europe, U.S. forces now contribute little to peace, at best making the tiny odds of war among states there slightly more so.7 Even in Asia, where there is more tension, the history of international relations suggests that without U.S. military deployments potential rivals, especially those separated by sea like Japan and China, will generally achieve a stable balance of power rather than fight. In other cases, as with our bases in Saudi Arabia between the Iraq wars, U.S. forces probably create more unrest than they prevent. Our force deployments can also generate instability by prompting states to develop nuclear weapons. Even when wars occur, their economic impact is likely to be limited here.8 By linking markets, globalization provides supply alternatives for the goods we consume, including oil. If political upheaval disrupts supply in one location, suppliers elsewhere will take our orders. Prices may increase, but markets adjust. That makes American consumers less dependent on any particular supply source, undermining the claim that we need to use force to prevent unrest in supplier nations or secure trade routes.9 Part of the confusion about the value of hegemony comes from misunderstanding the Cold War. People tend to assume, falsely, that our activist foreign policy, with troops forward supporting allies, not only caused the Soviet Union's collapse b

ut is obviously a good thing even without such a rival. Forgotten is the sensible notion that alliances are a necessary evil occasionally tolerated to balance a particularly threatening enemy. The main justification for creating our Cold War alliances was the fear that Communist nations could conquer or capture by insurrection the industrial centers in Western Europe and Japan and then harness enough of that wealth to threaten us — either directly or by forcing us to become a garrison state at ruinous cost. We kept troops in South Korea after 1953 for fear that the North would otherwise overrun it. But these alliances outlasted the conditions that caused them. During the Cold War, Japan, Western Europe and South Korea grew wealthy enough to defend themselves. We should let them. These alliances heighten our force requirements and threaten to drag us into wars, while providing no obvious benefit.

## 1nr

### overview

#### Loss of presidential leadership guarantee collapse of the economy and hegemony – causes Middle East war

Kay Bailey Hutchison (U.S. Senator from Texas) 9/21/2012 “A Looming Threat to National Security,” States News Service, Lexis

Despite warnings of the dire consequences, America is teetering at the edge of a fiscal cliff, with January 1st, 2013 as the tipping point. On that date, unless Congress and the White House can reach agreement on how to cut the federal deficit, all taxpayers will be hit with higher taxes and deep cuts - called "sequestration" - will occur in almost all government spending, disrupting our already weak economy and putting our national security at risk. According to the House Armed Services Committee, if sequestration goes into effect, it would put us on course for more than $1 trillion in defense cuts over the next 10 years. What would that mean? A huge hit to our military personnel and their families; devastating cuts in funding for critical military equipment and supplies for our soldiers; and a potentially catastrophic blow to our national defense and security capabilities in a time of increasing violence and danger. All Americans feel a debt of gratitude to our men and women who serve in uniform. But Texas in particular has a culture that not only reveres the commitment and sacrifice they make to protect our freedom, we send a disproportionate number of our sons and daughters to serve. The burden is not borne solely by those who continue to answer the call of duty, but by their families as well, as they endure separation and the anxiety of a loved one going off to war. These Americans have made tremendous sacrifices. They deserve better than to face threats to their financial security and increased risks to their loved ones in uniform, purely for political gamesmanship. Sequestration would also place an additional burden on our economy. In the industries that support national defense, as many as 1 million skilled workers could be laid off. With 43 straight months of unemployment above 8 percent, it is beyond comprehension to add a virtual army to the 23 million Americans who are already out of work or under-employed. Government and private economic forecasters warn that sequestration will push the country back into recession next year. The recent murder of our Ambassador to Libya and members of his staff, attacks on US embassies and consulates and continued riots across the Middle East and North Africa are stark reminders that great portions of the world remain volatile and hostile to the US. We have the mantle of responsibility that being the world's lone super-power brings. In the absence of U.S. military leadership, upheaval in the Middle East would be worse. As any student of history can attest, instability does not confine itself to national borders. Strife that starts in one country can spread like wildfire across a region. Sequestration's cuts would reduce an additional 100,000 airmen, Marines, sailors and soldiers. That would leave us with the smallest ground force since 1940, the smallest naval fleet since 1915 and the smallest tactical fighter force in the Air Force's history. With the destabilization in the Middle East and other areas tenuous, we would be left with a crippled military, a diminished stature internationally and a loss of technological research, development and advantage - just as actors across the globe are increasing their capabilities. Sequestration can still be avoided. But that will require leadership from the President that has thus far been missing. Congress and the White House must reach a long-term agreement to reduce $1 trillion annual budget deficits, without the harsh tax increases that could stall economic growth and punish working families.

**Economic decline causes Chinese nationalism and nuclear lashout**

Philip **Bowring,** Hong Kong-based journalist and commentator, August 17, **2004**, International Herald Tribune, “China's new power can be contained,” p. Lexis

The biggest source of danger is not simply the emergence of a China with strategic nuclear weapons, a plethora of missiles facing Taiwan and a growing blue-water fleet. Those are inevitable consequences of China's self-styled "peaceful rise." They should only be a threat if power struggles within China, or economic disruptions stemming from global problems, cause China to shift its focus from satisfying its new materialism to satisfying nationalist urges. Even now, when China's economic success is so apparent, rivalry between the new leadership of President Hu Jintao and Prime Minister Wen Jiabao, and the old boss, former President Jiang Zemin, using his position as head of the Central Military Commission, expresses itself in terms of military posturing and rhetoric toward Japan and Taiwan. Taiwan and Japan are inextricably linked not only in the minds of Chinese nationalists but also in those of Japanese defense planners. Japan may not care much about Taiwan's identity, but it does care about Taiwan's geography. Taiwan is as close to Japan's Ryukyu islands as it is to the Chinese mainland, and it controls the Luzon Straits, which give access to the South China Sea and Japan's trade partners in Southeast Asia and the Middle East. China claims that Asia fears renewed Japanese militarism. But Southeast Asia is more worried about China's territorial sea claims and its search for raw materials than about Japan, which is preoccupied with protecting its trade and investments. Japan's conventional arms build-up has been quieter but as significant as that of China. Its naval capability is particularly impressive. But its continued partnership with the United States on nuclear issues and the missile defense shield remains critical to its own defense and, arguably, that of Taiwan. That alliance remains crucial if Japan is not to go its own way on nuclear and strategic weapons, raise tensions and perhaps send China into a dangerous spasm of xenophobia. The U.S. decision to reduce troop strength in Asia is not important in itself, but any domestic U.S. reaction against failures in Iraq which severely reduced America's strategic role in East Asia would be destabilizing. Chinese nationalism could burst out anyway if China's economic hopes were dashed by global recession, a world energy crisis or a trade war with a United States that took unilateral measures to correct its huge imbalance with China.

#### Turns hegemony and air dominance

**Khalilzad**, policy analyst at Rand and Afghanistan specialist for CSIS, **1995** (Zalmay, The Washington Quarterly, Lexis)

The United States is unlikely to preserve its military and technological dominance if the U.S. economy declines seriously. In such an environment, the domestic economic and political base for global leadership would diminish and the United States would probably incrementally withdraw from the world, become inward-looking, and abandon more and more of its external interests. As the United States weakened, others would try to fill the Vacuum.

### 2nc a2 link uniqueness

#### This distinction between alternative and energy and nuclear is important – their policies have been spun as ae policies – not nuclear

JOHNSON ’12 (John; Nuclear Energy Insider, “US Campaign Trail: is nuclear in the equation?” 4/25, <http://analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation>)

Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions.¶ Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry.¶ Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S.

#### Obama distancing himself from nuclear issues in the run-up to the election

LEVINE 9/7/12 (Gregg; Contributing Editor and Former Managing Editor – Firedoglake and Contributing Writer for Truthout, “Obama Drops Nuclear from Energy Segment of Convention Speech,” <http://capitoilette.com/2012/09/07/obama-drops-nuclear-from-energy-segment-of-convention-speech/>)

President Obama no longer promises to “safely harness nuclear power”–that likely would have sounded like a cruel joke in a world now contaminated by the ongoing Fukushima disaster–but beyond that, he does not promise anything about nuclear power at all. There was no platitude, no carefully crafted signal to the industry that has subsidized much of Obama’s political career, no mention of nuclear power whatsoever.

That is not to say that the entire 2012 Democratic National Convention was a nuclear-free zone. A few hours before the president took the stage at the Time Warner Cable Arena, James Rogers, co-chair of the Charlotte host committee, and oh, by the way, CEO of Duke Energy, stepped to the lectern and endorsed Obama’s “all of the above” energy “strategy” (they keep using that word; I do not think it means what they think it means):

We need to work even harder toward a future of affordable, reliable and cleaner energy. That means we need to invest heavily in new zero-emission power sources, like new nuclear, wind and solar projects, as well as new technologies, like electric vehicles.

Well, if you are looking for a future of affordable, reliable and cleaner energy, you need look no further than nu–wait, what? If you are looking for those three features in an energy future, it is hard to imagine a worse option than the unsustainably expensive, chronically unreliable and dangerously dirty nuclear power plant. And, as has been discussed here many times, nuclear is not a zero-emission source, either. The massive carbon footprint of the nuclear fuel lifecycle rivals coal, and that doesn’t even consider the radioactive isotopes that facilities emit, even when they are not encountering one of their many “unusual events.”

But the CEO of the Charlotte-based energy giant probably has his eyes on a different prize. Rogers, who has been dogged by questions about a power grab after Duke’s merger with Progress Energy and his lackluster performance as fundraiser-in-chief for the DNC, sits atop a company that operates seven US nuclear power plants, and is partners in a plan to build two new AP1000 reactors in Cherokee County, South Carolina.

That last project, which is under active review by the Nuclear Regulatory Commission, awaiting a combined construction and operating license, is one of a small handful of proposed new nuclear facilities currently scrambling for financing. The South Carolina plant, along with a pair of reactors in Georgia, two slated for a different site in South Carolina, and possibly one more in Tennessee, represent what industry lobbyists like to call the “nuclear renaissance.”

But completion of any of the above is nowhere close to guaranteed, and even if some of these reactors are eventually built, none will be able to generate even one kilowatt of commercial power until years after President Obama completes his sought-after second term.

Which, if you really care about America’s energy future, is, of course, all for the better. As even James Rogers noted in his speech (and he gets props for this):

[W]e cannot lose sight of energy efficiency. Because the cleanest, most efficient power plant is the one we never have to build.

That Duke’s CEO thought to highlight efficiency is interesting. That President Obama, with his well-documented ties to the nuclear industry, chose not to even mention nuclear power is important.

#### And, the magnitude of the link outweighs

#### ---- visceral public reactions

Mariotte 6/5/12 (Michael Mariotte, Executive Director of Nuclear Information and Resource Service, “Nuclear Power and Public Opinion: What the polls say,” http://www.dailykos.com/story/2012/06/05/1097574/-Nuclear-Power-and-Public-Opinion-What-the-polls-say)

Americans are not exactly wild about the idea of building new nuclear reactors. Polls asking the question different ways arrive at different results; at the lowest common denominator it is safe to say the country is **divided on the issue**. But Americans clearly don’t want to pay for construction of new reactors. And the reality is that no utility wants to or even can spend its own money building new reactors—they’re just too expensive. Congress, State legislatures and Public Service Commissions would do well to heed that warning, especially since it crosses all party and political lines. It is also clear that the American public does not see nuclear power as a “clean energy” source (nor, for that matter, “clean” coal or natural gas fracking). Congressional or state efforts to include these technologies in a “clean energy standard” or a clean energy bank concept are **bound to fail.**

And, distinct from renewablesr – and is consistent with historical findings

Mariotte 6/5/12 (Michael Mariotte, Executive Director of Nuclear Information and Resource Service, “Nuclear Power and Public Opinion: What the polls say,” http://www.dailykos.com/story/2012/06/05/1097574/-Nuclear-Power-and-Public-Opinion-What-the-polls-say)

Jumping back to ORC International, their March 2012 poll found this: About two out of three Americans (66 percent) – including 58 percent of Republicans, 65 percent of Independents, and 75 percent of Democrats -- agree that the term “‘clean energy standard’ should not be used to describe any energy plan that involves nuclear energy, coal-fired power, and natural gas that comes from hydraulic fracturing, also known as ‘fracking.’” and this: About three out of four Americans (73 percent) agree that “federal spending on energy should focus on developing the energy sources of tomorrow, such as wind and solar, and not the energy sources of yesterday, such as nuclear power.” Fewer than one in four (22 percent) say that “federal spending on energy should focus on existing energy sources, such as nuclear, and not emerging energy sources, such as wind and solar.” Meanwhile, the New York Times in May reported on a Harvard/Yale poll (also behind a paywall), conducted in 2011 but released in May 2012, that found that Americans are willing to pay an average of $162/year more for clean energy than they are paying now—an average 13% increase in electric bills. But when clean energy was defined as including nuclear power or natural gas, that **support plummeted**. This is **consistent with findings over the past decade**, which have shown that nuclear power has typically ranked well below renewable energy sources, especially solar and wind, in public opinion, at times battling with coal for least-favorite U.S. energy source. A March 2012 Gallup poll found that 69% of Americans support spending more government money on solar and wind power—with majorities among Democrats (84%) and Republicans (51%) alike. But support for “expanding the use of nuclear power” barely received a majority (52%) and then only due to Republican support: 64% of Republicans supported that idea, only 41% of Democrats.

And, perceived as more expensive

Mariotte 6/5/12 (Michael Mariotte, Executive Director of Nuclear Information and Resource Service, “Nuclear Power and Public Opinion: What the polls say,” http://www.dailykos.com/story/2012/06/05/1097574/-Nuclear-Power-and-Public-Opinion-What-the-polls-say)

New nuclear reactors are simply too expensive for utilities to build with their own assets. Nor are banks willing to lend money for most nuclear projects; they’re considered too risky given the long history of cost overruns, defaults, cancellations and other problems. Thus, the only two means of financing a new reactor are to either get money from taxpayers, through direct federal loans or taxpayer-backed loan guarantees, or from ratepayers in a few, mostly Southern states, which allow utilities to collect money from ratepayers before reactors are built—a concept known either as “early cost recovery” or Construction Work in Progress (CWIP). ORC International (which polls for CNN, among others) has asked a straightforward question for the past two years (March 2011 and February 2012) in polls commissioned by the Civil Society Institute: “Should U.S. Taxpayers Take on the Risk of Backing New Nuclear Reactors?” The answer? Basically identical both years: 73% opposed in 2011, 72% opposed in 2012.

#### And,SMRs politically “nuclear”

Fairly, 2010 (Peter “Downsizing Nuclear Power Plants”, IEE Spectrum, http://spectrum.ieee.org/energy/nuclear/downsizing-nuclear-power-plants/2)

However, there are political objections to SMRs. Precisely because they are more affordable, they may well increase the risk of proliferation by bringing the cost and power output of nuclear reactors within the reach of poorer countries.

Russia’s first SMR, which the nuclear engineering group Rosatom expects to complete next year, is of particular concern. The Akademik Lomonosov is a floating nuclear power plant sporting two 35-MW reactors, which Rosatom expects to have tethered to an Arctic oil and gas operation by 2012. The reactor’s portability prompted Greenpeace Russia to call this floating plant the world’s most dangerous nuclear project in a decade.

SMRs may be smaller than today’s reactors. But, politically at least, they’re just as nuclear.

### 2nc a2 Elections lead to pol cap

#### Fiat should be determined by the least restrictive means – currently congress is holding ‘pro forma’ sessions until the lame duck – NO legislative business can occur in them

Ramsey Cox (writer for The Hill) September 24, 2012 “Congress to hold pro forma sessions until November” http://thehill.com/blogs/floor-action/senate/251313-congress-to-hold-pro-forma-sessions-until-november

Rather than being in recess for more than five weeks, both the Senate and the House decided to hold pro forma sessions until after the November elections. Both chambers will gavel in Tuesday morning for a brief session; typically, legislative business doesn't take place in pro forma sessions. At most members ask to be recognized for a speech, but rarely do. It is unclear if the legislative branch was afraid of recess appointments by the White House, yet both sides took a formal recess in August. The Senate will hold a pro forma session every Tuesday and Friday until Nov. 13 at 2 p.m. when they’ll continue work on S. 3525, the Sportsmen Act, which would increase access to federal land for hunters and fishers while also supporting conservation measures.

#### Interpreting the plan any other way would be constitutionally prohibited

**Colliss,** October 4**, 2010** (Michael Colliss, All 247 News, “The U.S. Congress: A Legislative Analysis – Unemployment Extension and Tier V” 2010, google)

Many have suggested that the President call the Congress back into session for the sole purpose of paying attention to unemployment extension and a Tier V. Aside from the fact that even if the President could call the Congress back into session, he has, of course, no power to dictate the result of any Congressional action in this theoretical special session, the way that the Senate adjourned on September 29 makes it Constitutionally impossible for the President to do so. When the Senate adjourned on September 29, it scheduled “pro forma” sessions on the following dates; Friday, October 1, Tuesday, October 5, Friday, October 8, Tuesday, October 12, Friday, October 15, Tuesday, October 19, Friday, October 22, Tuesday, October 26, Friday, October 29, Monday, November 1, Thursday, November 4, Monday, November 8, Wednesday, November 10, and Friday, November 12. All of these are pro forma sessions. The Senate parliamentary handbook defines a “pro forma session” as a brief meeting (usually only several seconds) of the Senate in which no business is conducted. The President can only call a special session when neither House of the U.S. Congress has not met for three days and when no meeting is scheduled for three days in the future. A pro forma session is considered a “meeting” even though no business is conducted. The reason that the Senate did schedule these pro forma sessions is because to get the necessary votes to temporarily fund the government, the Republicans demanded these pro forma sessions be scheduled. It is also important to note that the President cannot make any “recess appointments” when pro forma sessions are scheduled.

### 2nc a2 biofuels

**No capital spent until the finish line**

**Drum 2010** (Kevin, reporter for Mother Jones, http://motherjones.com/kevin-drum/2010/03/immigration-

coming-back-burner)

Not to pick on Ezra or anything, but this attitude betrays a surprisingly common misconception about political issues in general. The fact is that political dogs never bark until an issue becomes an active one. Opposition to Social Security privatization was pretty mild until 2005, when George Bush turned it into an active issue. Opposition to healthcare reform was mild until 2009, when Barack Obama turned it into an active issue. Etc. I only bring this up because we often take a look at polls and think they tell us what the public thinks about something. But for the most part, they don't.1 That is,they don't until the issue in question is squarely on the table and both sides have spent a couple of months filling the airwaves with their best agitprop. Polling data about gays in the military, for example, hasn't changed a lot over the past year or two, but once Congress takes up the issue in earnest and the Focus on the Family newsletters go out, the push polling starts, Rush Limbaugh picks it up, and Fox News creates an incendiary graphic to go with its saturation coverage — well, that's when the polling will tell you something. And it will probably tell you something different from what it tells you now.Immigration was bubbling along as sort of a background issue during the Bush administration too until 2007, when he tried to move an actual bill. Then all hell broke loose. The same thing will happen this time, and without even a John McCain to act as a conservative point man for a moderate solution. The political environment is worse now than it was in 2007, and I'll be very surprised if it's possible to make any serious progress on immigration reform. "Love 'em or hate 'em," says Ezra, illegal immigrants "aren't at the forefront of people's minds." Maybe not. But they will be soon.

#### Fiscal cliff legislation is at the top of the agenda after the election

Rob Cox (editor for Rueters, writer for The Daily Beast) October 3, 2012 “Fantasy League for Economic Policy Wonks” http://www.thedailybeast.com/articles/2012/10/03/fantasy-league-for-economic-policy-wonks.html

But here’s one thing neither camp will actually say out loud: they won’t have the luxury of choosing their first big legislative priority. In all likelihood, it will be dictated to them. Election pledges will take a backseat to the so-called “fiscal cliff.” Some $450 billion of tax increases and about $1 trillion of spending cuts kick in come January 2013. If the post-Nov. 6 election session of Congress does anything, it is likely to delay the start date, throwing the issue right into the lap of the new president. “Whether it’s done now or in the lame-duck session, Congress is going to have to extend it, say 100 days or so, at least enough time to get it done,” says Larry Fink, chief executive of BlackRock, the fund manager overseeing $12 trillion of assets, who is also one of Wall Street’s most influential Democrats. “And it’s going to be the big priority for whoever gets to be president,” he told Breakingviews over the summer.

#### ‘Fiscal cliff’ top of the lame duck agenda

Bruce Bartlett (held senior policy roles in the Reagan and George H.W. Bush administrations and served on the staffs of Representatives Jack Kemp and Ron Paul) 10/2, 2012 “The ‘Fiscal Cliff’ Opportunity” http://economix.blogs.nytimes.com/2012/10/02/the-fiscal-cliff-opportunity/

Dealing with the fiscal cliff will undoubtedly be the principal item of business when Congress returns for a lame-duck session. Talks between the administration and Congressional leaders have already begun but have been hampered by questions about who will be president in January, as well as which party will control the House and Senate.

### pc key

#### Pressure is key to compromise

Bruce Bartlett (served in senior policy roles in the Reagan and George H.W. Bush administrations and served on the staffs of Representatives Jack Kemp and Ron Paul) October 2, 2012 “The ‘Fiscal Cliff’ Opportunity” http://economix.blogs.nytimes.com/2012/10/02/the-fiscal-cliff-opportunity/

One option for dealing with the fiscal cliff is simply to kick the can down the road — that is, delay all the spending cuts and tax increases for a year while Congress and the White House theoretically negotiate something better. But given the propensity of Republicans in the Senate to filibuster anything they don’t like, no matter how trivial, and the fact that virtually all have signed a “taxpayer protection pledge” vowing never to raise taxes for any reason, the likelihood of compromise without severe external pressure is unlikely.

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## 2ac

### 2ac a2 Cleary

#### Their US won’t use leverage card is aff evidence

Cleary 12

Richard Cleary, American Enterprise Institute Research Assistant, 8/13/12, Richard Cleary: Persuading Countries to Forgo Nuclear Fuel-Making, npolicy.org/article.php?aid=1192&tid=30

Conclusion

<Their Card>

The cases above offer a common lesson:  The U.S., though constrained or empowered by circumstance, can exert considerable sway in nonproliferation matters, but often elects not to apply the most powerful tools at its disposal for fear of jeopardizing other objectives. The persistent dilemma of how much to emphasize nonproliferation goals, and at what cost, has contributed to cases of nonproliferation failure. The inconsistent or incomplete application of U.S. power in nonproliferation cases is most harmful when it gives the impression to a nation that either sharing sensitive technology or developing it is, or will become, acceptable to Washington. U.S. reticence historically, with some exceptions, to prioritize nonproliferation—and in so doing reduce the chance of success in these cases—does not leave room for great optimism about future U.S. efforts at persuading countries to forgo nuclear fuel-making.

<Ends>

The most successful case above, South Korea, saw the U.S. put in question the basis of its relationship with Seoul, its security assurance, for nonproliferation aims. The potential near-term consequences of a South Korean nuclear weapon made this bold diplomatic maneuver worth the risk. But in other cases competing U.S. aims, often worthy, have impinged on nonproliferation goals, diluting efforts and sending mixed signals. In the case of Pakistan, for example, even well before the Soviet invasion of Afghanistan, the United States failed to use sufficiently forceful sticks or attractive carrots. U.S. efforts were bound by increasing distrust between Islamabad and Washington, a delicate geopolitical situation in the subcontinent given India’s close relationship with the Soviet Union, and facing a great challenge in a Pakistani leadership that was humiliated in 1971 and keen to reestablish some power equity with India. In negotiations with Iran regarding the nuclear cooperation agreement, U.S. policy makers–hoping to reinforce the NPT after the Indian test, avoid offending the Shah, and secure civilian nuclear contracts–were initially willing to make concessions on the issue of national reprocessing. In the case of the West Germany-Brazil contract, Kissinger went so far as to tell his counterpart in Bonn that, with expanded safeguards, the deal would be acceptable to Washington despite the clear proliferation risk from Brasilia.

The examples above show the limitations of both demand and supply side efforts. Supply side diplomatic interventions, made before the transfer of technology, have been at times effective, particularly in precluding nuclear fuel-making in the short term and buying time for more lasting solutions. However, as the Pakistan and Brazil cases illustrated, supply side interventions are no substitute for demand side solutions:  Countries face political choices regarding nuclear fuel-making. A nation set upon an independent fuel-making capacity, such as Pakistan or Brazil, is unlikely to give up efforts because of supply side controls. Multilateral fuel-making arrangements, as proposed repeatedly by the United States, have not materialized and therefore seem to have had little tangible influence.

In recent years, a new nonproliferation instrument has appeared:  a restructured 123 nuclear cooperation agreement, developed in the course of negotiations with the United Arab Emirates (UAE) and signed in 2009. This agreement, unlike previous bilateral nuclear cooperation agreements, offers a model for demand side nonproliferation, with the UAE vowing to forgo all enrichment and reprocessing technology on its own soil. It goes far beyond, for example, the “veto” on reprocessing of U.S.-origin spent fuel broached in the negotiations with the Shah. This “Gold Standard” agreement, much hailed at first, particularly in contrast to Iran’s enrichment activities, has begun to lose its luster as, once again, competing priorities marginalize nonproliferation. In January 2012, the Obama Administration announced that a “case by case” approach would be taken to the application of the Gold Standard. Countries such as Vietnam, where the U.S. holds out hope for a grander partnership aimed at countering China, may not be held to the UAE’s standard.100 Today, as in the 1970s with the Symington and Glenn Amendments, Congress seems most concerned about the prospect of proliferation of ENR technology.

### 2ac solvency

#### The tech is realistic – basis is robust

Frye 8 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

Other scientists have been exploring thorium as a possible fuel for nuclear reactors, and have made major strides in designing such a reactor. According to a recent reports, such a thorium-fueled reactor would not suffer a meltdown, would generate spent fuel which would remain radioactive for only about 500 years, would create either no weapons-grade byproducts at all or would create material that (due to intense gamma radiation) would be very difficult for bomb-makers to handle, would actually incinerate any plutonium that was added to the fuel mix (helping to dispose of high-level spent fuel from both nuclear reactor fuel and decommissioned nuclear weapons) - oh, and it also would generate cheap electricity. [n338](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n338) The idea of a thorium reactor is not mere pie-in-the-sky scientific theory - one American company, Thorium Power Ltd., is devoted solely to the development and promotion of thorium as a fuel for nuclear power plants, with [\*328] fuel specifically designed both to be proliferation-resistant and to reduce spent-fuel volume. Moreover, for plants seeking to burn off excess plutonium, the plutonium seed in the thorium fuel assembly burns "about three times faster and at somewhere between a third and half the cost of the mixed-oxide process" according to the company's Ernie Kennedy. [n339](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n339) Further, the company is not trying to develop an entirely new reactor design, but just a new fuel element that can be retrofitted into existing conventional nuclear power plants. In fact, Thorium Power expects its technology to be used in a commercial Russian VVER-1000 reactor as early as 2010, and to be "commercially proven" by 2013. [n340](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n340) Thorium Power is hardly a fly-by-night company. It has existed for sixteen years; Hans Blix (former head of the IAEA and UN weapons inspector) is one of its advisors; its executive chairman is Tom Graham (one of the world's leading non-proliferation experts); and the United Arab Emirates has recently appointed it as a consultant. Nor is Thorium Power the only American player in the thorium game. Northamerican Group Corporation has created a new division whose purpose is to develop thorium-based nuclear power generation facilities: The new division would undertake research, and develop both Thorium-based nuclear power generation facilities, and Thorium-based power cells. The company noted that... three top nuclear scientists, who are experts in the use of thorium and uranium in power generating plants, have agreed to join Northamerican's energy group. The scientists would lead the research and development of Thorium-based nuclear reactor... facilities that would help to ease the crunch on natural gas and fossil fuel electric generating facilities. [n341](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n341) In addition, a group of British scientists has "re-discovered" a salt-based thorium reactor design (originally constructed at Oak Ridge, Tennessee, in 1964) and that is now also being revisited by scientists in France, Germany, the Czech Republic, the Netherlands, Norway, Turkey, and Canada. [n342](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n342) This reactor design also has the advantages of being capable of breeding fuel, making hydrogen, and refueling without a reactor shutdown - plus its advocates claim that it is incapable of meltdown. [n343](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n343) India, which has ample thorium reserves, [n344](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n344) is seriously considering the construction of thorium-powered nuclear power [\*329] plants, [n345](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n345) and tentatively plans to build a 300-MW thorium-fueled reactor by 2020. [n346](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078" \l "n346)

#### No timeframe

Barton, ‘9

[Charles, retired counselor, writes for Energy From Thorium, “The Liquid Fluoride Thorium Paradigm,” http://www.theoildrum.com/node/4971/]

The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under "business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables?

### 2ac china

#### Thorium expansion inevitable – the only relevant question is who will lead the process

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

IT IS, OF COURSE, NOT THAT SIMPLE. I came to realize fairly soon that the tone of the Energy from Thorium forum—geeky, high minded, theoretical, and naive—characterized the thorium movement as a whole. It seemed clear that a small band group of advocates, however committed, had little chance of influencing national energy policy or turning the giant battleship of the nuclear industry. “The nuclear industry has zero incentive to shift to a new fuel cycle,” Charlie Hess told me. A long-time executive at the architectural engineering firm Burns & Roe, Hess spent 30 years building and operating nuclear plants. Although he is a prototypical member of the nuclearati, he is an advocate of alternative nuclear power, including thorium-based reactors, and a critic of the nuke-power establishment. Fuel costs for uranium reactors are less than half a cent per kilowatthour. “They spend more on security guards than they do on fuel,” Hess told me. “Frankly they don’t care.” That was made clear to me by John Rowe, the CEO of Exelon, the country’s number one producer of nuclear power, when I pulled him aside after a speech at a National Press Club luncheon in Washington, DC. When I asked about the possibility of shifting to thorium as a primary nuclear fuel, he assured me that there “will be alternatives across the entire fuel cycle.” But inexpensive uranium works just fine for Exelon, which has a market capitalization (the total value of its outstanding shares) of $28 billion and made $18.6 billion in revenue in 2010. If it’s not broke, don’t fix it—and nuclear tycoons like John Rowe have convinced themselves that the nuclear power industry is not broken. From the perspective of his office suite, that’s certainly true: Rowe made $10.3 million in 2010, and between 2006 and 2011, his compensation totaled $153.9 million. Uranium reactors have been good to nuclear power executives. Rowe’s dismissive attitude embodies the obstacles that face the thorium movement, which is composed of outsiders. “Look, the nuclear industry in the U.S. is very conservative,” Ambassador Thomas Graham told me. “I can see interest here in the U.S. gradually developing. But it’s not going to happen here first.” Graham, a longtime diplomat and opponent of nuclear proliferation who served as President Bill Clinton’s special representative for arms control, now chairs the board of Lightbridge, a company based in McLean, Virginia, that is developing solid fuel thorium rods for conventional reactors. While Graham foresees the use of thorium in the American nuclear power industry at some point, “the initial deployments,” he said, “are going to be abroad.” Abroad. In the three years I’ve been covering the thorium movement, almost every conversation has at some point included that stipulation. The United States, which dropped the first atomic bomb on Japan at the conclusion of World War II, pioneered nuclear power, built the first commercial power reactors, and invented the liquid-core reactor and first proved that thorium could be used in power-generating reactors, is, barring some unforeseen and unlikely shift in energy policy, almost certainly destined to be a laggard in the worldwide thorium revolution. France is the world’s largest producer of nuclear power and supplier of uranium for reactors. Eighty percent of its electricity comes from nuclear power, and the energy giant Areva has an active thorium R&D program and is investigating the possibility of building Liquid fluoride thorium reactors by 2032. The Laboratoire de Physique Subatomique et de Cosmologie in Grenoble is the only facility in the world that has the resources and backing needed to actually develop a commercial LFTR by 2022. The Rei nuclear research institute in the Czech Republic is a leader in the development of MSRs and is investigating the possibility of fueling MSRs with thorium, according to the institute’s director.6 Norway, which has an estimated 180,000 tons of thorium reserves, is embarking on an ambitious long-term nuclear power program that includes the construction of thorium-fueled reactors. In Brazil, which has the world’s second-largest thorium reserves and began research into thorium power in the 1960s, R&D efforts have recently begun again to develop thorium-fueled solid fuel reactors. By far the most active thorium power programs, however, are in Asia, particularly in the emerging economic superpowers of India and China. In February 2011, China officially announced that it will start a program to develop a thorium-fueled molten salt nuclear reactor, taking a crucial step toward replacing coal with nuclear power as a primary energy source. The program was announced at the annual conference in Shanghai of the Chinese Academy of Sciences and is headed by Jiang Mianheng, son of the former Chinese president Jiang Zemin and the holder of a Ph.D. in electrical engineering from Drexel University. The People’s Republic has no intention of falling behind in the race for the next great energy source. The world’s most ambitious thorium power program, though, is in India, which has the world’s largest thorium reserves. India exploded its first nuclear weapon in 1974 in defiance of the Nuclear Nonproliferation Treaty, and it has always viewed nuclear energy — in both warheads and power reactors, as a key element of national sovereignty. The country has embarked on a three-phase program to build as many as 60 reactors, converting them to run on thorium before 2032. I will detail the Indian and Chinese programs in chapter 7 and the implications for the United States in the conclusion. Here it is enough to quote the 2011 film The Ides of March, in which the progressive presidential candidate, played by George Clooney, declares, “Either we’re going to lead the world or we’re going to bury our heads in the sand.” The question of thorium is not whether it will become a major source of energy—it will—but when—and where and who will lead the way.

### 2ac a2 cap k

#### Framework – the k needs to prove the whole plan is bad– any other interp moots aff offense and decreases policy education – critique alone isn’t enough to solve

**Kuzemko 12** [Caroline Kuzemko, CSGR University of Warwick, Security, the State and Political Agency: Putting ‘Politics’ back into UK Energy, <http://www.psa.ac.uk/journals/pdf/5/2012/381_61.pdf>]

Both Hay (2007) and Flinders and Buller (2006) suggest that there are other forms that depoliticisation can take, or in the terminology of Flinders and Buller ‘tactics’ which politicians can pursue in order to move a policy field to a more indirect governing relationship (Flinders and Buller 2006: 296). For the purposes of understanding the depoliticisation of UK energy policy, however, two of Colin Hay’s forms of depoliticisation are most useful: the ‘… offloading of areas of formal political responsibility to the market…’ and the passing of policymaking responsibility to quasipublic, or independent, authorities (Hay 2007: 82-3). 1 What each of these forms of depoliticisation has in common is the degree to which they can serve, over time, to reduce political capacity by removing processes of deliberation and contestation, thereby reducing the ability for informed agency and choice. In that politics can be understood as being inclusive of processes of deliberation, contestation, informed agency and collective choice the lack of deliberation and capacity for informed agency would result in sub-optimal politics (Hay 2007: 67; cf. Gamble 2000; Wood 2011; Jenkins 2011). There seems little doubt that, with regard to energy as a policy area, the principal of establishing a more indirect governing system had become accepted by UK political elites. One of the very few close observers of UK energy policy from the 1980s to early 2000s claims that both Conservative and New Labour politicians had actively sought to remove energy from politics, making it an ‘economic’ subject: From the early 1980s, British energy policy, and its associated regulatory regime, was designed to transform a state-owned and directed sector into a normal commodity market. Competition and 1 "These"forms"are"referred"to"elsewhere"by"the"author"as"‘marketised’"and"‘technocratic’"depoliticisation"(Kuzemko" 2012b:").liberalization would, its architects hoped, take energy out of the political arena… Labour shared this vision and hoped that energy would drop off the political agenda…. (Helm 2003: 386) 2 As already suggested this paper considers the intention to depoliticise energy to have been reasonably successful. By the early 2000s the Energy Ministry had been disbanded, there was little or no formal Parliamentary debate, energy was not represented at Cabinet level, responsibility for the supply of energy had been passed to the markets, it was regulated by an independent body, and the (cf. Kuzemko 2012b). Furthermore, the newly formed Energy Directorate within the Department of Trade and Industry (DTI), which now had responsibility for energy policy, had no specific energy mandates but instead mandates regarding encouraging the right conditions for business with an emphasis on competition (Helm et al 1989: 55; cf. Kuzemko 2012b: 107). As feared by various analysts who write about depoliticisation as a sub-optimal form of politics, these processes of depoliticisation had arguably resulted in a lack of deliberation about energy and its governance outside of narrow technocratic elite circles. Within these circles energy systems were modelled, language was specific and often unintelligible to others, including generalist politicians or wider publics, and this did, indeed, further encourage a high degree of disengagement with the subject (cf. Kern 2010; Kuzemko 2012b; Stern 1987). Technical language and hiring practices that emphasised certain forms of economic education further isolated elite technocratic circles from political contestation and other forms of knowledge about energy. Arguably, by placing those actors who have been elected to represent the national collective interest at one remove from processes of energy governance the result was a lack of formal political capacity in this policy field. It is worth, briefly, at this point reiterating the paradoxical nature of depoliticisation. Whilst decisions to depoliticise are deeply political, political capacity to deliberate, contest and act in an issue area can be reduced through these processes. Depoliticisation has been an ongoing form of governing throughout the 20 th century it may (Burnham 2001: 464), however, be particularly powerful and more difficult to reverse when underpinned by increasingly dominant ideas about how best to govern. For example Hay, in looking for the domestic sources of depoliticisation in the 1980s and 1990s, suggests that these processes were firmly underpinned by neoliberal and public choice ideas not only about the role of the state but also about the ability for political actors to make sound decisions relating, in particular, to economic governance (Hay 2007: 95-99). Given the degree to which such ideas were held increasingly to be legitimate over this time period depoliticisation was, arguably, genuinely understood by many as a process that would result in better governance (Interviews 1, 2, 3, 15 cf. Hay 2007: 94; Kern 2010). This to a certain extent makes decisions to depoliticise appear both less instrumental but also harder to reverse given the degree to which such ideas become further entrenched via processes of depoliticisation (cf. Kuzemko 2012b: 61-66; Wood 2011: 7).

#### The 1ac is an impact turn – Zhang and Wohlforth say status competition is inevitable – hegemonic breakdown causes global war and a breakdown of economic interdepended

#### The alternative causes transition wars and extinction

Kothari, 82 [Professor of political science at University of Delhi, “Towards a Just Social Order”, p. 571]

Attempts at global economic reform could also lead to a world racked by increasing turbulence, a greater sense of insecurity among the major centres of power -- and hence to a further tightening of the structures of domination and domestic repression – producing in their wake **an intensification of** the old arms race and militarization of regimes, encouraging regional conflagrations and setting the stage for eventual **global holocaust**.

#### Cap solves war—causes economic, not military competition

Gartzke 5—Former associate prof of pol sci, Columbia. Former associate prof of pol sci, USCD. PhD in International Relations, Formal/Quantitative Methods from U Iowa (Erik, “Future Depends on Capitalizing on Capitalist Peace,” 1 October 2005, http://www.cato.org/pub\_display.php?pub\_id=5133,)

With terrorism achieving "global reach" and conflict raging in Africa and the Middle East, you may have missed a startling fact - we are living in remarkably peaceable times. For six decades, developed nations have not fought each other. France and the United States may chafe, but the resulting conflict pitted french fries against "freedom fries," rather than French soldiers against U.S. "freedom fighters." Tony Blair and Jacques Chirac had a nasty spat over the EU, but the English aren't going to storm Calais any time soon. The present peace is unusual. Historically, powerful nations are the most war prone. The conventional wisdom is that democracy fosters peace but this claim fails scrutiny. It is based on statistical studies that show democracies typically don't fight other democracies. Yet, the same studies show that democratic nations go to war about as much as other nations overall. And more recent research makes clear that only the affluent democracies are less likely to fight each other. Poor democracies behave much like non-democracies when it comes to war and lesser forms of conflict. A more powerful explanation is emerging from newer, and older, empirical research - the "capitalist peace." As predicted by Montesquieu, Adam Smith, Norman Angell and others, nations with high levels of economic freedom not only fight each other less, they go to war less often, period. Economic freedom is a measure of the depth of free market institutions or, put another way, of capitalism. The "democratic peace" is a mirage created by the overlap between economic and political freedom. Democracy and economic freedom typically co-exist. Thus, if economic freedom causes peace, then statistically democracy will also appear to cause peace. When democracy and economic freedom are both included in a statistical model, the results reveal that economic freedom is considerably more potent in encouraging peace than democracy, 50 times more potent, in fact, according to my own research. Economic freedom is highly statistically significant (at the one-per-cent level). Democracy does not have a measurable impact, while nations with very low levels of economic freedom are 14 times more prone to conflict than those with very high levels. But, why would free markets cause peace? Capitalism is not only an immense generator of prosperity; it is also a revolutionary source of economic, social and political change. Wealth no longer arises primarily through land or control of natural resources. **New Kind of Wealth** Prosperity in modern societies is created by market competition and the efficient production that arises from it. This new kind of wealth is hard for nations to "steal" through conquest. In days of old, when the English did occasionally storm Calais, nobles dreamed of wealth and power in conquered lands, while visions of booty danced in the heads of peasant soldiers. Victory in war meant new property. In a free market economy, war destroys immense wealth for victor and loser alike. Even if capital stock is restored, efficient production requires property rights and free decisions by market participants that are difficult or impossible to co-ordinate to the victor's advantage. The Iraqi war, despite Iraq's immense oil wealth, will not be a money-maker for the United States. Economic freedom is not a guarantee of peace. Other factors, like ideology or the perceived need for self-defence, can still result in violence. But, where economic freedom has taken hold, it has made war less likely. Research on the capitalist peace has profound implications in today's world. Emerging democracies, which have not stabilized the institutions of economic freedom, appear to be at least as warlike - perhaps more so - than emerging dictatorships. Yet, the United States and other western nations are putting immense resources into democratization even in nations that lack functioning free markets. This is in part based on the faulty premise of a "democratic peace." It may also in part be due to public perception. Everyone approves of democracy, but "capitalism" is often a dirty word. However, in recent decades, an increasing number of people have rediscovered the economic virtues of the "invisible hand" of free markets. We now have an additional benefit of economic freedom - international peace. The actual presence of peace in much of the world sets this era apart from others. The empirical basis for optimistic claims - about either democracy or capitalism - can be tested and refined. The way forward is to capitalize on the capitalist peace, to deepen its roots and extend it to more countries through expanding markets, development, and a common sense of international purpose. The risk today is that faulty analysis and anti-market activists may distract the developed nations from this historic opportunity.

#### Capitalism is sustainable – no alternative

Rogoff, 12/23/11[Professor of Economics and Public Policy at Harvard University, and was formerly chief economist at the IMF. Is Modern Capitalism Sustainable?, <http://www.namibian.com.na/news/full-story/archive/2011/december/article/is-modern-capitalism-sustainable/>]

CAMBRIDGE – I am often asked if the recent global financial crisis marks the beginning of the end of modern capitalism. It is a curious question, because it **seems to presume that there is a viable replacement** waiting in the wings. The truth of the matter is that, for now at least, the only serious alternatives to today’s dominant Anglo-American paradigm are **other forms of capitalism**. Continental European capitalism, which combines generous health and social benefits with reasonable working hours, long vacation periods, early retirement, and relatively equal income distributions, would seem to have everything to recommend it – except sustainability. China’s Darwinian capitalism, with its fierce competition among export firms, a weak social-safety net, and widespread government intervention, is widely touted as the inevitable heir to Western capitalism, if only because of China’s huge size and consistent outsize growth rate. Yet China’s economic system is continually evolving. Indeed, it is far from clear how far China’s political, economic, and financial structures will continue to transform themselves, and whether China will eventually morph into capitalism’s new exemplar. In any case, China is still encumbered by the usual social, economic, and financial vulnerabilities of a rapidly growing lower-income country. Perhaps the real point is that, in the broad sweep of history, all current forms of capitalism are ultimately transitional. Modern-day capitalism has had an extraordinary run since the start of the Industrial Revolution two centuries ago, **lifting billions of ordinary people out of abject poverty**. Marxism and heavy-handed socialism have **disastrous records** by comparison. But, as industrialisation and technological progress spread to Asia (and now to Africa), someday the struggle for subsistence will no longer be a primary imperative, and contemporary capitalism’s numerous flaws may loom larger. First, even the leading capitalist economies have failed to price public goods such as clean air and water effectively. The failure of efforts to conclude a new global climate-change agreement is symptomatic of the paralysis. Second, along with great wealth, capitalism has produced extraordinary levels of inequality. The growing gap is partly a simple byproduct of innovation and entrepreneurship. People do not complain about Steve Jobs’s success; his contributions are obvious. But this is not always the case: great wealth enables groups and individuals to buy political power and influence, which in turn helps to generate even more wealth. Only a few countries – Sweden, for example – have been able to curtail this vicious circle without causing growth to collapse. A third problem is the provision and distribution of medical care, a market that fails to satisfy several of the basic requirements necessary for the price mechanism to produce economic efficiency, beginning with the difficulty that consumers have in assessing the quality of their treatment. The problem will only get worse: health-care costs as a proportion of income are sure to rise as societies get richer and older, possibly exceeding 30% of GDP within a few decades. In health care, perhaps more than in any other market, many countries are struggling with the moral dilemma of how to maintain incentives to produce and consume efficiently without producing unacceptably large disparities in access to care. It is ironic that modern capitalist societies engage in public campaigns to urge individuals to be more attentive to their health, while fostering an economic ecosystem that seduces many consumers into an extremely unhealthy diet. According to the United States Centers for Disease Control, 34% of Americans are obese. Clearly, conventionally measured economic growth – which implies higher consumption – cannot be an end in itself. Fourth, today’s capitalist systems vastly undervalue the welfare of unborn generations. For most of the era since the Industrial Revolution, this has not mattered, as the continuing boon of technological advance has trumped short-sighted policies. By and large, each generation has found itself significantly better off than the last. But, with the world’s population surging above seven billion, and harbingers of resource constraints becoming ever more apparent, there is no guarantee that this trajectory can be maintained. Financial crises are of course a fifth problem, perhaps the one that has provoked the most soul-searching of late. In the world of finance, continual technological innovation has not conspicuously reduced risks, and might well have magnified them. In principle, none of capitalism’s problems is insurmountable, and economists have offered a variety of market-based solutions. A high global price for carbon would induce firms and individuals to internalise the cost of their polluting activities. Tax systems can be designed to provide a greater measure of redistribution of income without necessarily involving crippling distortions, by minimising non-transparent tax expenditures and keeping marginal rates low. Effective pricing of health care, including the pricing of waiting times, could encourage a better balance between equality and efficiency. Financial systems could be better regulated, with stricter attention to excessive accumulations of debt. Will capitalism be a victim of its own success in producing massive wealth? For now, as fashionable as the topic of capitalism’s demise might be, **the possibility seems remote**. Nevertheless, as pollution, financial instability, health problems, and inequality continue to grow, and as political systems remain paralysed, capitalism’s future might not seem so secure in a few decades as it seems now.

#### And, no environment impact

Norberg, 3 (Johan Norberg, Senior Fellow at Cato Institute, “In Defense of Global Capitalism”, p. 223)

It is a mistake, then, to believe that growth automatically ruins the environment. And claims that we would need this or that number of planets for the whole world to attain a Western standard of consumption—those “ecological footprint” calculations—are equally untruthful. Such a claim is usually made by environmentalists, and it is concerned, not so much with emissions and pollution, as with resources running out if everyone were to live as we do in the affluent world. Clearly, certain of the raw materials we use today, in present day quantities, would not suffice for the whole world if everyone consumed the same things. But that information is just about as interesting as if a prosperous Stone Age man were to say that, if everyone attained his level of consumption, there would not be enough stone, salt, and furs to go around. Raw **material consumption is not static**. With more and more people achieving a high level of prosperity, we start looking for ways of using other raw materials. Humanity is constantly improving technology so as to get at raw materials that were previously inaccessible, and we are attaining a level of prosperity that makes this possible. New innovations make it possible for old raw materials to be put to better use and for garbage to be turned into new raw materials. A century and a half ago, oil was just something black and sticky that people preferred not to step in and definitely did not want to find beneath their land. But our interest in finding better energy sources led to methods being devised for using oil, and today it is one of our prime resources. Sand has never been all that exciting or precious, but today it is a vital raw material in the most powerful technology of our age, the computer. In the form of silicon—which makes up a quarter of the earth's crust— it is a key component in computer chips. There is a **simple market mechanism that averts shortages**. If a certain raw material comes to be in short supply, its price goes up. This makes everyone more **interested in economizing** on **that resource**, in finding more of it, in reusing it, and in trying to find substitutes for it.

#### The plan solves resource wars

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Increasing population stresses natural resources. The world population is growing to an estimated 9 billion people, all competing for diminishing natural resources - fresh water, oil, agricultural land, and food. The largest population growth is in the most impoverished countries, where people die young from starvation, disease, and war; and bear more children. Yet affordable, reliable electricity is a key to economic prosperity in the developing nations, which suffer from energy poverty. Basic electric power allows modest economic prosperity, with time for women to learn, work, become independent, and make reproductive choices, leading to a sustainable population. Cheap oil is ending. World economies depend on oil for transportation fuels. As conventional petroleum resources dwindle, supplies are being extended by drilling deeper, in more hostile environments, refining heavy crude, and mining tar sands, at ever higher costs and ever higher CO2 emissions. Yet powering small vehicles with electricity from nuclear power plants will reduce oil dependency. And high temperature heat from advanced nuclear reactors can synthesize substitute liquid fuels. Air pollution kills millions. Soot from burning coal causes respiratory illness and annually kills tens of thousands of people in the US, hundreds of thousands in China, and a million worldwide. Yet nuclear electric power plants emit no soot. Energy insecurity leads to conflict. Nations lack energy security for stability and peace. Japan depends on imported liquefied natural gas for energy; the US on petroleum; France on uranium. Supply disruptions can wreck national economies. Yet domestic thorium energy resources are sufficient for every nation to attain energy security.

#### Goes nuclear

**Wooldridge 9** – political writer and former lecturer at Cornell University (Frosty, “Humanity galloping toward its greatest crisis in the 21st century”

http://www.australia.to/index.php?option=com\_content&view=article&id=10042:humanity-galloping-toward-its-greatest-crisis-in-the-21st-century&catid=125:frosty-wooldridge&Itemid=244)

It is clear that most politicians and most citizens do not recognize that returning to “more of the same” is a recipe for promoting the first collapse of a global civilization. The required changes in energy technology, which would benefit not only the environment but also national security, public health, and the economy, would demand a World War II type mobilization -- and even that might not prevent a global climate disaster. Without transitioning away from use of fossil fuels, humanity will move further into an era of resource wars (remember, Africom has been added to the Pentagon’s structure -- and China has noticed), clearly with intent to protect US “interests” in petroleum reserves. The consequences of more resource wars, many likely triggered over water supplies stressed by climate disruption, are likely to include increased unrest in poor nations, a proliferation of weapons of mass destruction, widening inequity within and between nations, and in the worst (and not unlikely) case, a nuclear war ending civilization.

### 2ac reg neg

#### Permutation do the cp – the aff should get to define the scope and the mandate of the plan – normal means is infinitely regressive and kills aff ground

#### Doesn’t sever should

**Green, 89 – US District Judge (**EMERSON EMORY, Captain, USNR (Ret.), Plaintiff v. SECRETARY OF THE NAVY, Defendant Civil Action No. 83-2494 UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA 708 F. Supp. 1335; 1989 U.S. Dist. LEXIS 2993; 49 Fair Empl. Prac. Cas. (BNA) 677; 51 Empl. Prac. Dec. (CCH) P39,276 March 22, 1989, Decided March 22, 1989, Filed, lexis)

Defendant argues that the "should" and "also desired" is "plainly permissive," [5](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1304195469571&returnToKey=20_T11858051186&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.871370.3788639477#fnote5) while plaintiff points out that "should" is a past tense of "shall." While "shall" denotes a mandatory action when used in statutes and contracts, "should" does not ordinarily  [\*\*10]  express such certainty. [6](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1304195469571&returnToKey=20_T11858051186&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.871370.3788639477#fnote6) By examining the context in which "should" is used within the policy statements, this Court concludes that it is not used in a mandatory manner. In setting out the requirements of board membership at that time, the Navy consistently used "will" or "must." The subsection addressing minority officers was the only one in this memorandum that used "should," instead of "will" or "must."

#### OR resolved

Webster’s Guide to Grammar and Writing – 2000

[http://ccc.commnet.edu/grammar/marks/colon.htm]

Use of a colon before a list or an explanation that is preceded by a clause that can stand by itself. Think of the colon as a gate, inviting one to go on… **If the introductory phrase preceding the colon is very brief** and **the clause following the colon represents the real business of the sentence**, begin the clause after the colon with a capital letter.

#### Permutation do both

#### The cp kills investor certainty – can’t create gen iv tech, and doesn’t promote innovation

Cary Coglianese (Associate Professor of Public Policy, Harvard University, John F. Kennedy School of Government; Chair of the¶ Regulatory Policy Program, Center for Business and Government; and Affiliated Scholar, Harvard Law School) 2001 “Assessing The Advocacy Of Negotiated Rulemaking:¶ A Response To Philip Harter” <http://www.hks.harvard.edu/m-rcbg/research/c.coglianese_new.york_assessing.advocacy.pdf>

In addition to giving priority to tractable issues, negotiated rulemaking may encourage imprecision or ambiguity.273 Since it is usually easier to achieve consensus at higher levels of abstraction, the potential always exists that negotiators will adopt abstract or vague language.274 As¶ Neil Kerwin has observed, when an agency commits itself to obtaining consensus, that is, “to¶ producing a rule with which everyone with a recognized interest can agree, the only way to break certain deadlocks is to produce a rule that ignores unresolved (or unresolvable) issues or deals with¶ them through vague language whose meaning will be disputed during the implementation¶ process.”275 Adopting vague language may Negotiated rulemaking’s emphasis on unanimity also makes it more likely that the final¶ outcome will succumb to the lowest-common-denominator problem. The outcome that is minimally¶ acceptable to all the members of a negotiated rulemaking committee will not necessarily be optimal¶ or effective in terms of achieving social goals. A recent study of negotiated rulemaking conducted¶ by Charles Caldart and Nicholas Ashford shows that in industries that are not likely to innovate in¶ the absence of strong governmental regulation, the lowest-common-denominator problem keeps negotiated rules from promoting the technological innovation needed to improve environmental and¶ safety performance.276 They conclude that because industry representatives in these types of¶ industries will be reluctant to agree to regulations that would compel firms to make dramaticinvestments in new technologies, “negotiated rulemaking’s focus on consensus can effectively¶ remove the potential to spur innovation.”277

#### Certainty is essential – only effective method of catalyzing investment

**Trembath, 11** [2/4/11, [Nuclear Power and the Future of Post-Partisan Energy Policy](http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/), Alex Trembath is a policy associate in the Energy and Climate Program at Breakthrough. He is the lead or co-author of several Breakthrough publications, including the 2012 report "Beyond Boom and Bust: Putting Clean Tech on a Path to Subsidy Independence" and "Where the Shale Gas Revolution Came From." Alex is a graduate of University of California at Berkeley, <http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/>]

If there is one field of the energy sector for which certainty of political will and government policy is essential, it is nuclear power. High up front costs for the private industry, extreme regulatory oversight and public wariness necessitate a committed government partner for private firms investing in nuclear technology. In a new [report](http://www.thirdway.org/publications/370) on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy. The report, “The Future of Nuclear Energy,” makes the case for political certainty: “It is difficult for energy producers and users to estimate the relative price for nuclear-generated energy compared to fossil fuel alternatives (e.g. natural gas)–an essential consideration in making the major capital investment decision necessary for new energy production that will be in place for decades.” Are our politicians willing to match the level of certainty that the nuclear industry demands? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to [supply-side “push” policies](http://leadenergy.org/2010/09/supply-demand-energy-innovation/), or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power. One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill [included](http://www.huffingtonpost.com/2010/05/12/american-power-act-photos_n_573643.html#s90041&title=undefined) provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship. But that was last year. The changing of the guard in Congress makes this a whole different game, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times [piece](http://www.nytimes.com/2010/11/17/business/energy-environment/17NUCLEAR.html) in the aftermath of the elections forecast a difficult road ahead for nuclear energy policy, but did note Republican support for programs like a waste disposal site and loan guarantees. Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably [Lindsey Graham](http://washingtonindependent.com/99171/graham-circulating-clean-energy-standard) and [Richard Lugar](http://www.plattsenergyweektv.com/story.aspx?storyid=132784&catid=293), would throw their support behind a clean energy standard that includes nuclear and CCS. Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined [“innovation hawks,”](http://leadenergy.org/2011/01/the-rise-of-innovation-hawks/) among them Steven Hayward, David Brooks and George Will. Will has been [particularly outspoken](http://www.newsweek.com/2010/04/08/this-nuclear-option-is-nuclear.html) in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.” The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post [reports](http://www.huffingtonpost.com/2011/02/01/sen-jeff-bingaman-backs-n_n_816864.html) that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct [Section 48C](http://leadenergy.org/2010/12/clean-energy-financing-first-steps-towards-post-partisan-effort/#more-3320) of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing. Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what nuclear energy needs moving forward. It will require an agressive push from the White House, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one. The politician with perhaps the single greatest leverage over the future of nuclear energy is President Obama, and his rhetoric matches the challenge posed by our aging and poisonous energy infrastructure. “This is our generation’s Sputnik moment,” announced Obama recently. Echoing the calls of presidents past, the President used his [State of the Union](http://www.slate.com/id/2281847/) podium to signal a newly invigorated industrialism in the United States. He advocated broadly for renewed investment in infrastructure, education, and technological innovation. And he did so in a room with many more members of the opposition party than at any point during the first half of his term. The eagerness of the President to combine left and right agendas can hopefully match the hyper-partisan bitterness that dominates our political culture, and nuclear power maybe one sector of our economy to benefit from his political leadership.

#### The CP’s ‘citizen involvement’ ensures agency backlash – causes delays and hampers implementation

Sean Nolan (Associate Professor of Law and Dispute Resolution Program Director. Vermont Law School) 2011 Negotiating the Wind: A Framework to Engage Citizens in Siting Wind Turbines

“Citizen involvement” as a label has different meanings depending¶ on who is using it and the context in which it is used. In¶ the context of the minimal governmental procedures that are required¶ to make a legally defensible decision, it means notice and¶ comment and possibly a public hearing. However, in the context of¶ decision-making intended to fully incorporate a range of concerns,¶ “citizen involvement” refers to a more inclusive, transparent and¶ responsive process. Many agencies resist more robust levels of citizen¶ involvement at the policy development stage, preferring to rely¶ on the minimal processes with which they are familiar.¶ Resistance to this level of citizen involvement is endemic and¶ springs from beliefs (and experiences) that engaging citizens takes¶ too long, is too costly, and results in sub-optimal solutions.17 The¶ assumption is that a more streamlined decision-making process,¶ guided and informed by knowledgeable bureaucrats, will produce better and timelier results.18 Adherents to minimal citizen involvement¶ in decision-making view the citizens as uninformed and parochial¶ and involving them will only give strength to Not-in-My-¶ Back-Yard (“NIMBY”) sentiment.19 Simply dismissing citizen opposition¶ as self-interested, NIMBY whiners ignore the two realities¶ addressed in this Article: (1) that many facility proposals subject to¶ citizen opposition will impose significant, uncompensated burdens¶ on communities; and (2) that successful citizen involvement is¶ more than a statement of principle—it must be implemented following¶ the best practices of consensus building and collaboration.20

### 2ac tradeoff

#### Renewables don’t solve – timeframe and magnitude – Thorium key

**‘Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

For all the promise of renewable energy sources and all the hype lavished on them, it was clear that wind, solar, geothermal, biofuel, and such stood no chance of replacing a significant amount of carbon based sources in time to significantly slow down the relentless heating of the planet. Only one source is clean enough, inexpensive enough, and abundant enough to do this: nuclear power. And despite the talk of a nuclear renaissance, nuclear power was going nowhere. Thorium has the potential to change that. After my Wired story on thorium ran in December 2009, thorium got little attention. An occasional newspaper feature or article in the science press would appear touting its promise, but no one else in the mainstream media was covering it in a systematic way. Here was a story that needed covering on an ongoing basis, and I was the only one on the thorium beat.

#### Warming inevitable - oceans

**NPR 9** (1/26, Global Warming Is Irreversible, Study Says, All Things Considered, http://www.npr.org/templates/story/story.php?storyId=99888903)

Climate change is essentially irreversible, according to a sobering new scientific study. As carbon dioxide emissions continue to rise, the world will experience more and more long-term environmental disruption. The damage will persist even when, and if, emissions are brought under control, says study author Susan Solomon, who is among the world's top climate scientists. "We're used to thinking about pollution problems as things that we can fix," Solomon says. "Smog, we just cut back and everything will be better later. Or haze, you know, it'll go away pretty quickly." That's the case for some of the gases that contribute to climate change, such as methane and nitrous oxide. But as Solomon and colleagues suggest in a new study published in the Proceedings of the National Academy of Sciences, it is not true for the most abundant greenhouse gas: carbon dioxide. Turning off the carbon dioxide emissions won't stop global warming. "People have imagined that if we stopped emitting carbon dioxide that the climate would go back to normal in 100 years or 200 years. What we're showing here is that's not right. It's essentially an irreversible change that will last for more than a thousand years," Solomon says. This is because the oceans are currently soaking up a lot of the planet's excess heat — and a lot of the carbon dioxide put into the air. The carbon dioxide and heat will eventually start coming out of the ocean. And that will take place for many hundreds of years. Solomon is a scientist with the National Oceanic and Atmospheric Administration. Her new study looked at the consequences of this long-term effect in terms of sea level rise and drought.

#### Plan only trades off with fossil fuels

Loudermilk 2011 (Micah J. Loudermilk is a Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, May 31, 2011, “Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs,” Journal of Energy Security, <http://www.ensec.org/index.php?option=com_content&view=article&id=314:small-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&catid=116:content0411&Itemid=375>)

Pursuing a carbon-free world Realistically speaking, a world without nuclear power is not a world full of increased renewable usage, but rather, of fossil fuels instead. The 2007 Japanese Kashiwazaki-Kariwa nuclear outage is an excellent example of this, as is Germany’s post-Fukushima decision to shutter its nuclear plants, which, despite immense development of renewable options, will result in a heavier reliance on coal-based power as its reactors are retired, leading to a 4% increase in annual carbon emissions. On the global level, without nuclear power, carbon dioxide emissions from electricity generation would rise nearly 20% from nine to eleven billion tons per year. When examined in conjunction with the fact that an estimated 300,000 people per year die as a result of energy-based pollutants, the appeal of nuclear power expansion grows further. As the world copes simultaneously with burgeoning power demand and the need for clean energy, nuclear power remains the one consistently viable option on the table. With this in mind, it becomes even more imperative to make nuclear energy as safe as possible, as quickly as possible—a capacity which SMRs can fill with their high degree of safety and security. Additionally, due to their modular nature, SMRs can be quickly constructed and deployed widely. While this is not to say that small reactors should supplant large ones, the US would benefit from diversification and expansion of the nation’s nuclear energy portfolio.

#### No tradeoff – abundance and France prove

**Tindale, 11** [Stephen Tindale is an associate fellow at the CER, June 2011, Center for European Reform, <http://www.cer.org.uk/sites/default/files/publications/attachments/pdf/2011/pb_thorium_june11-153.pdf>]

The money to support research and development of molten salt reactors need not be taken from renewables or other low-carbon energy supply options. There is more than enough money available in the existing subsidies for nuclear fusion. And the argument that governments which support any form of nuclear power overlook or downplay renewables is disproved by the example of France. France gets over three-quarters of its electricity from nuclear power stations. Yet the French government has supported onshore wind farms and is now giving subsides to offshore wind. It is also subsidising an expansion of the district heating system in Paris, to distribute heat from power stations burning energy crops and waste wood which would otherwise be wasted.

### 2ac elections

#### Romney and Obama would both support a strike

Sheldon Richman 8- 6-2012 Obama, Sheldon Richman is editor of The Freeman, published by The Foundation for Economic Education in Irvington, New York, and serves as senior fellow at The Future of Freedom Foundation. Romney Are Reckless on Iran http://www.fff.org/comment/com1208d.asp

You will strain your eyes looking for a significant difference between President Obama’s and Mitt Romney’s positions on Iran and the prospects of an Israeli attack on the Islamic republic. Both say “all options are on the table.” All. That includes a full-scale military attack with even nuclear weapons. This isn’t alarmism. Iran’s facilities are undoubtedly well protected. No light force would be capable of taking them out. The Romney campaign created a stir recently when a key foreign-policy adviser, Dan Senor, seemed to up the ante by saying, “If Israel has to take action on its own, in order to stop Iran from developing that [nuclear weapons] capability, the governor would respect that decision.” The remark apparently went too far, because Romney had to clarify his position. “I respect the right of Israel to defend itself,” he told CBS. But “because I’m on foreign soil, I don’t want to be creating new foreign policy for my country or in any way to distance myself from the foreign policy of our nation.” This indicates that Senor said nothing that Romney wishes to disavow. Senor just said it in the wrong place — on foreign soil. Americans have this foolish rule that “politics stops at the water’s edge.” But as the classical-liberal critic of foreign intervention Felix Morley once said, politics stops at the water’s edge only when policy stops at the water’s edge — which, for the American empire, it does not.

**No impact to a strike**

**Poor 2/16**—quoting Charles Krauthammer (Jeff, 2/16/12, <http://dailycaller.com/2012/02/16/krauthammer-israeli-strike-on-iran-will-not-cause-a-world-war-video/>, RBatra)

On Wednesday’s “Special Report Online” segment on FoxNews.com, syndicated columnist Charles Krauthammer said that if Israel decides to attack Iran in order to thwart its development of nuclear weapons, the collateral damage wouldn’t start a third world war.

Krauthammer based that hypothesis on Iran not having allies that would be willing to intervene significantly on a military level. (RELATED: More analysis from Charles Krauthammer)

“It could cause a regional war,” Krauthammer said. “It will not cause a world war by any means. It’s not August 1914, because Iran has no great power allies who will intervene militarily. Iran is going to be alone with its clients, Syria, Hezbollah and Hamas — all of whom are on their heels right now.”

He said it would require Iran acting out in an irrational way and luring the United States into engagement for any conflict to become more widespread.

“If Iran is smart, it will not attack the United States in retaliation because that would involve us,” he said. “It would retaliate against Israel and it could remain a limited engagement. Now of course, irrationality is possible and you cannot predict. **If the Iranians either close the Strait of Hormuz or attack Americans at the naval facility in Bahrain, that would be suicide because that would occasion American intervention**, almost like Wilson in the First World War in the sinking of the Lusitania. You don’t do that if you’re rational, but who knows. The Iranians haven’t always been rational.”

#### Obama will win, it’s too late to alter swing state dynamics and most voters have already decided

**Downie, 10/4/12 –** Washington Post Opinion writer, James, Obama lost the first debate, but he will still win the election, Washington Post, http://www.washingtonpost.com/blogs/post-partisan/post/obama-lost-the-first-debate-but-he-will-still-win-the-election/2012/10/04/9c3b7eb8-0deb-11e2-bd1a-b868e65d57eb\_blog.html)

And yet, the president’s supporters would be wrong to wring their hands. Fundamentally, Obama’s loss will not matter. At most, Wednesday night was a case of “too little, too late” for Romney. Yes, the polls will probably move a point or two in Romney’s direction after the first debate. But all the evidence suggests that for Romney, whether or not you believe he should be president, closing the gap and beating Obama is a bridge too far.

Consider the task facing Romney going into Wednesday’s debate: Nationally, RealClearPolitics’s poll average had him down three points; Nate Silver’s model had him down four. He had held a lead in a major poll exactly once since the end of August. The electoral college looked even worse for him: RealClear’s map gave Obama 269 electoral votes safe or leaning to Romney’s 181 (with 88 in toss-up states); HuffPost Pollster gave Obama a 290-191 lead; and Nate Silver’s model had Obama winning an average of 319 electoral votes to Romney’s 218, a comfortable margin. Even Karl Rove had 277 votes safe or leaning to Obama, with another 70 as toss-ups.

“Ah,” you say, “that may be true, but surely the gap is small enough to close? And wouldn’t the first debate be enough to bring this race back to a dead heat?” In a word, no.

Let’s start with the second question. Incumbent presidents almost always have a poor first debate: George W. Bush lost to John Kerry in 2004, for example, and Walter Mondale beat Ronald Reagan so badly in 1984 that there was a spate of articles asking if the incumbent was too old for the presidency. Yet never has a challenger’s strong first debate performance closed as large a national polling gap as Romney faced going into last night’s debate. Furthermore, most post-debate polling bumps come from previously undecided voters, of which there is a historically small amount in this campaign, thus making it even less likely that Romney could exceed past norms. And Romney would need to outdo history by quite a distance — only Harry Truman has come back from a national deficit as large or larger than Romney’s at this point in the campaign.

If Romney would have to pull off a miracle to close the gap in national polling, he has no shot at matching the president in the electoral college. As mentioned above, forecasters commonly predict that Obama already has a big lead of safe and leaning states. If we assume Romney will improve in the polls, there would be around nine “swing states”: Colorado, Florida, Iowa, North Carolina, New Hampshire, Nevada, Ohio, Virginia and Wisconsin. There’s one problem here for Romney: He is trailing, and has been consistently trailing, in all but two — North Carolina, where he’s held a small lead, and Florida, this election’s closest thing to a 50-50 state. Romney doesn’t need to win two out of those nine; in almost every scenario, he will need six or seven out of those nine to win, including at least two or three states where he is behind by several points more than he is nationally.

All of which brings me to the final point: Given the state of the race before last night’s debate, even most Romney backers would agree that a Romney victory would require a flawless campaign the rest of the way from Romney and a blunder or two from Obama. After six years of both these men running for and/or being president of the United States, is there really anyone out there who thinks Mitt Romney can go a month without making a single mistake? Who thinks Barack Obama, who has been playing it safe for at least several months now, will suddenly make a reckless error, as opposed to a merely lackluster performance? (Or, if you’re Sean Hannity and co., do you believe the lamestream media will suddenly forget their liberal bias and stop protecting the president while assaulting Mitt Romney?)

Seriously, does anyone believe that?

The fact is that, come October, presidential elections cannot permanently change course over a few days or hours (unlike, say, media narratives). The majority of voters have already made their decision, and the debates won’t provide enough of a boost to alter the contest’s trajectory. Sadly for Romney, the path the race is stuck on ends with his defeat.

#### Energy won’t switch votes

**Farnam, 12** (T.W. Washington Post, Energy ads flood TV in swing states, 6/27, <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.

And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.

The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.

Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”

Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.

In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.

When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

#### No Romney traction – even if voters hate Obama’s energy policy they won’t shift to Romney

Lewis, 10/1/12 - senior contributor to The Daily Caller (Matt, The Daily Caller, “Mitt Romney’s struggle to win blue collar Ohio voters”

This sounds trivial, but it matters greatly — especially in places like Ohio.

The Atlantic’s Molly Ball is consistently a “must read,” and her latest column reinforces a point I’ve been making for a long time — that Mitt Romney is in danger of under-performing with working-class whites in key states like the Buckeye state. (Ball’s teaser says it all: “In Appalachian coal country, Romney is now viewed with nearly as much suspicion as Obama — and that may be the story of the 2012 election.”)

There is at least one substantive reason for these voters to be skeptical of Romney. While interviewing Ohio voters, Ball stumbled over an interesting blast from the past:

It turns out Romney, as governor of Massachusetts in 2003, held a press conference in front of a coal-fired power plant. “I will not create jobs or hold jobs that kill people,” he said, and then, gesturing at the facility behind him: “That plant, that plant kills people.” You can see the footage in an Obama campaign ad that’s been airing heavily here. It seems to have made an impression.

The notion that Romney would be worse for coal than Obama seems absurd. Still, Obama is using the line to effectively muddy the waters. All he really needs is for voters to conclude, “they’re both bad,” and Obama can consider that a victory. Ball sums it up thusly,

I heard it over and over again from Ohioans — the idea that Romney stands for the wealthy and not for them. Obama’s depiction of his rival as an out-of-touch rich guy, which has gotten no little assistance from Romney himself, has made a deep and effective impression with these self-consciously working-class voters.

#### Plan happens after the election

Ramsey Cox (writer for The Hill) September 24, 2012 “Congress to hold pro forma sessions until November” http://thehill.com/blogs/floor-action/senate/251313-congress-to-hold-pro-forma-sessions-until-november

Rather than being in recess for more than five weeks, both the Senate and the House decided to hold pro forma sessions until after the November elections. Both chambers will gavel in Tuesday morning for a brief session; typically, legislative business doesn't take place in pro forma sessions. At most members ask to be recognized for a speech, but rarely do. It is unclear if the legislative branch was afraid of recess appointments by the White House, yet both sides took a formal recess in August. The Senate will hold a pro forma session every Tuesday and Friday until Nov. 13 at 2 p.m. when they’ll continue work on S. 3525, the Sportsmen Act, which would increase access to federal land for hunters and fishers while also supporting conservation measures.

#### Plan wouldn’t affect states that make the difference in the election

Joel Kotkin 3-30-2012; executive editor of NewGeography.com and is a distinguished presidential fellow in urban futures at Chapman University, and contributing editor to the City Journal in New York. He is author of The City: A Global History. His newest book is The Next Hundred Million: America in 2050, released in February, 2010. Is Energy the Last Good Issue for Republicans? <http://www.newgeography.com/content/002698-is-energy-last-good-issue-republicans>

In the short run, Obama’s political exposure in the energy wars is somewhat limited. Most of the big-producing states—Oklahoma, Wyoming, Utah, Texas, Louisiana, Alaska, and North Dakota—are unlikely to vote for him anyway. Nor does he have to worry about too much pressure from inside his party; Democratic ranks in Congress from energy-producing states have thinned considerably in recent years, removing contrary voices inside the party.

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

**Nuclear power popular**

Brown ’12 (Dave Brown — Exclusive to Uranium Investing News, “United States Still Favors Nuclear Power”, <http://uraniuminvestingnews.com/11008/united-states-still-favors-nuclear-power.html>, March 28, 2012, LEQ)

According to the results of Gallup’s annual Environment survey, conducted earlier this month, the majority of Americans continue to favor nuclear energy as a source of electricity for the United States. The survey indicated that 57 percent of participants were in favor of nuclear power this year, the same amount as in 1994, the first year for the survey. This year’s results also demonstrate an equal level of support among participants as last year, just prior to the Japanese earthquake and tsunami. Support for the nuclear industry as measured by the survey has ranged from a low of 46 percent in 2001 to a high of 62 percent in 2010. These results are of significance to investors as the US is the largest consumer of uranium in the world, with 104 operational nuclear reactors. Continued public support and confidence from the country should guide future political decisions and foster economic interest in domestic and international uranium resources as well as in nuclear industry stakeholders.

#### Too late to change the election- ideology

Helling ’12 (DAVE HELLING, McClatchy Newspapers Miami Herald 7-22-12 "Is the race for president already over?"

But **a growing number** of **political scientists and campaign consultants** - backed by the **latest polling data** - think the daily campaign back-and-forth **is having no significant effect on voters.** Most Americans have **locked in** their presidential decisions, polls released Thursday suggested, and the already small number of persuadable voters **shrinks by the hour**. Put another way: America could vote for president next week, and the outcome would probably be the same as it will be in November. "That's accurate, barring some really big, big event or change in the political environment," said Alan Abramowitz, a political science professor at Emory University in Atlanta, who has studied presidential voting patterns. Kenneth Warren, a political science professor at St. Louis University, agreed. "Most people have decided who they're going to vote for early on," he said. Recent polls show those who have decided are split almost evenly between Obama and Romney. In a CBS/New York Times poll, Romney led by 1 point. In a Fox News poll, he trailed Obama by 4 points. A National Public Radio poll found Obama leading by 2 points. A Gallup tracking poll over the same time period showed the race dead even. The average of polls puts the Obama advantage at 1.2 percent, according to Real Clear Politics, a political aggregation website. The incumbent has led Romney in that average by a one- to two-point margin since last October. Political scientists and consultants said there were several reasons for early presidential decision-making. In an Internet-cable-TV age, **voters are pounded with political messages daily, helping them make up their minds far in advance** of the election. An incumbent in the race makes at least one of the candidates a known quantity. And American **voters are deeply divided, further cementing their choices.**

#### Eurozone action will outweigh the plan

**Weisenthal, 9/26**/12 - Prior to joining Business Insider in October 2008, Joe was a correspondent for paidContent.org, as well as the Opening Bell editor at Dealbreaker.com. He previously was a writer and analyst for Techdirt.com, and before that worked as an analyst for money management firm Prentiss Smith & Co (Joe, “We're Getting A Glimpse Of Barack Obama's Worst Nightmare” Business Insider, http://www.businessinsider.com/obamas-worst-nightmare-2012-9#ixzz289W0KygN)

This doesn't necessarily seem likely, but the latest turns and twists of the global economy open up a scenario whereby markets could get really ugly between now and the election.

Basically, we present a plausible scenario in which things get bad on two fronts. The scenario is based on developments over the last several days.

Here's how it could go:

First, Europe really stalls out.

Thanks to the political crisis in Spain, suddenly it's not clear if the ECB's powerful bond buying program will ever get off the ground.

Remember, the ECB has announced a plan to backstop government bonds, but it needs the countries to request aid and submit to outside fiscal supervision. Because of mass protests, and a burgeoning secession movement in Catalonia, Spanish PM Mariano Rajoy is very reluctant to ask for a bailout unless it's absolutely necessary. He'd like to delay the request as long as possible.

In addition, you have heightening squabbles over what will be done with Greece (raising the specter that it will leave the Eurozone). There are more and more reports about HUGE holds in the government's budget, and the various creditor parties are fighting about who will take the hit. The specter of Greece leaving the Eurozone is rising.

This could then start hitting markets in the US. Actually that already seems to be happening. The market's dropping. And now we no longer have an implied "put" from the Fed, since it's already blown its wad (or so it seems) with the announcement of open-ended QE.

Already, the market has been weak since QE3 was announced, and in particular, the oil & gas/basic materials stocks that people associate with reflation have been weak.

Those two sectors, which are supposed to rise on successful reflation, make up 2 out of 3 of the worst performing S&P sectors today.

This could be a nothing blip, but a series of weeks like this one (riots in Europe, which inevitably remind people about government

debt) and markets in the US reacting badly could be the "October Surprise" that Romney needs to win.

## 1ar

### resource wars

#### Resource wars will get worse—robust academic basis

**Jawan, 12** [S Naji, Faculty of Human Ecology, Universiti Putra Malaysia, ‘Resource Wars’ in the Post-Cold War Era: The Persian Gulf Oil, US, and the Iraq War Arts and Social Sciences Journal, Vol. 2012: ASSJ-49, http://astonjournals.com/manuscripts/Vol2012/ASSJ-49\_Vol2012.pdf]

\*\*\*Cites **Yergin**, Pulitzer Prize winning economic researcher. and chairman of Cambridge Energy Research Associates and Billon (MBA Paris, PhD Oxford) is Associate Professor at the University of British Columbia with the Department of Geography and Klare [professor](http://en.wikipedia.org/wiki/Professor) of Peace and World Security Studies, at Hampshire College, author of *Resource Wars* and *Blood and Oil: The Dangers and Consequences of America's Growing Petroleum Dependency* (Metropolitan) and Dr. Susanne Peters the Academic Director of the Kent State University and teaches International Relations and European Politics\*\*\*

2. ‘Resource Wars’ and Conflict for Oil Natural resources have always played a key role in conflicts and wars taking place. These struggles are often caused by the scarcity and immense value resources such as diamonds, copper, gold, water, timber, arable land, and oil [1]. Among them, the role of petroleum as a vital commodity for the industrial world, and due to its global influences has been most remarkable, and as Yergin [8] noted, the history of petroleum has always been associated with the history of struggle and war. Indeed, “petroleum is unique among the world’s resources” [1]. There is this view that, the 21st century, similar to the previous century will be a “century of oil” and from this view, access to oil as a global resource has always included those issues that have formed battles [9]. In fact, the new resource wars in the world will be a significant problem in the future. It will be because of the oil supply crisis as a natural resource. It will occur because of the declining oil reservoirs as well as the unbalanced distribution of these resources in particular along the North-South axis [4]. Billon [3] believes that the natural resources have always been introduced as a crucial motive of conflicts and wars. He refers to the more important role of these resources in creating wars in the 1990s and argues that some interventions take place because of the lust for valuable resources. He also believes that, on the other hand, the political and economic vulnerabilities of dependent countries on resources are the main reason for the importance of resources in creating wars. In this respect, the geopolitical thinking in the west, concerning resources, has been established over an equally strong relationship amongst power, trade, and war which has been tied strongly to maritime navigation and overseas resources too. In the past, this geopolitical thought had been reflected in the view that “whoever commands the oceans commands the trade of the world, and whoever commands the trade of the world commands the riches of the world, and whoever is master of that commands the world itself.” With growing dependence of the western countries on imported materials during the 19th century, indeed, great western countries expanded their command over raw materials throughout the world. In this commentary, some classic geopolitical concepts such as “vital space” or Lebensraum for accessing further resources and Mackinder’s “Heartland” in warning about the role of railways in control of resources are very important [3]. Oil is the most significant overseas resource, and Billon [3], showed the key role it played during World War I and World War II. The vulnerability of those resources at that time was also revealed so that during the Cold War, ultimately, it was focused “on the vulnerability of rising resource supply dependence” which required various strategies to secure the needed resources in the forms of military deployments, accumulation of resources, diplomatic activities, coup d’état, etc. [3]. In this respect, four important events have also been mentioned by Billon, which have influenced the oil strategies and history; the decolonization process, Suez crisis in 1956, the 1973 Arab oil embargo, and the Islamic revolution of Iran in 1979. He also mentioned two important events, the end of the Cold War and the Iraqi invasion of Kuwait, as events that increased the importance of energy security and vulnerability of these resources. Billon, on the other hand, indicates the necessity of energy security for the oil producer countries. For him, always one of the strategic http://astonjournals.com/assj 3 Arts and Social Sciences Journal, Vol. 2012: ASSJ-49 concerns for importing and exporting countries relates to geopolitics of energy security. In that regard, he also considers the natural resources revenues as a strong instrument to create wars in the post-Cold War era. This view is similar to Huntington’s idea that oil-rich countries in the Persian Gulf became money-rich and then weapons-rich, and then, several wars finally occurred between Arab and Israel [10]. Peters [4], however, in his work “Coercive Western Energy Security Strategies: ‘Resource Wars’ as a New Threat to Global Security,” explains the conditions of the Cold War era concerning resource wars and believes that, in 1986, a list of 12 wars and skirmishes in the 20th century was presented indicating that all were started by clashes over access to resources, renewable or non-renewable. For him, the 1991 Gulf War was the first interstate war on a major scale in the post-Cold War era, which was fought to control the oil of the region. From his view, oil is the most important non-renewable resources. In particular, it is a vital commodity in the industrial countries, with industrialized economies, particularly in agriculture and transportation sectors. As evidence, he refers to demand rates of consumer countries and indicates that demand is growing significantly and will continue to do so especially in the forthcoming decades such that in accordance with the international energy agency’s (IEA) request for oil between 1997 and 2020 which is anticipated to rise with a growth rate of 1.9% per year [4]. In this respect and according to an international group of petroleum specialists (Association for the Study of Peak Oil, ASPO), researchers will witness the peak of world supply of oil in early 2010, and as a consequence, the energy prices will grow, and ultimately the world will face economic upheaval. Peters examines in fact, the resources conflict from the South–North perspectives and argues that 67.3% of all proven oil reservoirs has been covered by the G-77 and OPEC, and Arab league covers nearly 60% of world oil reservoirs. On the other hand, the demands of the developing countries are growing too. It is expected to rise almost three-fold as fast as in the developed world. It is estimated that from 43% for today to 55% of total global consumption by 2020. Therefore, conflict between South and North will be built over the distribution of energy resources among the energy-producing states and the energy-consuming states. There is, indeed, this view that, wars are generally the result of a multifaceted combination of motives, and the most important motivation is the concerns that are related to access and control of resources [4]. It is interesting that Peters refers to two wars in the post-Cold War as “resource wars,” which were the result of the US coercive strategy in order to protect energy supplies. In this respect, however, Singh refers to three wars in the Persian Gulf; two Iraq wars and the Afghanistan war that took place between two Iraq wars. He, in reference to the Afghanistan war, presents this question: “Is the NATO military presence in South-West Asia only to fight terrorism and introduce democracy or is there a hidden agenda like dominating the energy sources for the use of the west? Are they spending billions of dollars to maintain a large number of troops not only in Iraq but also in the neighborhood for political philanthropy, like establishing democracy, or is it an investment for energy security in the future?” [11]. Singh, with reference to some studies emphasizes that bypassing the National Oil Company of Iraq in support of free market of oil was the aim of neo-conservatives, as it would reduce the domination of OPEC and other oil producers over the international oil market. He refers to production and consumption of oil for the period 1970–2003, and emphasizes the US dependency on foreign oil. He also stresses three significant issues: a continuous decrease in oil production, growing oil consumption, and as a result constantly rising dependence upon foreign imported oil. This increasing dependence has been shown to grow from 12.15% in 1970 to 43.7% in 1990 and to 65.1% in 2003. From this point of view, as the oil reserves of the US, South-East Asia and North Sea are declining; all the major consumers’ dependence is increasing, especially on the Persian Gulf oil because of their future needs. This increase for the US is from 2.3 million barrels per day (mbd) in 2003 to 4.2 mbd by 2020. He also refers to declining oil production in the US from 9.5 mbd in 1970 to 6.72 mbd in 1994 and to 5.72 mbd in 2003. There is also decline in Norway, UK, and Indonesia. Clearly, the oil reservoirs and productions of the Persian Gulf area will increasingly be vital for global energy security because the decreasing oil production and limited reservoirs in the OECD states [11]. Another commentator, Klare [12] discusses three main resources in his work: energy resources (oil and natural gas), water, and valuable timber and minerals, and refers to the importance of these vital materials in the outbreak of conflicts across the world. Klare reveals his own worry about these conflicts and believes that it is a necessary issue to find and plan ways to resolve the issue of the competition over natural resources, because controlling specific natural resources is a national security theme of many countries and “something worth fighting for.” In this respect, he divides the reasons of conflicts after the Cold War to two periods and says that fighting in Central Africa, Kashmir, and the former Yugoslavia focused the global community on preventing ethnic conflict in the early 1990s, while in the next few years, violence in Africa occurred in the fight to control the copper mines, diamond fields, and farmlands. Concerning oil and gas, however, Klare pointed out the mechanism of supply and demand as the starting point of the pressure on http://astonjournals.com/assj 4 Research Article energy reserves. He believes that increasing the populations and expanding the economic activities caused increasing need for vital materials, and demands for these materials, especially oil and gas, has always risen. Based on this viewpoint, “as shortages of critical materials rise in frequency and severity, the competition for access to the remaining supplies of these commodities will grow more intense” [12]. He refers to a report of the US Department of Energy and declares that the world oil consumption will increase from about 77 mbd in 2000 to 110 mbd in 2020 (about 43%). In this condition, the world consumption will rise to approximately 670 billion barrels of oil only from 2000 till 2020. It means that it will include nearly two-thirds of the proven oil reservoirs of the world. In this respect, it seems that the production of petroleum will not be able to keep up with global demands and as a result the world will face an unbalanced global supply and demand [12].

### north-south

#### No impact to ligitation

Kim Taylor (writer for Inside Counsel) May 2012 “Using arbitration for a quicker and more cost effective resolution” http://www.insidecounsel.com/2012/05/03/using-arbitration-for-a-quicker-and-more-cost-effe

Inside counsel face many pressures today, not the least of which is cost containment in litigation. Counsel have met the challenge by using alternative fee arrangements, closely managing outside law firm expenses and bringing other matters in-house. Litigation, however, is inevitable, and costly. While arbitration has received its share of criticism in recent years for failing to meet its promise of a “better, faster, cheaper” substitute for litigation, arbitration still remains, in most cases, a less expensive and faster alternative.¶ With proper planning, inside counsel can play a crucial role in the design of the arbitration process that starts with a well-drafted arbitration clause, written long before a dispute arises.¶ Issues such as what disputes are covered by the arbitration clause and who decides certain threshold questions such as jurisdiction are often ignored in the clause, forcing the parties to go to court for clarification and thus increasing the expense. If the drafter intends all disputes to be resolved by arbitration, a broad statement such as, “any controversy, claim or dispute arising out of or relating to…” should be used. And if the parties want the arbitrator, not a court, to decide threshold issues, that intent should be made clear, as should the powers of the arbitrator to award any consequential or punitive damages.¶ To avoid wasting time at the outset of a matter, consider where the arbitration should be administered and heard. Drafters sometimes fail to specify the governing law of the dispute and this can have unintended consequences regarding, for example, the enforceability of broad indemnification clauses.¶ Wise counsel should also consider the number of arbitrators and their qualifications. How will they be appointed? And will any party-appointed arbitrators in a tripartite panel be non-neutral or neutral? Waiting until an arbitration has been commenced to start arguing over these matters can have unintended consequences.¶ There are several arbitral institutions (e.g., AAA, JAMS, the International Chamber of Commerce (ICC), etc.) to which counsel can turn for advice on clause drafting, and whose rules provide order, structure and manageability to the process. Parties also can choose to self-administer the arbitration in a so-called ad hoc proceeding. In that case, the parties’ agreement should specify the procedural guidelines for the proceedings. Otherwise, their procedures will be governed by the law of the place of the arbitration. Be careful, however because in some jurisdictions, including mainland China, ad hoc clauses are unenforceable.¶ One of the biggest cost-drivers in arbitration is discovery, especially electronic discovery. In response to this problem, arbitration providers have introduced protocols to guide the process But the scope of discovery and limits on e-discovery also can be spelled out in the contract or by reference to provider rules or protocols.¶ Other factors to consider in drafting an arbitration clause include:¶ Whether the parties desire a reasoned award¶ Whether interim relief should be permitted (most institutional rules give the arbitrator the power to order interim relief or provisional remedies)¶ Whether negotiation or mediation should be a condition precedent to the commencement of an arbitration¶ Whether dispositive motions will be considered¶ Deadlines and confidentiality of the process¶ In sum, arbitration can be, and despite the criticism, almost always is, a cost-effective alternative to litigation. Care must be taken at the clause drafting stage, for which inside counsel is uniquely qualified to guide the process.

#### It’s impossible to prevent backlash or bridge the North-South divide

**Patrick, 10** - Senior Fellow and Director of the Program on International Institutions and Global Governance at the Council on Foreign Relations (Stewart, “Irresponsible Stakeholders? The Difficulty of Integrating Rising Powers,” Foreign Affairs, November/December, proquest)

Emerging countries wrestle with conflicting identities. They seek a louder voice in global affairs, but as self-identified developing countries, they remain committed to alleviating poverty within their own borders. Thus, they resist global initiatives that would hamper their domestic growth.

This dual identity can sometimes allow rising powers to bridge North-South divides. But it can also leave them whipsawed between global ambitions and solidarity with other developing nations. Obama administration officials speak wryly of emerging powers cross-dressing as developed countries within the G-20 only to invoke long-standing developingcountry grievances in other forums.

Some of the most prominent rising powers are ringleaders of developing country blocs. Brazil, India, Indonesia, and South Africa, for example, are all leaders of the Group of 77 (G-77), and the last three are members of the Non- Aligned Movement-both groups that impede multilateral cooperation by reinforcing obsolete ideological divisions between the North and the South. **Despite strong bilateral ties** to the United States, these rising players have a penchant for playing to the gallery and voting against U.S. preferences in the un General Assembly, the Human Rights Council, and other multilateral forums. Obama has spoken vristfully of the need to abandon "outdated" bloc mentalities, but the emerging powers show little inclination to do so.

**Internal political dynamics** make integration efforts difficult. Leaders of both the established and the emerging powers must reconcile an increasingly complicated and intrusive multilateral agenda with political realities at home. These pressures are likely to constrain partnership between them.

Regime type, for example, is limiting U.S.-Chinese cooperation on cybersecurity. The United States has promoted a vision of cyberspace that is open, global, and relatively anonymous, whereas China's vision is predicated on state control. Both countries are interested in keeping the Internet safe from criminal activities, but it is hard to see how they can agree on any multilateral system as long as Beijing insists on censorship and persecutes online dissidents.

#### Squo solves global inequality

**Chandy & Gertz 11** – Global Economy and Development Fellow at Brookings & Global Economy and Development Research Analyst at Brookings (Laurence & Geoffrey, "Poverty in Numbers: The Changing State of Global Poverty from 2005 to 2015" Brookings Institution, January, <http://www.brookings.edu/~/media/Files/rc/papers/2011/01_global_poverty_chandy/01_global_poverty_chandy.pdf>)

To calculate the number of people in the world living in extreme poverty, we update the World Bank’s official $1.25 a day poverty estimates for 119 countries, which together account for 95 percent of the population of the developing world. To do this, we take the most recent household survey data for each country, and generate poverty estimates for the years 2005 to 2015 using historical and forecast estimates of per capita consumption growth, making the simplifying assumption that the income distribution in each country remains unchanged. Global poverty figures are then calculated by adding together the number of poor from each country. (See the Appendix for a full account of our methodology.) Our results indicate that the world has seen a dramatic decrease in global poverty over the past six years, and that this trend is set to continue in the four years ahead. We estimate that between 2005 and 2010, the total number of poor people around the world fell by nearly half a billion people, from over 1.3 billion in 2005 to under 900 million in 2010. Looking ahead to 2015, extreme poverty could fall to under 600 million people—less than half the number regularly cited in describing the number of poor people in the world today. Poverty reduction of this magnitude is unparalleled in history: never before have so many people been lifted out of poverty over such a brief period of time. When measured as a share of population, progress remains impressive, but is more in line with past trends. In the early 1980s, more than half of all people in developing countries lived in extreme poverty. By 2005, this was down to a quarter. According to our estimates, as of 2010 less than 16 percent remained in poverty, and fewer than 10 percent will likely be poor by 2015. The first Millennium Development Goal defines a target (MDG1a) of halving the rate of global poverty by 2015 from its 1990 level. In an official report prepared for the U.N. MDG conference this past September, the World Bank stated that we are 80 percent of the way toward this target and are on track to meet it by 2015, though the Bank warned that “the economic crisis adds new risks to prospects for reaching the goal.” 3 Our assessment is considerably more upbeat. We believe that the MDG1a target has already been met—approximately three years ago. 4 Furthermore, by 2015, we will not only have halved the global poverty rate, as per MDG1a, but will have halved it again. Over the past half century, the developing world, including many of the world’s poorest countries, have seen dramatic improvements in virtually all non-income measures of well-being: since 1960, global infant mortality has dropped by more than 50 percent, for example, and the share of the world’s children enrolled in primary school increased from less than half to nearly 90 percent between 1950 and today. 5 Likewise there have been impressive gains in gender equality, access to justice and civil and political rights. Yet, through most of this period, the incomes of rich and poor countries diverged, and income poverty has proven a more persistent challenge than other measures of wellbeing. 6 The rapid decline in global poverty now underway—and the early achievement of the MDG1a target—marks a break from these trends, and could come to be seen as a turning point in the history of global development.

### perm

#### Increase means to become bigger or larger in number, quantity, or degree.

**Encarta World English Dictionary, 7** (“Increase”, 2007, <http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861620741>)

Increase

transitive and intransitive verb  (past and past participle in·creased, present participle in·creas·ing, 3rd person present singular in·creas·es)

Definition:

make or become larger or greater: to become, or make something become, larger in number, quantity, or degree

### fails

#### Links MORE to litigation than the aff – reg-negs create new conflicts – any consensus is temporary and will breakdown

Cary Coglianese (Associate Professor of Public Policy, Harvard University, John F. Kennedy School of Government; Chair of the¶ Regulatory Policy Program, Center for Business and Government; and Affiliated Scholar, Harvard Law School) 2001 “Assessing The Advocacy Of Negotiated Rulemaking:¶ A Response To Philip Harter” <http://www.hks.harvard.edu/m-rcbg/research/c.coglianese_new.york_assessing.advocacy.pdf>

Not only does negotiated rulemaking fail to eliminate litigation or reduce its intensity, it also¶ results in more legal challenges than would otherwise be expected. These legal challenges have¶ been filed both by participants in negotiated rulemakings and by organizations who were not part of¶ the negotiation process.193 As I explain in Assessing Consensus, the failure of negotiated rulemaking¶ to live up to expectations is in part explained by the fact that conventional rulemaking at EPA has¶ been much more resistant to litigation than anyone previously believed.194 It is also the case that¶ negotiation efforts do not resolve all conflicts, and, in some ways, they can even engender new¶ conflicts. As we have seen, consensus is not always attainable, and even when it is, it may only¶ temporarily hide underlying conflicts.195 Negotiated rulemaking also creates new sources of conflict¶ that do not exist with other methods of policy making.196 Conflicts can arise over the selection of¶ participants in the negotiations, the meaning of agreements that are reached, and whether the final¶ rule is consistent with those agreements.197 Disagreements can even arise about the implications of silence in the agreement over particular terms or issues.198 None of these additional kinds of conflict¶ arise in the absence of negotiated rulemaking.

### biod

#### Too many alt causes

**Pynn 7** (Larry, staff writer at The Vancouver Sun, “Global warming not biggest threat: expert,” *The Vancouver Sun*, http://www2.canada.com/vancouversun/news/story.html?id=6e2988da-31ab-4697-810d-7a008306d571&p=1)

"We all worry about climate change, as we should, but it doesn't mean we shouldn't worry about protecting habitat," says James Grant, a biology professor at Concordia University in Montreal and co-author of a new report on threats to endangered species in Canada. "The really immediate causes right now for many species are things like farming, urbanization and habitat loss caused by the direct things we do." Research by Grant and his pupils shows the biggest threat is habitat loss at 84 per cent, overexploitation 32 per cent, native species interactions 31 per cent, natural causes 27 per cent, pollution 26 per cent, and introduced species 22 per cent. On average, species are threatened by at least two of the six categories. Human activities representing the biggest source of habitat loss and pollution are not industrial resource extraction, but agriculture at 46 per cent and urbanization at 44 per cent. "Farming is huge," Grant said in an interview. "The Prairies are one of the most affected habitats in the world. We've turned them into wheat fields." The southern Okanagan-Similkameen is another example, home to about one-third of species at risk in B.C. as well as a thriving agricultural industry, including vineyards, and increased urban development.

### renewables fail

#### Renewables don’t solve

Loudermilk 2011 (Micah J. Loudermilk is a Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, May 31, 2011, “Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs,” Journal of Energy Security, <http://www.ensec.org/index.php?option=com_content&view=article&id=314:small-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&catid=116:content0411&Itemid=375>)

Limitations of renewables Renewable energy technologies have made great strides forward during the last decade. In an increasingly carbon emissions and greenhouse gas (GHG) aware global commons, the appeal of solar, wind, and other alternative energy sources is strong, and many countries are moving to increase their renewable electricity generation. However, despite massive expansion on this front, renewable sources struggle to keep pace with increasing demand, to say nothing of decreasing the amount of energy obtained from other sources. The continual problem with solar and wind power is that, lacking efficient energy storage mechanisms, it is difficult to contribute to baseload power demands. Due to the intermittent nature of their energy production, which often does not line up with peak demand usage, electricity grids can only handle a limited amount of renewable energy sources—a situation which Germany is now encountering. Simply put, nuclear power provides virtually carbon-free baseload power generation, and renewable options are unable to replicate this, especially not on the scale required by expanding global energy demands. Small nuclear reactors, however, like renewable sources, can provide enhanced, distributed, and localized power generation. As the US moves towards embracing smart grid technologies, power production at this level becomes a critical piece of the puzzle. Especially since renewable sources, due to sprawl, are of limited utility near crowded population centers, small reactors may in fact prove instrumental to enabling the smart grid to become a reality.

#### Only the plan does

**Hansen, 08** [heads the NASA Goddard Institute for Space Studies in New York City, a part of the Goddard Space Flight Center in Greenbelt, Maryland. He has held this position since 1981Letter to Obama, <http://www.columbia.edu/~jeh1/mailings/2008/20081121_Obama.pdf>]

The Liquid-Fluoride Thorium Reactor (LFTR) is a thorium reactor concept that uses a chemically-stable fluoride salt for the medium in which nuclear reactions take place. This fuel form yields flexibility of operation and eliminates the need to fabricate fuel elements. 7 This feature solves most concerns that have prevented thorium from being used in solidfueled reactors. The fluid fuel in LFTR is also easy to process and to separate useful fission products, both stable and radioactive. LFTR also has the potential to destroy existing nuclear waste, albeit with less efficiency than in a fast reactor such as IFR. Both IFR and LFTR operate at low pressure and high temperatures, unlike today’s LWR’s. Operation at low pressures alleviates much of the accident risk with LWR. Higher temperatures enable more of the reactor heat to be converted to electricity (40% in IFR, 50% in LFTR vs 35% in LWR). Both IFR and LFTR have the potential to be air-cooled and to use waste heat for desalinating water. Both IFR and LFTR are 100-300 times more fuel efficient than LWRs. In addition to solving the nuclear waste problem, they can operate for several centuries using only uranium and thorium that has already been mined. Thus they eliminate the criticism that mining for nuclear fuel will use fossil fuels and add to the greenhouse effect. The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under ‘business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables? China and India have strong incentives to achieve pollution-free skies as well as avert dangerous climate change. The United States, even if efficiency and renewables can satisfy its energy needs (considered unlikely be many energy experts), needs to deal with its large piles of nuclear waste, which have lifetime exceeding 10,000 years. Development of the first large 4th generation nuclear plants may proceed most rapidly if carried out in China or India (or South Korea, which has a significant R&D program), with the full technical cooperation of the United States and/or Europe. Such cooperation would make it much easier to achieve agreements for reducing greenhouse gases. Implications. We have already overshot the safe level of greenhouse gases. Things are beginning to crumble – Arctic ice is melting, methane is bubbling from permafrost, mountain glaciers are disappearing. We must move onto a different course within the next few years to avoid committing the planet to accelerating climate changes out ofour control.The time has passed for ‘goals’, half-measures, gre

enwashing, and compromises with special interests.

# r3 neg v emory ps

## 1nc

### 1nc topicality

#### The aff isn't topical—procurement is a non-financial incentive

Czinkota et al, 9 - Associate Professor at the McDonough School of Business at Georgetown University (Michael, Fundamentals of International Business, p. 69 – google books)

Incentives offered by policymakers to facilitate foreign investments are mainly of three types: fiscal, financial, and nonfinancial. Fiscal incentives are specific tax measures designed to attract foreign investors. They typically consist of special depreciation allowances, tax credits or rebates, special deductions for capital expenditures, tax holidays, and the reduction of tax burdens. Financial incentives offer special funding for the investor by providing, for example, land or buildings, loans, and loan guarantees. Nonfinancial incentives include guaranteed government purchases; special protection from competition through tariffs, import quotas, and local content requirements, and investments in infrastructure facilities.

#### Voter for limits and extra topicality —including government purchase creates an entirely separate topic making us accountable for every non-market application of every energy type in any setting.

### 1nc cp

#### The United States federal government should remove its restrictions external to a fast track licensing process for small modular reactors to obtain electricity from small modular reactors for military instillations in the United States.

### 1nc da

#### Fiscal cliff will dominate the lame duck and barely pass now

Bruce Krasting (writer or Business Insider) 10/1, 2012 “The BEST Case Scenario For The Fiscal Cliff Is Still Ugly” http://www.businessinsider.com/war-headlines-after-the-november-election-will-prevent-cutbacks-in-military-spending-2012-10

Absent some earth shaking event between now and November, Obama is going to win, the House will remain in the hands of the Republicans and the Senate will continue to be equally divided. The war between Reds and Blues will be just as bad as it was a year ago. The day after the election, the fight over the fiscal cliff will commence. I expect it will be ugly. -I think there is zero probability that all of the issues now on the cliff will be pushed off to some future period. (Ultimate-can-kicking) Some of the cutbacks/tax increases that are now scheduled, will happen. -I put the odds on falling off the cliff without any compromises at 40%. This scenario comes about if the Reps and Dems can’t agree on anything. If that is the case, we fall very hard on January 2. (No-can-kicking) -Therefore, I see a 60% chance of a compromise that softens the consequences of the fiscal cliff, but does not eliminate it entirely. (Semi-can-kicking, but still kicking ourselves in the face) If there is to be a compromise, it will be interesting to see who gets what, and who gives up what. It might play out with the following results: I) The 2% reduction in FICA taxes is history. As of 1/1/13 every worker is getting hit with a 2% tax increase. This is a very regressive tax increase. II) The Bush tax cuts for those making more than $250k are gone. This is a very Progressive tax increase. III) The Bush tax cuts for those making less than $250k will be retained. This “centrist” compromises is the result of the “give” on #s I and II. Both sides will be able to claim that they did their best for “Middle Class Workers”. IV) The Alternative Minimum Tax will be adjusted for inflation and will be fully phased in over a period of three years. This tax will hit 40m taxpayers (up from only 4m today). This is most definitely a middle class tax increase. V) The capital gains tax rate is going to go up to at least 25%. The result of I – V is that everyone who works, or has investment income is going to be paying more. No one will escape higher taxes. Then there is the spending side of the ledger. The so-called, “sequestered” amounts. Here is where the real horse-trading will happen. Keep in mind that the timing of this critical argument debate will be in November and December. What else will be happening in those months that will influence the budget compromises? Talk of War.

#### Plan drains capital and causes an immediate fight

Szondy, ‘12

[David, freelance writer -- Gizmag, 2-16, “Feature: Small modular nuclear reactors - the future of energy?” http://www.gizmag.com/small-modular-nuclear-reactors/20860/]

The problem is that nuclear energy is the proverbial political hot potato - even in early days when the new energy source exploded onto the world scene. The tremendous amount of energy locked in the atom held the promise of a future like something out of a technological Arabian Nights. It would be a world where electricity was too cheap to meter, deserts would bloom, ships would circle the Earth on a lump of fuel the size of a baseball, planes would fly for months without landing, the sick would be healed and even cars would be atom powered. But though nuclear power did bring about incredible changes in our world, in its primary role, generating electricity for homes and industry, it ended up as less of a miracle and more of a very complicated way of boiling water.¶ Not only complicated, but expensive and potentially dangerous. Though hundreds of reactors were built all over the world and some countries, such as France, generate most of their electricity from it, nuclear power has faced continuing questions over cost, safety, waste disposal and proliferation. One hundred and four nuclear plants provide the United States with 20 percent of the nation's power, but a building permit hadn't been issued since 1978 with no new reactors coming on line since 1996 and after the uproar from the environmental movement after nuclear accidents at Three Mile Island, Chernobyl and Fukushima, it seemed unlikely that any more would ever be approved - until now. This fierce domestic opposition to nuclear power has caused many governments to take an almost schizophrenic stance regarding the atom.

#### Sustaining polcap is key

Andrew Sprung (he is the CEO of Sprung PR and hold a PhD from the University of Rochestor) 9/21, 2012 “Ezra Klein's unconvincing theory that Obama misunderstands (or misrepresents) "change," http://xpostfactoid.blogspot.com/2012/09/ezra-kleins-unconvincing-theory-that.html)

In my view, Klein is viewing this question too narrowly. Obama is well aware of the limitations of the bully pulpit, and he's got to know better than any person on the planet that presidential advocacy polarizes, entrenching the opposing party in implacable opposition to whatever the president proposes. Yet, in presenting a revamped theory of how the presidency works, he's not just feeding us a line of BS. And if Obama wins reelection, I believe that we will look back five or ten or twenty years from now and recognize that yes, Obama did change the way Washington works. Or at the very least, he kept the US on a sane policy course in a time of extreme polarization and thus gave (will have given...) the system space to self-correct, as it has in the past. Let's start with Klein's objection to Obama's characterization of how healthcare reform got done: The health-care process, which I reported on extensively, was a firmly “inside game” strategy. There were backroom deals with most every major interest group and every swing legislator.... By the time the law passed, many more Americans viewed it unfavorably than viewed it favorably — exactly the opposite of what you’d expect if health care had passed through an “outside game” strategy in which, as Obama put it, “the American people … put pressure on Congress to move these things forward.” And yet, health care passed. The inside game worked. All true, laddie. And yet, in claiming that the impetus for healthcare reform came from the outside, I don't think Obama is attempting to whitewash this long and messy process -- or is even referring to it. He is alluding to the marshaling or channeling of popular will that got him elected. The essence of Obama's primary election argument against Hillary Clinton was that he was better equipped to marshal the popular will for fundamental change -- with healthcare reform as the centerpiece -- than she was. I well remember the moment when that argument first impressed itself on me. It was in a debate in the immediate aftermath of the Iowa caucuses, on Jan. 5, 2008: Look, I think it's easier to be cynical and just say, "You know what, it can't be done because Washington's designed to resist change." But in fact there have been periods of time in our history where a president inspired the American people to do better, and I think we're in one of those moments right now. I think the American people are hungry for something different and can be mobilized around big changes -- not incremental changes, not small changes. I actually give Bill Clinton enormous credit for having balanced those budgets during those years. It did take political courage for him to do that. But we never built the majority and coalesced the American people around being able to get the other stuff done. And, you know, so the truth is actually words do inspire. Words do help people get involved. Words do help members of Congress get into power so that they can be part of a coalition to deliver health care reform, to deliver a bold energy policy. Don't discount that power, because when the American people are determined that something is going to happen, then it happens. And if they are disaffected and cynical and fearful and told that it can't be done, then it doesn't. I'm running for president because I want to tell them, yes, we can. And that's why I think they're responding in such large numbers. Cue the political science eye-roll. The American people were not "determined" that healthcare reform per se had to occur. You can't read the results of the 2008 wave election as a "mandate" for a specific policy. In the aftermath, the electoral tide went back out with a vengeance. But it's also true that in two years of campaigning Obama's words did inspire people, that the American people were hungry for change after Bush, that Obama made a broad and conceptually coherent case for moving the center of American politics back to the left with a renewed commitment to shared prosperity and investment in the common good, and that healthcare reform was at the center of that case. True too that the results of that election gave him enough of a majority to persist, even when relentless Republican misinformation and bad-faith negotiation and delay eroded public support. Obama also used the bully pulpit at crucial points, if not to rally public opinion, at least to re-commit wavering Democrats -- and also to convince the public, as he enduringly has, that he was more of a good faith negotiator, more willing to compromise, than the Republicans. Those pressure points were the September 2009 speech he gave to a joint session of Congress, and the remarkable eight-hour symposium he staged with the leadership of both parties in late February 2010 to showcase the extent to which the ACA incorporated past Republican proposals and met goals allegedly shared by both parties, as well as his own bend-over-backwards willingness to incorporate any Republican ideas that could reasonably be cast as advancing those goals. In a series of posts about Ronald Reagan, Brendhan Nyhan has demonstrated that presidential rhetoric generally does not sway public opinion. Savvy politicians channel public opinion; transformative ones seize an opportunity when their basic narrative of where the country needs to go aligns with a shift in public opinion, usually in response to recent setbacks or turmoil. Obama, like Reagan, effected major change in his first two years because he caught such a wave -- he amassed the political capital, and he spent it, and we got what he paid for. The force from outside -- a wave election -- empowered Obama to work change from inside in a system that reached a new peak of dysfunctionality. Klein's also objects to Obama's pitch for how to effect change going forward. In 2011, he notes, Obama highlighted the substantial change won from the messy inside game of legislating, touting the long list of legislative accomplishments of the 111th Congress. In election season, he has reverted to a keynote of his 2008 campaign: change comes from you, the electorate; it happens when ”the American people … put pressure on Congress to move these things forward.” Klein regards this as election season hooey: But while this theory of change might play better, it’s the precise theory of change that the last few years have shattered. Whatever you want to say about the inside game, it worked. Legislation passed. But after the midterm elections, it stopped working. And so the White House moved towards an outside game strategy, where ”the American people … put pressure on Congress to move these things forward.” Perhaps the most public example was Obama’s July 2011 speech, in which he said: I’m asking you all to make your voice heard. If you want a balanced approach to reducing the deficit, let your member of Congress know. If you believe we can solve this problem through compromise, send that message. So many Americans responded that Congress’s Web site crashed. But Obama didn’t get his “balanced approach,” which meant a deal including taxes. Klein goes on to recount that throughout the past year of confrontation with the GOP, pushing a jobs package that had broad popular support, Obama won only one minor victory, extension of the payroll tax cut. He then reverts to two political science tenets: presidential advocacy entrenches the opposition, and it can't move popular opinion. But I think he misreads Obama's pitch, strategy and record on several counts. First, he understates Obama's (and the Democrats') successes in the year of confrontation that has followed the debt ceiling debacle. He writes off the payroll tax cut and unemployment benefit extension as small beer. But this was actually a near-total victory in two stages against entrenched opposition, and it won Obama some vital back-door stimulus for the second year running in the wake of the GOP House takeover. It was followed by a similar GOP cave-in on maintaining low student loan interest rates -- and then again, by the collapse of the House GOP effort to renege on the Budget Control Act and impose still more spending cuts. Presidential rhetoric may not change the public mind. But when it's in sync with voter's propensities, it can deploy public opinion to bring pressure to bear on the opposition. Second, it's true that under threat of GOP debt ceiling extortion, Obama successfully marshaled public opinion in favor of his "balanced" approach to deficit reduction but wasn't able to use that pressure to move the GOP off their no-new-taxes intransigence. But that battle ain't over yet, and popular support for Obama's position is political capital that's still in the bank. In the upcoming fiscal cliff negotiations, Obama, if he wins reelection, will have the whip hand, given the expiration of the Bush tax cuts and Republican teeth-gnashing over the defense cuts in the sequester. Speaking of which, Obama's refusal to intervene in the supercommittee negotiations as Republicans stonewalled once again over any tax hikes banked him further capital in this upcoming fight. Republicans are screaming much louder than Democrats about the sequester, disastrous though the cuts may be on the domestic side. Third, it's rational for Obama to recast his bid for change in election season, because of course he's seeking further "change" from the outside, i.e., more Democrats elected to Congress. He's not going to win a mandate as in 2008, or, most likely, majorities in both houses of Congress. But he has to make the pitch for being granted renewed tools to advance his agenda. Finally, a key part of Obama's "you are the change" pitch in his convention speech was a frank call to play defense -- to protect the changes wrought in his first term and fend off the further capture of the electoral process and the nation's resources by the oligarchy the GOP represents: If you turn away now – if you buy into the cynicism that the change we fought for isn’t possible … well, change will not happen. If you give up on the idea that your voice can make a difference, then other voices will fill the void: lobbyists and special interests; the people with the $10 million checks who are trying to buy this election and those who are making it harder for you to vote; Washington politicians who want to decide who you can marry, or control health-care choices that women should make for themselves.

#### Impact is global econ collapse

Harold Mandel (writer for the Examiner) 9/27, 2012 “Fitch says fiscal cliff could set off global recession (Video)” http://www.examiner.com/article/fitch-says-fiscal-cliff-could-set-off-global-recession

The ratings agency stated, "The U.S. fiscal cliff represents the single biggest near-term threat to a global economic recovery." Fitch has gone on to warn, “A U.S. fiscal shock would be exported to the rest of the world via a sharply weaker U.S. dollar and asset prices, lower U.S. price and wage inflation and heightened risk of deflation, and the impact on commodity prices.” In the meantime leading U.S. executives have less confidence in the business outlook now than at any time in the past three years, with a primary reason being fear of gridlock in Washington over the fiscal deficit and tax policy. And so unless the fiscal cliff is confronted and avoided this could be bad news for everyone.

#### Extinction

**Tilford 2008** – PhD in history from George Washington University, served for 32 years as a military officer and analyst with the Air Force and Army (Earl, “Critical mass: economic leadership or dictatorship”, Cedartown Standard, lexis)

Could it happen again? Bourgeois democracy requires a vibrant capitalist system. Without it, the role of the individual shrinks as government expands. At the very least, the dimensions of the U.S. government economic intervention will foster a growth in bureaucracy to administer the multi-faceted programs necessary for implementation. Bureaucracies, once established, inevitably become self-serving and self-perpetuating. Will this lead to “socialism” as some conservative economic prognosticators suggest? Perhaps. But so is the possibility of dictatorship. If the American economy collapses, especially in wartime, there remains that possibility. And if that happens the American democratic era may be over. If the world economies collapse, totalitarianism will almost certainly return to Russia, which already is well along that path in any event. Fragile democracies in South America and Eastern Europe could crumble. A global economic collapse will also increase the chance of global conflict. As economic systems shut down, so will the distribution systems for resources like petroleum and food. It is certainly within the realm of possibility that nations perceiving themselves in peril will, if they have the military capability, use force, just as Japan and Nazi Germany did in the mid-to-late 1930s. Every nation in the world needs access to food and water. Industrial nations—the world powers of North America, Europe, and Asia—need access to energy. When the world economy runs smoothly, reciprocal trade meets these needs. If the world economy collapses, the use of military force becomes a more likely alternative. And given the increasingly rapid rate at which world affairs move; the world could devolve to that point very quickly.

### 1nc da

#### Obama is winning but its close and reversible – the average of recent polls puts Obama ahead

**Cook, 10/4**/12 – editor and publisher of the Cook Political Report for National Journal (Charlie, “Mitt Romney Breaks His Losing Streak” <http://www.nationaljournal.com/columns/cook-report/the-cook-report-romney-breaks-his-losing-streak-20121004?mrefid=mostViewed>)

Too many political observers see politics in an entirely binary way: Everything has to be either a “0” or a “1”; a race is either tied or it’s over; every election is either won or stolen. Some people never want to admit that their side lost. And some people think that a poll either tells them what they want to hear or is methodologically flawed—or crooked. It’s like an obnoxious sports fan (often found in Philadelphia) who views a ruling by a referee or umpire as either favorable or a bad call. Denial and simplicity reign.

The presidential election is neither tied nor over. Of the 16 most recent national polls using live telephone interviewers calling both respondents with landlines and those with cell phones (between 30 and 40 percent of voters do not have landlines and cannot legally be called by robo-pollsters), one has the race even, two have Obama with a narrow 2-point edge, five have 3-point Obama margins, two have 5-point Obama advantages, another pair have 6-point Obama leads, two have 7-point leads, and one has an 8-point Obama lead. This would strongly suggest that the Obama lead is between 3 and 6 percentage points; such brand-name polls as those by CNN, Fox News, and NBC News/Wall Street Journal are among those in that 3- to 6-point range.

Conversations with Democratic and Republican pollsters and strategists suggest that Colorado, Florida, North Carolina, and Virginia are the most competitive swing states. Some high-quality private polling shows Romney with very narrow leads in both North Carolina and Virginia, but a few other equally sophisticated surveys show Obama with narrow advantages in those two states. At least one private survey shows Florida even, but most show the Sunshine State and Colorado with narrow Obama leads, in the small- to mid-single-digit range. Just a hair or two better for Obama but still quite close are Nevada and Wisconsin, followed by Iowa. Things really get ugly for Romney in Ohio and Michigan, and, finally, in Pennsylvania, which is no longer competitive. Ohio shows a 5- to 8-point lead for Obama in private polling. In Michigan, Obama’s lead is slightly wider, and in Pennsylvania, Romney faces close to a 10-point deficit. It is mathematically possible for Romney to reach 270 electoral votes without Michigan, Ohio, or Pennsylvania, but it is in reality exceedingly unlikely.

It would take a very consequential event to change the trajectory of this race. Time will tell whether Romney’s strong debate performance on Wednesday night was the event that he needed—particularly in swing states such as Ohio. But at least he energized his supporters and sent a clear message that the race is not over.

#### SMRs incentives unpopular

**Taso 11** (Firas Eugen Taso, “21st Century Civilian Nuclear Power and the Role of Small Modular Reactors”, Fletcher School of Law and Diplomacy; Tufts University, May, http://dl.tufts.edu/ProxyServlet/?url=http://repository01.lib.tufts.edu:8080/fedora/get/tufts:UA015.012.079.00002/bdef:TuftsPDF/getPDF&filename=tufts:UA015.012.079.00002.pdf) **Quotes Paolo Ferroni, a senior engineer at Westinghouse**

Paolo Ferroni also mentions that SMRs would not solve the public concern over nuclear power. To the general public, they would still be nuclear facilities, something that they do not understand and fear. Unless they were proven and demonstrated, opposition would exist even for the smaller demonstration projects. The NIMBY attitude would likely preclude SMRs from being a game changer for nuclear power, unless something changes dramatically, not only incrementally, in public perception. Furthermore, Makhijani and Boyd argue that SMRs would not even address the climate change problem since their development will take likely another decade, they constitute a waste of money and resources, as renewable sources are already becoming cheaper than nuclear. 232 Robert Bryce disagrees with this argument in Power Hungry, saying that nuclear provides baseload power, while renewables are peak power at most, and sometimes do not even provide that. While he makes a valid point, it is hard to assess what the renewable industry could do to improve its track record, including capacity and price if it had the resources large nuclear has had for the past decades. This again comes to the opportunity cost of investing a technology to the detriment of others, in effect picking winners.

#### Energy is pivotal

**Levine, 12** - Steve LeVine is the author of The Oil and the Glory and a longtime foreign correspondent (“How dirty is Romney prepared to get to win election?” 6/13,

http://oilandglory.foreignpolicy.com/posts/2012/06/12/how\_dirty\_is\_romney\_prepared\_to\_get\_to\_win\_election)

Yet if the election is as close as the polls suggest, the energy ads could prove a pivotal factor. "Advertising is generally not decisive. Advertising matters at the margins. ... But ask Al Gore if the margin matters," said Ken Goldstein, president of the Campaign Media Analysis Group at Kantar Media. "This is looking like an election where the margin may matter."

#### Romney causes massive foreign backlash and nuclear wars around the globe

Doug Bandow 5-15-2012; Doug Bandow is a senior fellow at the Cato Institute and former special assistant to President Ronald Reagan. “Mitt Romney: The Foreign Policy of Know-Nothingism” http://www.cato.org/publications/commentary/mitt-romney-foreign-policy-knownothingism

Romney’s overall theme is American exceptionalism and greatness, slogans that win public applause but offer no guidance for a bankrupt superpower that has squandered its international credibility. “This century must be an American century,” Romney proclaimed. “In an American century, America leads the free world and the free world leads the entire world.” He has chosen a mix of advisers, including the usual neocons and uber-hawks — Robert Kagan, Eliot Cohen, Jim Talent, Walid Phares, Kim Holmes, and Daniel Senor, for instance — that gives little reason for comfort. Their involvement suggests Romney’s general commitment to an imperial foreign policy and force structure. Romney is no fool, but he has never demonstrated much interest in international affairs. He brings to mind George W. Bush, who appeared to be largely ignorant of the nations he was invading. Romney may be temperamentally less likely to combine recklessness with hubris, but he would have just as strong an incentive to use foreign aggression to win conservative acquiescence to domestic compromise. This tactic worked well for Bush, whose spendthrift policies received surprisingly little criticism on the right from activists busy defending his war-happy foreign policy. The former Massachusetts governor has criticized President Obama for “a naked political calculation or simply sheer ineptitude” in following George W. Bush’s withdrawal timetable in Iraq and for not overriding the decision of a government whose independence Washington claims to respect. But why would any American policymaker want to keep troops in a nation that is becoming ever more authoritarian, corrupt, and sectarian? It is precisely the sort of place U.S. forces should not be tied down. In contrast, Romney has effectively taken no position on Afghanistan. At times he appears to support the Obama timetable for reducing troop levels, but he has also proclaimed that “Withdrawal of U.S. forces from Afghanistan under a Romney administration will be based on conditions on the ground as assessed by our military commanders.” Indeed, he insisted: “To defeat the insurgency in Afghanistan, the United States will need the cooperation of both the Afghan and Pakistani governments — we will only persuade Afghanistan and Pakistan to be resolute if they are convinced that the United States will itself be resolute,” and added, “We should not negotiate with the Taliban. We should defeat the Taliban.” Yet it’s the job of the president, not the military, to decide the basic policy question: why is the U.S. spending blood and treasure trying to create a Western-style nation state in Central Asia a decade after 9/11? And how long is he prepared to stay — forever? On my two trips to Afghanistan I found little support among Afghans for their own government, which is characterized by gross incompetence and corruption. Even if the Western allies succeed in creating a large local security force, will it fight for the thieves in Kabul? Pakistan is already resolute — in opposing U.S. policy on the ground. Afghans forthrightly view Islamabad as an enemy. Unfortunately, continuing the war probably is the most effective way to destabilize nuclear-armed Pakistan. What will Romney do if the U.S. military tells him that American combat forces must remain in Afghanistan for another decade or two in order to “win”? The ongoing AfPak conflict is not enough; Romney appears to desire war with Iran as well. No one wants a nuclear Iran, but Persian nuclear ambitiions began under America’s ally the Shah, and there is no reason to believe that the U.S. (and Israel) cannot deter Tehran. True, Richard Grenell, who briefly served as Romney’s foreign-policy spokesman, once made the astonishing claim that the Iranians “will surely use” nuclear weapons. Alas, he never shared his apparently secret intelligence about the leadership in Tehran’s suicidal tendencies. The Iranian government’s behavior has been rational even if brutal, and officials busy maneuvering for power and wealth do not seem eager to enter the great beyond. Washington uneasily but effectively deterred Joseph Stalin and Mao Zedong, the two most prolific mass murderers in history. Iran is no substitute for them. Romney has engaged in almost infantile ridicule of the Obama administration’s attempt to engage Tehran. Yet the U.S. had diplomatic relations with Hitler’s Germany and Stalin’s Russia. Washington came to regret not having similar contact with Mao’s China. Even the Bush administration eventually decided that ignoring Kim Jong-Il’s North Korea only encouraged it to build more nuclear weapons faster. Regarding Iran, Romney asserted, “a military option to deal with their nuclear program remains on the table.” Building up U.S. military forces “will send an unequivocal signal to Iran that the United States, acting in concert with allies, will never permit Iran to obtain nuclear weapons... Only when the ayatollahs no longer have doubts about America’s resolve will they abandon their nuclear ambitions.” Indeed, “if all else fails... then of course you take military action,” even though, American and Iranian military analysts warn, such strikes might only delay development of nuclear weapons. “Elect me as the next president,” he declared, and Iran “will not have a nuclear weapon.” Actually, if Tehran becomes convinced that an attack and attempted regime change are likely, it will have no choice but to develop nuclear weapons. How else to defend itself? The misguided war in Libya, which Romney supported, sent a clear signal to both North Korea and Iran never to trust the West. Iran’s fears likely are exacerbated by Romney’s promise to subcontract Middle East policy to Israel. The ties between the U.S. and Israel are many, but their interests often diverge. The current Israeli government wants Washington to attack Iran irrespective of the cost to America. Moreover, successive Israeli governments have decided to effectively colonize the West Bank, turning injustice into state policy and making a separate Palestinian state practically impossible. Perceived American support for this creates enormous hostility toward the U.S. across the Arab and Muslim worlds. Yet Romney promises that his first foreign trip would be to Israel “to show the world that we care about that country and that region” — as if anyone anywhere, least of all Israel’s neighbors, doesn’t realize that. He asserted that “you don’t allow an inch of space to exist between you and your friends and allies,” notably Israel. The U.S. should “let the entire world know that we will stay with them and that we will support them and defend them.” Indeed, Romney has known Israeli Prime Minister Benjamin Netanyahu for nearly four decades and has said that he would request Netanyahu’s approval for U.S. policies: “I’d get on the phone to my friend Bibi Netanyahu and say, ‘Would it help if I say this? What would you like me to do?’” Americans would be better served by a president committed to making policy in the interests of the U.S. instead. Romney’s myopic vision is just as evident when he looks elsewhere. For instance, he offered the singular judgment that Russia is “our number one geopolitical foe.” Romney complained that “across the board, it has been a thorn in our side on questions vital to America’s national security.” The Cold War ended more than two decades ago. Apparently Romney is locked in a time warp. Moscow manifestly does not threaten vital U.S. interests. Romney claimed that Vladimir “Putin dreams of ‘rebuilding the Russian empire’.” Even if Putin has such dreams, they don’t animate Russian foreign policy. No longer an ideologically aggressive power active around the world, Moscow has retreated to the status of a pre-1914 great power, concerned about border security and international respect. Russia has no interest in conflict with America and is not even much involved in most regions where the U.S. is active: Asia, the Middle East, and Latin America. Moscow has been helpful in Afghanistan, refused to provide advanced air defense weapons to Iran, supported some sanctions against Tehran, used its limited influence in North Korea to encourage nuclear disarmament, and opposes jihadist terrorism. This is curious behavior for America’s “number one geopolitical foe.” Romney’s website explains that he will “implement a strategy that will seek to discourage aggressive or expansionist behavior on the part of Russia,” but other than Georgia where is it so acting? And even if Georgia fell into a Russian trap, Tbilisi started the shooting in 2008. In any event, absent an American security guarantee, which would be madness, the U.S. cannot stop Moscow from acting to protect what it sees as vital interests in a region of historic influence. Where else is Russia threatening America? Moscow does oppose NATO expansion, which actually is foolish from a U.S. standpoint as well, adding strategic liabilities rather than military strengths. Russia strongly opposes missile defense bases in Central and Eastern Europe, but why should Washington subsidize the security of others? Moscow opposes an attack on Iran, and so should Americans. Russia backs the Assad regime in Syria, but the U.S. government once declared the same government to be “reformist.” Violent misadventures in Kosovo, Afghanistan, Iraq, and Libya demonstrate that America has little to gain and much to lose from another attempt at social engineering through war. If anything, the Putin government has done Washington a favor keeping the U.S. out of Syria. This doesn’t mean America should not confront Moscow when important differences arise. But treating Russia as an adversary risks encouraging it to act like one. Doing so especially will make Moscow more suspicious of America’s relationships with former members of the Warsaw Pact and republics of the Soviet Union. Naturally, Romney wants to “encourage democratic political and economic reform” in Russia — a fine idea in theory, but meddling in another country’s politics rarely works in practice. Just look at the Arab Spring. Not content with attempting to start a mini-Cold War, Mitt Romney dropped his nominal free-market stance to demonize Chinese currency practices. He complained about currency manipulation and forced technology transfers: “China seeks advantage through systematic exploitation of other economies.” On day one as president he promises to designate “China as the currency manipulator it is.” Moreover, he added, he would “take a holistic approach to addressing all of China’s abuses. That includes unilateral actions such as increased enforcement of U.S. trade laws, punitive measures targeting products and industries that rely on misappropriations of our intellectual property, reciprocity in government procurement, and countervailing duties against currency manipulation. It also includes multilateral actions to block technology transfers into China and to create a trading bloc open only for nations genuinely committed to free trade.” Romney’s apparent belief that Washington is “genuinely committed to free trade” is charming nonsense. The U.S. has practiced a weak dollar policy to increase exports. Washington long has subsidized American exports: the Export-Import Bank is known as “Boeing’s Bank” and U.S. agricultural export subsidies helped torpedo the Doha round of trade liberalization through the World Trade Organization. Of course, Beijing still does much to offend Washington. However, the U.S. must accommodate the rising power across the Pacific. Trying to keep China out of a new Asia-Pacific trade pact isn’t likely to work. America’s Asian allies want us to protect them — no surprise! — but are not interested in offending their nearby neighbor with a long memory. The best hope for moderating Chinese behavior is to tie it into a web of international institutions that provide substantial economic, political, and security benefits. Beijing already has good reason to be paranoid of the superpower which patrols bordering waters, engages in a policy that looks like containment, and talks of the possibility of war. Trying to isolate China economically would be taken as a direct challenge. Romney would prove Henry Kissinger’s dictum that even paranoids have enemies. Naturally, Romney also wants to “maintain appropriate military capabilities to discourage any aggressive or coercive behavior by China against its neighbors.” However, 67 years after the end of World War II, it is time for Beijing’s neighbors to arm themselves and cooperate with each other. Japan long had the second largest economy on earth. India is another rising power with reason to constrain China. South Korea has become a major power. Australia has initiated a significant military build-up. Many Southeast Asian nations are constructing submarines to help deter Chinese adventurism. Even Russia has much to fear from China, given the paucity of population in its vast eastern territory. But America’s foreign-defense dole discourages independence and self-help. The U.S. should step back as an off-shore balancer, encouraging its friends to do more and work together. It is not America’s job to risk Los Angeles for Tokyo, Seoul, or Taipei. Romney similarly insists on keeping the U.S. on the front lines against North Korea, even though all of its neighbors have far more at stake in a peaceful peninsula and are able to contain that impoverished wreck of a country. The Romney campaign proclaims: “Mitt Romney will commit to eliminating North Korea’s nuclear weapons and its nuclear-weapons infrastructure.” Alas, everything he proposes has been tried before, from tougher sanctions to tighter interdiction and pressure on China to isolate the North. What does he plan on doing when Pyongyang continues to develop nuclear weapons as it has done for the last 20 years? The American military should come home from Korea. Romney complained that the North’s nuclear capability “poses a direct threat to U.S. forces on the Korean Peninsula and elsewhere in East Asia.” Then withdraw them. Manpower-rich South Korea doesn’t need U.S. conventional support, and ground units do nothing to contain North Korea’s nuclear ambitions. Pull out American troops and eliminate North Korea’s primary threat to the U.S. Then support continuing non-proliferation efforts led by those nations with the most to fear from the North. That strategy, more than lobbying by Washington, is likely to bring China around. Romney confuses dreams with reality when criticizing President Obama over the administration’s response to the Arab Spring. “We’re facing an Arab Spring which is out of control in some respects,” he said, “because the president was not as strong as he needed to be in encouraging our friends to move toward representative forms of government.” Romney asked: “How can we try and improve the odds so what happens in Libya and what happens in Egypt and what happens in other places where the Arab Spring is in full bloom so that the developments are toward democracy, modernity and more representative forms of government? This we simply don’t know.” True, the president doesn’t know. But neither does Mitt Romney. The latter suffers from the delusion that bright Washington policymakers can remake the world. Invade another country, turn it into a Western-style democracy allied with America, and everyone will live happily every after. But George W. Bush, a member of Mitt Romney’s own party, failed miserably trying to do that in both Afghanistan and Iraq. The Arab Spring did not happen because of Washington policy but in spite of Washington policy. And Arabs demanding political freedom — which, unfortunately, is not the same as a liberal society — have not the slightest interest in what Barack Obama or Mitt Romney thinks. Yet the latter wants “convene a summit that brings together world leaders, donor organizations, and young leaders of groups that espouse” all the wonderful things that Americans do. Alas, does he really believe that such a gathering will stop, say, jihadist radicals from slaughtering Coptic Christians? Iraq’s large Christian community was destroyed even as the U.S. military occupied that country. His summit isn’t likely to be any more effective. Not everything in the world is about Washington. Which is why Romney’s demand to do something in Syria is so foolish. Until recently he wanted to work with the UN, call on the Syrian military to be nice, impose more sanctions, and “increase the possibility that the ruling minority Alawites will be able to reconcile with the majority Sunni population in a post-Assad Syria.” Snapping his fingers would be no less effective. Most recently he advocated arming the rebels. But he should be more cautious before advocating American intervention in another conflict in another land. Such efforts rarely have desirable results. Iraq was a catastrophe. Afghanistan looks to be a disaster once American troops come home. After more than a decade Bosnia and Kosovo are failures, still under allied supervision. Libya is looking bad. Even without U.S. “help,” a full-blown civil war already threatens in Syria. We only look through the glass darkly, observed the Apostle Paul. It might be best for Washington not to intervene in another Muslim land with so many others aflame. Despite his support for restoring America’s economic health, Romney wants to increase dramatically Washington’s already outsize military spending. Rather than make a case on what the U.S. needs, he has taken the typical liberal approach of setting an arbitrary number: 4 percent of GDP. It’s a dumb idea, since America already accounts for roughly half the globe’s military spending — far more if you include Washington’s wealthy allies — and spends more in real terms than at any time during the Cold War, Korean War, or Vietnam War, and real outlays have nearly doubled since 2000. By any normal measure, the U.S. possesses far more military resources than it needs to confront genuine threats. What Romney clearly wants is a military to fight multiple wars and garrison endless occupations, irrespective of cost. My Cato colleague Chris Preble figured that Romney's 4 percent gimmick would result in taxpayers spending more than twice as much on the Pentagon as in 2000 (111 percent higher, to be precise) and 45 percent more than in 1985, the height of the Reagan buildup. Over the next ten years, Romney's annual spending (in constant dollars) for the Pentagon would average 64 percent higher than annual post-Cold War budgets (1990-2012), and 42 percent more than the average during the Reagan era (1981-1989). If Mitt Romney really believes that the world today is so much more dangerous than during the Cold War, he should spell out the threat. He calls Islamic fundamentalism, the Arab Spring, the impact of failed states, the anti-American regimes of Cuba, Iran, North Korea, and Venezuela, rising China, and resurgent Russia “powerful forces.” It’s actually a pitiful list — Islamic terrorists have been weakened and don’t pose an existential threat, the Arab Spring threatens instability with little impact on America, it is easier to strike terrorists in failed states than in nominal allies like Pakistan and Saudi Arabia, one nuclear-armed submarine could vaporize all four hostile states, and Russia’s modest “resurgence” may threaten Georgia but not Europe or America. Only China deserves to be called “powerful,” but it remains a developing country surrounded by potential enemies with a military far behind that of the U.S. In fact, the greatest danger to America is the blowback that results from promiscuous intervention in conflicts not our own. Romney imagines a massive bootstrap operation: he wants a big military to engage in social engineering abroad which would require an even larger military to handle the violence and chaos that would result from his failed attempts at social engineering. Better not to start this vicious cycle. America faces international challenges but nevertheless enjoys unparalleled dominance. U.S. power is buttressed by the fact that Washington is allied with every industrialized nation except China and Russia. America shares significant interests with India, the second major emerging power; is seen as a counterweight by a gaggle of Asian states worried about Chinese expansion; remains the dominant player in Latin America; and is closely linked to most of the Middle East’s most important countries, such as Israel, Saudi Arabia, Egypt, Jordan, and Iraq. If Mitt Romney really believes that America is at greater risk today than during the Cold War, he is not qualified to be president. In this world the U.S. need not confront every threat, subsidize every ally, rebuild every failed state, and resolve every problem. Being a superpower means having many interests but few vital ones warranting war. Being a bankrupt superpower means exhibiting judgment and exercising discretion. President Barack Obama has been a disappointment, amounting in foreign policy to George W. Bush-lite. But Mitt Romney sounds even worse. His rhetoric suggests a return to the worst of the Bush administration. The 2012 election likely will be decided on economics, but foreign policy will prove to be equally important in the long-term. America can ill afford another know-nothing president.

#### Romney crushes Russia relations

**CSM, 10-26-11**, p. http://www.alaskadispatch.com/article/putin-and-russian-empire-can-us-russian-relations-survive?page=0,1

Russia's foreign policy community is watching with growing nervousness as leading Republicans in the US, including at least one top contender for the party's presidential nomination, turn their ire against Barack Obama's already troubled "reset" in US-Russian relations, which the Kremlin sees as vital to its future plans for repairing Russian influence in the world.

Republicans have been critical all along of Mr. Obama's policy of building strong, practical relations with Moscow while soft-peddling US disapproval of Kremlin power abuses and human rights violations. But as recently as last December, more than a dozen Republican senators joined Democrats to win the needed two-thirds Senate ratification of the START nuclear arms reduction accord, which was understood in Moscow as a sign that pragmatism would always prevail in Washington.

Now, Russian experts do not seem so sure.

Since former president Vladimir Putin decided to shoulder aside his hand-picked successor, Dmitry Medvedev, and seek a fresh term as Russia's supreme leader, the tone of discussion about Russia in the US has grown much harsher, many note.

Mr. Putin's recently publicized plan to establish a "Eurasian Union" – a strong economic, and potentially political, alliance of former Soviet states – has rekindled fears among many in the West that Russia's strategic goal is to bring back the USSR and return to its historic rivalry with the US.

"We had hoped that the reset with the US might help Russia move into a friendlier, closer relationship with the West, but that seems to be fading fast," says Viktor Kremeniuk, deputy director of the official Institute of USA-Canada Studies in Moscow. "Now it seems the general opinion in the US is that Russia is fast becoming an authoritarian state with the scarecrow figure of Putin as its next president. It's all starting to feel a bit hopeless."

In a Washington Post interview earlier this month, Republican presidential contender Mitt Romney, often seen as moderate, is quoted as saying that Putin "dreams of rebuilding the Russian empire." Obama's reset of relations "has to end ... we have to show strength," Mr. Romney added.

Reining in Russian ambitions?

At a Washington conference Tuesday, Republican House Speaker John Boehner slammed Russia's "use of old tools and old thinking" as an attempt "to restore Soviet-style power and influence," and called for tougher measures to rein in Russian ambitions. At the same meeting, Garry Kasparov, a leader of the banned Other Russia opposition movement, urged Americans to heed Ronald Reagan's advice and treat Putin's Russia as an "evil empire" beyond the pale of civilized nations.

The current cold war-style spat between Moscow and Washington over the suspicious death of Sergei Magnitsky, an anticorruption lawyer who died after being denied medical treatment in a Russian remand prison two years ago, clearly illustrates the reasons Moscow prefers Obama to any Republican who might come into the White House.

A bill currently before the US Senate, the Sergei Magnitsky Rule of Law Accountability Act of 2011, and heavily supported by Republicans, would impose tough visa restrictions and financial penalties on a list of Russian officials deemed to be implicated in his fate.

But the US State Department has moved to preempt the bill by issuing its own "secret" list of proscribed officials, without imposing any financial sanctions, and connecting it with global human rights policies rather than a measure specifically targeted at Russia. Last weekend Moscow announced its own list of US citizens allegedly implicated in human rights abuses, who would be denied entry to Russia.

"On the surface it looks like a bad dispute, but actually we see the actions of the Obama administration as proof that it is committed to the reset," says Dmitry Suslov, an expert with the Council on Foreign and Defense Policies, an influential Moscow think tank. "The Senate bill is purely anti-Russian, and for the time being at least, Obama has managed to blunt this. It's greatly appreciated in Moscow.... We know that if any of the current Republican presidential nominees makes it to the White House, things will go very badly for the US-Russian relationship."

#### Extinction

**Collins & Rojansky, 10** – \* U.S. Ambassador to the Russian Federation from 1997 to 2001, AND \*\*deputy director of the Russia and Eurasia Program at the Carnegie Endowment (8/18/10, James F. Collins, Matthew Rojansky, Foreign Policy, “Why Russia Matters,” http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=41409, JMP)

A year and a half after Barack Obama hit the "reset" button with Russia, the **reconciliation is still fragile, incomplete, and politically divisive**. Sure, Russia is no easy ally for the United States. Authoritarian yet insecure, economically mighty yet technologically backward, the country has proven a challenge for U.S. presidents since the end of the Cold War. Recent news hasn't helped: The arrest in July of a former deputy prime minister and leader of the Solidarity opposition movement, Boris Nemtsov, provoked some of the harshest criticism of Russia yet from the Obama administration. Then last Wednesday, Russia announced that it had moved anti-aircraft missiles into Abkhazia, the region that broke off from Georgia during the August 2008 war. The announcement was hardly welcome news for the United States, which has tried to defuse tensions there for the last 24 months.

Yet however challenging this partnership may be, Washington can't afford not to work with Moscow. Ronald Reagan popularized the phrase, "Trust, but verify" -- a good guiding principle for Cold War arms negotiators, and still apt for today. Engagement is the only way forward. Here are 10 reasons why:

1. **Russia's nukes are still an existential threat.**

Twenty years after the fall of the Berlin Wall, Russia has thousands of nuclear weapons in stockpile and hundreds still on hair-trigger alert aimed at U.S. cities. This threat will not go away on its own; cutting down the arsenal will require direct, bilateral arms control talks between Russia and the United States. New START, the strategic nuclear weapons treaty now up for debate in the Senate, is the latest in a long line of bilateral arms control agreements between the countries dating back to the height of the Cold War. To this day, it remains the only mechanism granting U.S. inspectors access to secret Russian nuclear sites. The original START agreement was essential for reining in the runaway Cold War nuclear buildup, and New START promises to cut deployed strategic arsenals by a further 30 percent from a current limit of 2,200 to 1,550 on each side. Even more, President Obama and his Russian counterpart, Dmitry Medvedev, have agreed to a long-term goal of eliminating nuclear weapons entirely. But they can only do that by working together.

2. **Russia is a swing vote on the international stage.**

As one of the five permanent members of the U.N. Security Council, Moscow holds veto power over any resolution that the body might seek to pass -- including recent efforts to levy tougher sanctions on Iran or, in 2009, against North Korea following that country's second nuclear test. Russian support for such resolutions can also help persuade China and others not to block them. The post-reset relationship between Moscow and Washington works like a force multiplier for U.S. diplomacy. Russia plays an equally crucial role in the G-8 and G-20 economic groups, helping to formulate a coordinated approach in response to economic threats. In 2008, for example, Russia supported a G-20 resolution promising to refrain from protectionism and avoid new barriers to investment or trade.

3. Russia is big.

The country's borders span across Europe, Central and East Asia, and the Arctic -- all regions where the United States has important interests and where it cannot afford destructive competition. With an ongoing counterinsurgency campaign in Afghanistan, the United States has a strong interest in Central Asian stability and relies on Russia not only for direct assistance with logistics and information sharing, but to help manage threats like the recent political upheaval and sectarian violence in Kyrgyzstan. In the former Soviet space, Moscow's historical ties to newly independent states are still fresh and powerful. Moscow is the linchpin to resolving "frozen conflicts" that prevent countries like Moldova, Georgia, and Azerbaijan from prospering economically and moving toward European Union membership. Recently, for example, Moscow signaled renewed interest in resolving frozen conflicts in Nagorno-Karabakh and Transnistria. And despite recent troop movements into Abkhazia, a negotiated settlement is still very possible, one that returns some territory to Georgia but preserves its autonomous status, along with that of its fellow breakaway republic, South Ossetia.

4. Russia's environment matters.

As the catastrophic fires across Western Russia have dramatically illustrated, Russia is both a victim of global climate change and a steward of natural resources -- including many of the forests now badly burned -- **needed to reverse the global warming trend.** With more than one-tenth of the world's total landmass, vast freshwater and ocean resources, plus deposits of nearly every element on the periodic table, Russia is an indispensable partner in the responsible stewardship of the global environment. On climate change, there is work to be done, but progress is evident. Russia today is the world's fourth-largest carbon emitter, but as a signatory to the Copenhagen Accord, it has pledged to reduce emissions to 20 to 25 percent below 1990 levels. Another black spot is Russia's use of "flaring" -- a technique that burns natural gas into the open atmosphere during oil extraction, but Medvedev agreed to capture 95 percent of the gas currently released through flaring. Last year he also signed Russia's first law on energy efficiency, which takes such steps as requiring goods to be marked according to their energy efficiency and banning incandescent light bulbs after 2014. True, most of Russia's other commitments are short on deadlines and concrete deliverables. But like China's cleanup for the Beijing Olympics, Moscow could transform resolve into reality with surprising speed, given the right amount of international engagement. And in the meantime, Russia's natural climate-cleaning properties are vast; the Siberian provinces alone contain more clean oxygen-producing forests and reserves of freshwater than continental Europe.

5. Russia is rich.

As the "R" in the famous BRIC grouping of emerging economies, Russia is the 12th-largest market in world, with the third-largest foreign currency reserves. And the country's role in world markets is only growing. Russia is a big player in commodity trading, the country boasts a volatile but increasingly attractive stock exchange, and it is open to foreign investment -- even in state-owned industries. Russian businesses are increasingly looking abroad to form strategic partnerships, acquire assets, and sell their products. And as a country that felt the global financial crisis viscerally -- economic growth fell by almost 8 percent in 2009 -- Russia has a strong interest in making sure there is no repeat. Despite occasional retrenchments, such as the ban on grain exports after the summer fires, Russia is committed to becoming a free-trading World Trade Organization member, and wants more access to U.S. and European technology and management know-how to drive its modernization. Excessive bureaucracy and widespread corruption are the biggest challenges to Russia's further economic growth, but these are already top talking points in Medvedev's modernization drive, and engagement with more transparent Western countries such as the United States can only help.

6. One word: energy.

The American way of life depends on stable and predictable commodity prices -- gasoline, natural gas, and coal in particular -- and Russia plays a large role in the global production and pricing of these fossil fuels. Russia alone possesses roughly one-quarter of the world's known gas reserves, and it is currently responsible for over a fifth of global exports. It is the second largest oil-producing state after Saudi Arabia and has the second-largest coal reserves after the United States. The even better news for Washington is that Russia is not a member of OPEC, the cartel of oil-producing countries. This gives the country far more freedom to focus on increasing exports rather than reducing them to keep prices down. When it comes to bringing supply to market, many will no doubt remember the so-called gas wars between Russia and Ukraine and Russia and Belarus that left Eastern Europe in the cold several times in recent years. Much of the trouble is attributable to the legacy of Soviet energy infrastructure in Russia's western neighbors, which put a choke-hold on Russia's gas pipelines. Moscow is currently working with the United States, China, and Western Europe to find a way around this problem, which will entail building new pipelines through the Baltic Sea, Black Sea and Siberia.

7. **Russia is a staunch ally in the war on terror** (and other scourges).

Even during the dark days after the 2008 Russia-Georgia war, Moscow and Washington cooperated effectively on counterterrorism, counternarcotics, infectious disease prevention and response, and other shared security priorities. Recently, the two have worked together under the auspices of the Bilateral Presidential Commission to coordinate relief strategies for catastrophes such as the Haiti earthquake and the violence in Kyrgyzstan. Both Washington and Moscow recognize that swift, well-organized responses to such crises are key to preventing weaknesses from being exploited -- for example by extremist groups who are happy to fill the vacuum of government authority. Russia is also a critical partner in U.S. law enforcement efforts to defeat organized crime and terrorism financing. The two countries are currently working to map smuggling routes in Central Asia. And Russia has shared information with the United States on the informal financial networks used to fund Taliban and Afghan warlords.

8. The roads to Tehran and Pyongyang go through Moscow.

Russia maintains unique relationships with Iran and North Korea -- both top concerns on Washington's nuclear nonproliferation radar. In the past, the Kremlin has used its leverage to keep the path open for negotiations, sending senior diplomats to Tehran and offering carrots such as civilian nuclear assistance and weapons sales (though it has deferred the sale of advanced S-300 ground-to-air missiles that could be used to blunt a U.S. or Israeli air strike). Now more than ever, Washington needs allies with that kind of leverage to help punish violators and **discourage cascading nuclear proliferation worldwide.** Leading by example on nonproliferation is also a must; as the world's biggest nuclear powers, the United States and Russia are looked to as the standard-setters. If they fail to ratify their latest modest step forward on bilateral nuclear arms control, it will be difficult to push other countries to take similar counter-proliferation measures.

9. **Russia can be a peacemaker.**

Moscow has the potential to play a role in the settlement of key regional conflicts -- or if it chooses, to obstruct progress. Russia is a member of the Middle East "Quartet," the six-party talks dealing with North Korean denuclearization, and each of the working groups addressing conflicts in the post-Soviet space, such as the OSCE Minsk group on Nagorno-Karabakh, and the 5+2 group on Transnistria. In such post-Soviet regions in particular, Russia has a unique capacity to contribute to peaceful resolution of territorial disputes by facilitating trade and economic engagement with and between former adversaries, and acting as a peacekeeper once a final settlement is reached. In the Middle East, Russia still controls a network of commercial and intelligence assets and has substantial influence with the Syrians, who should be pushed to play a more productive role in the Arab-Israeli peace process.

10. Russians buy U.S. goods.

As the U.S. economy stops and starts its way out of recession, most everyone agrees that boosting exports is a key component in the recovery. And Russia is a big market. U.S. companies such as Boeing, International Paper, and John Deere have invested billions in Russian subsidiaries and joint ventures. In all, there are more than 1,000 U.S. companies doing business there today. They are in Russia not only to take advantage of the country's vast natural resources and highly skilled workers but also to meet the demand for American-branded goods. The Russian middle class wants consumer goods and the country's firms increasingly seek advanced U.S. equipment and machinery. Between 2004 and 2008, before the financial crisis hit, U.S.-Russia trade grew by more than 100 percent to over $36 billion annually, and although that figure dropped by a third in 2009, there is potential for an even better, more balanced trade relationship in the coming decade.

In short, **Russia is indispensible**. As long as the United States participates in the global economy and has interests beyond its own borders, it will have no choice but to maintain relations with Russia. And good relations would be even better.

### 1nc cp

#### The 50 state governments and relevant sub-federal actors should obtain, through power purchasing agreements, electricity from small modular reactors for military instillations in the United States.

#### Solves commercialization and spills over

**Rosner, 11** - Robert Rosner is an astrophysicist and founding director of the Energy Policy Institute at Chicago. He was the director of Argonne National Laboratory from 2005 to 2009 (Robert, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.” November, <http://epic.uchicago.edu/sites/epic.uchicago.edu/files/uploads/SMRWhite_Paper_Dec.14.2011copy.pdf>)

Production Cost Incentive: A production cost incentive is a performance-based incentive. With a production cost incentive, the government incentive would be triggered only when the project successfully operates. The project sponsors would assume full responsibility for the upfront capital cost and would assume the full risk for project construction. The production cost incentive would establish a target price, a so-called “market-based benchmark.” Any savings in energy generation costs over the target price would accrue to the generator. Thus, a production cost incentive would provide a strong motivation for cost control and learning improvements, since any gains greater than target levels would enhance project net cash flow. Initial SMR deployments, without the benefits of learning, will have significantly higher costs than fully commercialized SMR plants and thus would benefit from production cost incentives. Because any production cost differential would decline rapidly due to the combined effect of module manufacturing rates and learning experience, the financial incentive could be set at a declining rate, and the level would be determined on a plant-by-plant basis, based on the achievement of cost reduction targets. 43 The key design parameters for the incentive include the following: 1. The magnitude of the deployment incentive should decline with the number of SMR modules and should phase out after the fleet of LEAD and FOAK plants has been deployed. 2. The incentive should be market-based rather than cost-based; the incentive should take into account not only the cost of SMRs but also the cost of competing technologies and be set accordingly. 3. The deployment incentive could take several forms, including a direct payment to offset a portion of production costs or a production tax credit.

### 1nc cp

#### The Department of Defense should obtain, through alternative financing, electricity from space solar power for military bases in the United States.

#### Counterplan leads to rapid commercial development

**NSSO 7** (National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf)

FINDING:The SBSP Study Group found that industry has stated that the #1 driver and requirement for generating industry interest and investment in developing the initial operational SBSP systems is acquiring an anchor tenant customer, or customers, that are willing to sign contracts for high‐value SBSP services. Industry is particularly interested in the possibility that the DoD might be willing to pay for SBSP services delivered to the warfighter in forward bases in amounts of 5‐50 MWe continuous, at a price of $1 or more per kilowatt‐hour.  o Recommendation:  The SBSP Study Group recommends that the DoD should immediately conduct a requirements analysis of underlying long‐term DoD demand for secure, reliable, and mobile energy delivery to the war‐fighter, what the DoD might be willing to pay for a SBSP service delivered to the warfighter and under what terms and conditions, and evaluate the appropriateness and effectiveness of various approaches to signing up as an anchor tenant customer of a commercially‐delivered service, such as the NextView acquisition approach pioneered by the National GeoSpatial‐imaging Agency. FINDING: The SBSP Study Group found that even with the DoD as an anchor tenant customer at a price of $1‐2 per kilowatt hour for 5‐50 megawatts continuous power for the warfighter, when considering the risks of implementing a new unproven space technology and other major business risks, the business case for SBSP still does not appear to close in 2007 with current capabilities (primarily launch costs). This study did not have the resources to adequately assess the economic viability of SBSP given current or projected capabilities, and this must be part of any future agenda to further develop this concept. Past investigations of the SBSP concept have indicated that the costs are dominated by costs of installation, which depend on the cost of launch (dollars per kilogram) and assembly and on how light the components can be made (kilograms per kilowatt). Existing launch infrastructure cannot close the business case, and any assessment made based upon new launch vehicles and formats are speculative. Greater clarity and resolution is required to set proper targets for technology development and private capital engagement. Ideally SBSP would want to be cost‐competitive with other baseload suppliers in developing markets which cannot afford to spend a huge portion of their GDP on energy (4c/kWh), and these requirements are extremely stringent, but other niche export markets may provide more relaxed criteria (35c/kWh), and some customers, such as DoD, appear to be spending more than $1/kWh in forward deployed locations. It would be helpful to develop a series of curves which examine technology targets for various markets, in addition to the sensitivities and opportunities for development. Some work by the European Space Agency (ESA) has suggested that in an “apples‐to‐apples” comparison, SBSP may already be competitive with large‐scale  terrestrial solar baseload power. A great range of opinions were expressed during the study regarding the near‐term profitability.  It is instructive to note that that there are American companies that have or are actively marketed SBSP at home and abroad, while another group feels the technology is sufficiently mature to create a dedicated public‐private partnership based upon the COMSAT model and has authored draft legislation to that effect. • The business case is much more likely to close in the near future if the U.S. Government agrees to: o Sign up as an anchor tenant customer, and o Make appropriate technology investment and risk‐reduction efforts by the U.S. Government, and o Provide appropriate financial incentives to the SBSP industry that are similar to the significant incentives that Federal and State Governments are providing for private industry investments in other clean and renewable power sources. • The business case may close in the near future with appropriate technology investment and risk‐reduction efforts by the U.S. Government, and with appropriate financial incentives to industry. Federal and State Governments are providing significant financial incentives for private industry investments in other clean and renewable power sources. o Recommendation: The SBSP Study Group recommends that in order to reduce risk and to promote development of SBSP, the U.S. Government should increase and acceler

ate its investments in the development and demonstration of key component, subsystem, and system level technologies that will be required for the creation of operational and scalable SBSP systems. Finding: The SBSP Study Group found that a small amount of entry capital by the US Government is likely to catalyze substantially more investment by the private sector. This opinion was expressed many times over from energy and aerospace companies alike. Indeed, there is anecdotal evidence that even the activity of this intermim study has already provoked significant by at least three major aerospace companies. Should the United States put some dollars in for a study or demonstration, it is likely to catalyze significant amounts of internal research and development. Study leaders likewise heard that the DoD could have a catalytic role by sponsoring prizes or signaling its willingness to become the anchor customer for the product.

#### Solves supply vulnerability

**NSSO, 7** (National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, <http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf>)

For the DoD specifically, beamed energy from space in quantities greater than 5 MWe has the potential to be a disruptive game changer on the battlefield. SBSP and its enabling wireless power transmission technology could facilitate extremely flexible “energy on demand” for combat units and installations across an entire theater, while significantly reducing dependence on vulnerable over‐land fuel deliveries. SBSP could also enable entirely new force structures and capabilities such as ultra long‐endurance airborne or terrestrial surveillance or combat systems to include the individual soldier himself. More routinely, SBSP could provide the ability to deliver rapid and sustainable humanitarian energy to a disaster area or to a local population undergoing nation‐building activities. **SBSP could also facilitate base “islanding”** such that each installation has the ability to operate independent of vulnerable ground‐ based energy delivery infrastructures. In addition to helping American and Allied defense establishments remain relevant over the entire 21st Century through more secure supply lines, perhaps the greatest military benefit of SBSP is to lessen the chances of conflict due to energy scarcity by providing access to a strategically security energy supply.

**U.S. led SSP is vital to solving water wars – risks extinction**

**Schwab, 05 –** director of the Homeplanet Defense Institute (Martin, Homeplanet Defense: Strategic Thought for a World in Crisis, chapter 5)

The protracted crisis in Israel/Palestine continues to fuel much of the fire in the hearts of the Islamic world against the U.S. Even Europe, in general, perceives the U.S. as an impartial broker. This dynamic is destructive to the world system because it divides the transatlantic alliance, perhaps more than most analysts are willing to admit. As the gulf between Europe and the U.S. widens, hardliners and even reformers in China have less of an incentive to take the risks necessary for renewing their great civilization.¶ I believe the sickness in Israel/Palestine radiates outward to the rest of humankind, leading us toward auto-nuclear annihilation on our planet. By implication, I believe the situation in Israel/Palestine is the most immediate and pivotal threat to¶ humankind's continued expansion throughout the cosmos. The stakes have never been higher, more urgent and more opportune¶ on this question than at the present. This is why an entire chapter is devoted to examining this infuriating conflict.¶ Rabbi Michael Lerner, a citizen of San Francisco whose father was national vice president of the Zionist Organization of America, offers a reflective and courageous voice on what is needed to heal Israel/Palestine. "Healing Israel/Palestine" is Rabbi Lerner's framework for how to resolve once and for all this burning and vital question before the world community. To quote Rabbi Lerner:¶ Jews did not return to their ancient homeland to oppress the Palestinian people, and Palestinians did not resist the creation of a Jewish state out of hatred of the Jews ... In fact, both sides have made and continue to make terrible mistakes ... As long as each side clings to its own story, and is unable to acknowledge what is plausible in the story of the other side, peace will remain a distant hope... We need to learn how two groups of human beings, each containing the usual range of people –from loving to hateful, rational to demented, idealistic to self-centered – could end up feeling so angry at each other. 180¶ Rabbi Lerner has founded a group called Tikkun, which in Hebrew means healing or transformation. This dedicated group has an agenda of global peace that starts- with healing Israel/Palestine. See also www.tikkun.org.¶ Another useful framework for cooling the cauldron of our world's sickness has been offered by diplomatic historians Dr. Laura Zittrain Eisenberg and Dr. Neil Caplan. Like Lerner, they contend that the "unfinished business" of the Arab-Israeli peace process is solvable but only if the parties themselves break the historic patterns of failed negotiations. 181¶ Eisenberg and Caplan outline the period from 1918-1977 as being characterized by "persistence of passionately held but genuinely irreconcilable national goals [italics are mine]" primarily over territory. The nation-states in the region conducted negotiations for appearances, "trying to impress upon their constituents or upon a powerful third party the justness of their cause, the righteousness of their interpretation of events and their flexibility and willingness to resolve matters, as opposed to the extremist, uncompromising posture of the other side."' 82 Today, this description still applies to Israel and the Palestinians. Eisenberg and Caplan conclude that what is needed, is for the leaders in the region to somehow think about the conflict in a different way that does not inevitably lead to deadlock. 181¶ The rest of this chapter offers a few specific prescriptive measures by which Israel/Palestine can heal their sickness, with the aid of the rest of the world. As the world moves forward on the Israel/Palestine question, it will be important for the U.S., EU, Russia and the UN, known as the "Quartet" of third-party negotiators to keep in mind a potential inhibitor to peace in the region: The leaders of Egypt, Syria, Saudi Arabia and Iran will be vying amongst one other to be the most influential leader of all Islamic people.¶ Middle East water as a global strategic issue¶ Given the intertwining issues of Israeli settlements and Palestinian and Arab states' demographic projections, this section will address the issue of water in the Middle East in terms of scarcity rather than distribution.¶ During the latter half of 2002, water scarcity became a quiet driver of conflict in the Middle East. This driver, which has long been considered a topic of "low diplomacy," has the potential to inflame already negative attitudes against the U.S. presence in the region. It has been argued that water resource initiatives over the years have not been as successful as they could have been because they were handled separately from political discussions. Some believe that this separation of "high" diplomacy from "low" diplomacy dooms each process to failure. Progress that had been made by water experts in the Madrid multilateral talks ceased in 1996 only because the bilateral talks on final status between the Palestinians and Israel broke down during Benjamin Netanyahu's tenure as Prime Minister of Israel.' 84¶ Restarting the multilateral discussions known as the "multilaterals" became a high diplomacy issue of public contention between Israel and Egypt. Egypt contended that resumption of the multilaterals was contingent on the revival of the bilateral talks between Israel and Syria. Addressing mutual problems (namely water scarcity) in what has become the "post peace process era" in the Middle East is an alternative diplomatic framework in which to shape a common vision for future general relations.' 85¶ In October 2002, the Sharon government of Israel, despite U.S. pressure on it to compromise on the water issue, threatened to go to war with Lebanon over water resources. Sharon, a long time champion for Israeli settlements, stated: "We are deploying maximum efforts to keep our water resources, and Israel always has and always will do whatever it takes to protect its vital resources." This statement, made on public radio, was in reaction to Lebanon's plan to pump water from the Wazzani River. This river indirectly feeds the Sea of Galilee, Israel's main source of fresh water. Lebanon's position is that the water transfer would provide needed drinking water to some 40 villages in the border area. This area had been under Israeli occupation for 22 years, until May 2000. 186¶ In response, Hezbollah chief, Seyyed Hassan Nasrallah, warned Israel that if it attacks the new Lebanese pumping station on the Wazzani, his guerrillas would retaliate "within minutes" at already selected targets in Israel.' 8' These diplomatic exchanges, through the intermediary of the international press, are indicative of a type of cold war framework that has emerged over the lifeblood of the region, water. Given the seriousness of the situation, the U.S. Department of State sent to the region Chuck Lawson, a U.S. water expert. In late 2002, Lawson conducted quiet talks with officials on both sides of the border. In addition, the EU and the UN sent their own delegates to mediate. 188 It is absolutely critical that the U.S. preempt the possibility of nation-state on nation-state conflict between Israel and her neighbors by placing desalination powered by space solar power on the agenda for peace in a manner that is noticeable to the world community.¶ This is not the first time that the U.S. has acted as a critical third party in the Middle East over the issue of water scarcity. In July 1953, just a few years after its founding, Israel began construction on the intake of its National Water Carrier, on the northern shore of the Sea of Galilee. The problem was that their construction began in the demilitarized zone between Israel and Syria. Syria deployed its armed forces along the border and artillery units opened fire on the construction and engineering sites. Syria then protested Israel's action to the UN. 189¶ In 1954, the UN issued a resolution that allowed Israel to resume work on the water carrier and the U.S.S.R. vetoed the resolution. Israel then moved its intake out of the demilitarized zone and to the northwest shore of the Sea of Galilee. It was during this tense situation, with Cold War implications, that President Eisenhower sent his special envoy, Eric Johnston, to the Middle East in October 1953. His mission was to mediate a comprehensive settlement of the Jordan River system and design a plan for its regional development.'"¶ Johnston engaged in shuttle diplomacy until the end of 1955 to reconcile and unify the separate plans that had been presented by the U.S., Arab states and Israel. His position in the negotiations was bolstered by the fact that the U.S. was offering to fund two-thirds of the development costs. Johnston was also able to work with the common belief by both sides that a regional approach was¶ needed.' 9' Johnston addressed the objections of both Israelis and Arabs and therefore achieved a great deal of compromise in what has become known as the "Johnston Plan." The structure of the Johnston Plan was around distribution of existing water in the Jordan Basin. Four hundred million cubic meters (MCM) per year would go to Israel, 720 MCM/year to Jordan, 35 MCM/year to Lebanon and 132 MCM/year to Syria. Israel had given up on appropriating the Litani River for its sole use and was accepting international supervision of its water projects. Arab states agreed to Israeli storage of water in the Sea of Galilee and the construction of the Magarin Dam as long as neither side would have physical control over the share available to the other.' 192¶ Johnston's neglect, perhaps purposeful, of groundwater issues later proved to be a significant oversight. The Johnston Plan was never ratified. However, since that time to the present, Israeli and Jordanian (not Syrian) water officials have met several times a year at the confluence of the Jordan and Yarmuk rivers at "Picnic Table Talks" to discuss flow rates and allocations. The water officials even meet as often as every two weeks during the critical summer months. It should be noted that the impetus for this cooperation has been funding for future water development projects, promised by the U.S. only as long as the principles behind the Johnston Plan are adhered to.' 9'¶ Sometimes, what a critical third party cannot achieve through the rule of law, due to the need of parties to save face, can be achieved through hard cash, in combination with innovative ideas.¶ It is important to understand that the Middle East is a transition zone between Mediterranean subtropical and and climates. The Middle East has three main watersheds: the Nile Basin, the Jordan Basin (or "Jordan Valley") and the Tigris-Euphrates Basin. The politics of the Middle East have always been in part "hydro-politics" that occur when a population's demand for water approaches or exceeds water supply. It is little wonder that former Secretary General of the UN, Boutros Boutros-Ghali, said in 1991 that a future war in the Middle East may be fought over water. 194¶ This chapter focuses on the Jordan Basin or watershed. The conflict in this area, albeit for many reasons beyond water, has infected the entire globe with fervor for human self-destruction. Understanding this crucial strand of this conflict is key to untangling this web that has been woven by Israel and her neighbors in the years since 1948.¶ Seawater desalination powered by space solar power¶ The proximity of the Mediterranean and Red seas serves as an attractive potential to create water abundance through desalination powered by SSP. This potential could help bring the general conflict in this region of our interconnected world to an end. The factor of expense that is associated with water desalination will not be used in the typical manner to disregard the option of desalination but rather as a framework around which all sides involved in the present conflict may be able to contribute.¶ It is the oceans that hold 97 percent of the water on our homeplanet. Desalination is technically feasible, and the use of the process has grown enormously over the last 40 years. In 1992, more than 7,500 desalination plants of various kinds and sizes existed worldwide. Together, they convert 4.8 billion cubic meters of salt water into fresh water each year. However, desalination still produces just one tenth of 1 percent of the world's potable water. Desalination, either by heating water and condensing the steam (distillation) or by filtering water through a membrane using pressure (reverse osmosis), is energy intensive. SSP can ease this problem in Israel/Palestine.¶ ¶

### 1nc solvency

#### Squo solves—NRC is conducting SMR assessments with industry participation, but letting that demanding review process finish first is crucial to solvency

Heft, ‘11

[Gordon, Black & Veatch, “Small Modular Reactors Make Headway In Many Countries: Design Certification Starts Soon,” Issue No. 1, http://solutions.bv.com/small-modular-reactors-make-headway-in-many-countries/]

Small Modular Reactors (SMRs), those nuclear power plants that have the capability of being mass produced, hauled by rail and dropped in the ground, at first glance sound like something from the futuristic pages of Popular Science magazine. But look out – the first proposals head for design certification as early as next year. Already, the U.S. Nuclear Regulatory Commission (NRC) is holding discussions with various designers on what are called topical reports. It is a “meet and discussion” time that allows the subjects addressed in the topical reports (e.g., security, passive safety systems) to get an early review by the NRC and to see what kinds of questions or concerns the NRC raises. Call it an early-stage vetting opportunity. “SMRs have many advantages, including the passive cooling systems that have simplicity and safety,” said Larry Drbal, Chief Engineer, Nuclear for Black & Veatch. “It is really an interesting, exciting concept.” The notion of using nuclear power in a very small manner is certainly not new, considering several countries have naval fleets that are nuclear powered. But using SMRs to generate electrical power in small quantities – 10 megawatts to 300 MW – is definitely new and ground-breaking, Drbal said. Currently, there are four small reactors operating in a remote area of Siberia and a floating barge equipped with two small reactors under construction in Russia, with operation expected in 2013 near the city of Viluchinsk. Drbal sees SMRs as gaining much traction in the next few years. Although the design certification documents (DCDs) may take five years for NRC review, he said that utilities could also submit COLAs (combined construction and operating license applications) to the NRC in parallel with the DCD. By the time the DCD receives NRC approval, the COLA approval could soon follow, and construction could quickly begin. “One developer is saying they expect to have their first SMR operating commercially by 2020,” Drbal noted. Advantages to SMRs Drbal has no problem reeling off a laundry list of advantages he sees to this new way of viewing nuclear power. “All components can be built in-country and then hauled by truck, rail or barge to the site. These modules can be mass produced, which gains factory-like efficiencies. Since they are modular, they can be built to match the load growth of a given region, and when you need additional power, you add another module, just like what we do with combined cycle units.” Drbal says SMRs will likely be used in remote locations, where it is difficult to generate power and erect transmission lines. Because the generation size is so much smaller than a full-sized nuclear plant, the load output would be more compatible with the electric grid size. The designs also promise longer fuel cycles, and when it does come time to refuel, it may be a matter of pulling out one module and dropping in a new one for some SMR designs. Financially, SMRs come with a much smaller price tag. While owners are probably looking upwards at $1 billion, Drbal estimates, that is still dwarfed by the $8 billion price that comes with the full-sized brethren. With the smaller size also comes a smaller staff, partially reduced security needs, less operating maintenance, decreased financial risk, and perhaps even less emergency planning. The designs also are “passive,” meaning less safety-related pumps, motors, piping and other apparatus. International Interest in SMRs Many countries are looking at developing SMRs – China, South Korea, Argentina, Russia, the U.S., South Africa and France, just to name a few. The International Atomic Energy Association projects that 1,000 such reactors could be in commercial operation in the next 30 years – reaching isolated areas and small cities. There are a variety of different designs being offered by the global nuclear community, ranging from scaled-down PWRs (pressurized water reactors) to liquid metal-cooled (e.g., sodium) fast reactors to high-temperature gas-cooled reactors. “The NRC is first looking at the PWR designs, since that is what they are used to examining,” Drbal noted. “We expect the first two design certification applications to go before the NRC for review beginning in 2012.” The review process is meticulous but is continually ongoing during the five-year period, although SMR developers believe the NRC review time will be less because their designs are smaller, passive and simpler. There are many SMR generic licensing issues that will require resolution, including emergency planning, passive safety systems, staffing, physical security, financial issues, decommissioning and many more. These issues are being addressed with the NRC by the industry, technical societies, the government and other organizations. “The NRC will do a very detailed analysis. They will question everything – all assumptions, all calculations,” Drbal said. “They will ask for documentation, data and proof on literally hundreds of items. And after you answer those questions, they’ll ask more. They will also do their own analyses. Then there is a public comment period, which will generate more questions and discussions. It just takes time.” The fact that all of this technology is new – and in some cases, unproven – makes it even more time-consuming. There are few existing prototypes to gather data from, and no commercial operations to point to as examples. Still, Drbal says he has no doubt that SMR designs will be moving forward quickly in the upcoming years.

#### Domestic SMR construction is inevitable without the plan, but accelerating it during the review process leads to catastrophic accidents

Wang, 12

[Ucilia, Forbes, 1-20, “Feds To Finance Small Nuclear Reactor Designs,” http://www.forbes.com/sites/uciliawang/2012/01/20/feds-to-finance-small-nuclear-reactor-designs/]

The U.S. Department of Energy on Friday announced a plan to support the design of so-called “small modular nuclear reactors” and popularize their use for power generation. The plan is to fund two reactor designs that will become available for licensing and production by 2022. The department is first asking for advice from the power industry on crafting the details of this project, and it hasn’t said how much it would dole out. But whoever wins the contracts to design the reactors will have to pony up money as well. Small reactors are generally about one-third the size of existing nuclear reactors, and a power plant with small reactors promises to be cheaper to build and easier to obtain permits more quickly than a full-size nuclear power plant, proponents say. Utilities should have more flexibility in modifying the size of a power plant with small reactors – if they need more power, then they can add more reactors over time. Nuclear reactors have historically been designed to be 1-gigawatt or more each because such scale helps to drive down the manufacturing and installation costs. Small reactors can be economical, too, advocates say, because they can be shipped more easily and cheaply around the world. “We think (small, modular nuclear) solves a lot of issues in terms of investments and electricity infrastructure,” Chu said at a press conference a year ago. “And it’s a way for the United States to regain its leadership in nuclear.” Several startups and major power equipment makers are working on small modular nuclear reactors. They include TerraPower, which is backed by Bill Gates and recently received funding from Indian conglomerate Reliance Industries. TerraPower also has been talking to the governments of China, India and Russia, basically countries where nuclear power won’t likely receive the kind of intense opposition that you’ll find in the United States, Germany or Japan. Other venture capital-funded startups include NuScale Power and Hyperion Power Generation (see a list from GigaOm). These companies aren’t just working on shrinking the size of the reactors. They also are investigating the use of different fuels and ways to reduce nuclear waste, for example. Following the energy department’s announcement Friday morning, Westinghouse Electric Co. issued a statement to say it intends to apply for the funding. Westinghouse already is in the nuclear reactor design business. It received approval from the Nuclear Regulatory Commission for a large, 1,154-megawatt nuclear reactor called AP1000 last month. The energy department funded part of the project to design AP1000. Just because small nuclear reactors promise many economic and environmental benefits (they don’t produce dirty air like coal or natural gas power plants do) doesn’t mean they can be developed and made more quickly or cheaply, however. Technology companies also will have to prove that their small nuclear reactors can be just as safe if not safer than the conventional, large-scale nuclear reactors today. The Fukushima nuclear power plant disaster in Japan has shown that a misstep in designing and operating a nuclear plant can have a far greater and more devastating impact than a mistake in running other types of power plants. That means nuclear power companies — and the government — will have to do a lot more to prove that nuclear power should remain an important part of the country’s energy mix.

Extinction

Lendman, ‘11

[Stephen, Research Associate -- Center for Research on Globalization, 3-13, “Nuclear Meltdown in Japan,” http://www.thepeoplesvoice.org/TPV3/Voices.php/2011/03/13/nuclear-meltdown-in-japan]

For years, Helen Caldicott warned it's coming. In her 1978 book, "Nuclear Madness," she said: "As a physician, I contend that nuclear technology threatens life on our planet with extinction. If present trends continue, the air we breathe, the food we eat, and the water we drink will soon be contaminated with enough radioactive pollutants to pose a potential health hazard far greater than any plague humanity has ever experienced." More below on the inevitable dangers from commercial nuclear power proliferation, besides added military ones. On March 11, New York Times writer Martin Fackler headlined, "Powerful Quake and Tsunami Devastate Northern Japan," saying: "The 8.9-magnitude earthquake (Japan's strongest ever) set off a devastating tsunami that sent walls of water (six meters high) washing over coastal cities in the north." According to Japan's Meteorological Survey, it was 9.0. The Sendai port city and other areas experienced heavy damage. "Thousands of homes were destroyed, many roads were impassable, trains and buses (stopped) running, and power and cellphones remained down. On Saturday morning, the JR rail company" reported three trains missing. Many passengers are unaccounted for. Striking at 2:46PM Tokyo time, it caused vast destruction, shook city skyscrapers, buckled highways, ignited fires, terrified millions, annihilated areas near Sendai, possibly killed thousands, and caused a nuclear meltdown, its potential catastrophic effects far exceeding quake and tsunami devastation, almost minor by comparison under a worst case scenario. On March 12, Times writer Matthew Wald headlined, "Explosion Seen at Damaged Japan Nuclear Plant," saying: "Japanese officials (ordered evacuations) for people living near two nuclear power plants whose cooling systems broke down," releasing radioactive material, perhaps in far greater amounts than reported. NHK television and Jiji said the 40-year old Fukushima plant's outer structure housing the reactor "appeared to have blown off, which could suggest the containment building had already been breached." Japan's nuclear regulating agency said radioactive levels inside were 1,000 times above normal. Reuters said the 1995 Kobe quake caused $100 billion in damage, up to then the most costly ever natural disaster. This time, from quake and tsunami damage alone, that figure will be dwarfed. Moreover, under a worst case core meltdown, all bets are off as the entire region and beyond will be threatened with permanent contamination, making the most affected areas unsafe to live in. On March 12, Stratfor Global Intelligence issued a "Red Alert: Nuclear Meltdown at Quake-Damaged Japanese Plant," saying: Fukushima Daiichi "nuclear power plant in Okuma, Japan, appears to have caused a reactor meltdown." Stratfor downplayed its seriousness, adding that such an event "does not necessarily mean a nuclear disaster," that already may have happened - the ultimate nightmare short of nuclear winter. According to Stratfor, "(A)s long as the reactor core, which is specifically designed to contain high levels of heat, pressure and radiation, remains intact, the melted fuel can be dealt with. If the (core's) breached but the containment facility built around (it) remains intact, the melted fuel can be....entombed within specialized concrete" as at Chernobyl in 1986. In fact, that disaster killed nearly one million people worldwide from nuclear radiation exposure. In their book titled, "Chernobyl: Consequences of the Catastrophe for People and the Environment," Alexey Yablokov, Vassily Nesterenko and Alexey Nesterenko said: "For the past 23 years, it has been clear that there is a danger greater than nuclear weapons concealed within nuclear power. Emissions from this one reactor exceeded a hundred-fold the radioactive contamination of the bombs dropped on Hiroshima and Nagasaki." "No citizen of any country can be assured that he or she can be protected from radioactive contamination. One nuclear reactor can pollute half the globe. Chernobyl fallout covers the entire Northern Hemisphere." Stratfor explained that if Fukushima's floor cracked, "it is highly likely that the melting fuel will burn through (its) containment system and enter the ground. This has never happened before," at least not reported. If now occurring, "containment goes from being merely dangerous, time consuming and expensive to nearly impossible," making the quake, aftershocks, and tsunamis seem mild by comparison. Potentially, millions of lives will be jeopardized. Japanese officials said Fukushima's reactor container wasn't breached. Stratfor and others said it was, making the potential calamity far worse than reported. Japan's Nuclear and Industrial Safety Agency (NISA) said the explosion at Fukushima's Saiichi No. 1 facility could only have been caused by a core meltdown. In fact, 3 or more reactors are affected or at risk. Events are fluid and developing, but remain very serious. The possibility of an extreme catastrophe can't be discounted. Moreover, independent nuclear safety analyst John Large told Al Jazeera that by venting radioactive steam from the inner reactor to the outer dome, a reaction may have occurred, causing the explosion. "When I look at the size of the explosion," he said, "it is my opinion that there could be a very large leak (because) fuel continues to generate heat." Already, Fukushima way exceeds Three Mile Island that experienced a partial core meltdown in Unit 2. Finally it was brought under control, but coverup and denial concealed full details until much later. According to anti-nuclear activist Harvey Wasserman, Japan's quake fallout may cause nuclear disaster, saying: "This is a very serious situation. If the cooling system fails (apparently it has at two or more plants), the super-heated radioactive fuel rods will melt, and (if so) you could conceivably have an explosion," that, in fact, occurred. As a result, massive radiation releases may follow, impacting the entire region. "It could be, literally, an apocalyptic event. The reactor could blow." If so, Russia, China, Korea and most parts of Western Asia will be affected. Many thousands will die, potentially millions under a worse case scenario, including far outside East Asia. Moreover, at least five reactors are at risk. Already, a 20-mile wide radius was evacuated. What happened in Japan can occur anywhere. Yet Obama's proposed budget includes $36 billion for new reactors, a shocking disregard for global safety. Calling Fukushima an "apocalyptic event," Wasserman said "(t)hese nuclear plants have to be shut," let alone budget billions for new ones. It's unthinkable, he said. If a similar disaster struck California, nuclear fallout would affect all America, Canada, Mexico, Central America, and parts of South America. Nuclear Power: A Technology from Hell Nuclear expert Helen Caldicott agrees, telling this writer by phone that a potential regional catastrophe is unfolding. Over 30 years ago, she warned of its inevitability. Her 2006 book titled, "Nuclear Power is Not the Answer" explained that contrary to government and industry propaganda, even during normal operations, nuclear power generation causes significant discharges of greenhouse gas emissions, as well as hundreds of thousands of curies of deadly radioactive gases and other radioactive elements into the environment every year. Moreover, nuclear plants are atom bomb factories. A 1000 megawatt reactor produces 500 pounds of plutonium annually. Only 10 are needed for a bomb able to devastate a large city, besides causing permanent radiation contamination. Nuclear Power not Cleaner and Greener Just the opposite, in fact. Although a nuclear power plant releases no carbon dioxide (CO2), the primary greenhouse gas, a vast infrastructure is required. Called the nuclear fuel cycle, it uses large amounts of fossil fuels. Each cycle stage exacerbates the problem, starting with the enormous cost of mining and milling uranium, needing fossil fuel to do it. How then to dispose of mill tailings, produced in the extraction process. It requires great amounts of greenhouse emitting fuels to remediate. Moreover, other nuclear cycle steps also use fossil fuels, including converting uranium to hexafluoride gas prior to enrichment, the enrichment process itself, and conversion of enriched uranium hexafluoride gas to fuel pellets. In addition, nuclear power plant construction, dismantling and cleanup at the end of their useful life require large amounts of energy. There's more, including contaminated cooling water, nuclear waste, its handling, transportation and disposal/storage, problems so far unresolved. Moreover, nuclear power costs and risks are so enormous that the industry couldn't exist without billions of government subsidized funding annually. The Unaddressed Human Toll from Normal Operations Affected are uranium miners, industry workers, and potentially everyone living close to nuclear reactors that routinely emit harmful radioactive releases daily, harming human health over time, causing illness and early death. The link between radiation exposure and disease is irrefutable, depending only on the amount of cumulative exposure over time, Caldicott saying: "If a regulatory gene is biochemically altered by radiation exposure, the cell will begin to incubate cancer, during a 'latent period of carcinogenesis,' lasting from two to sixty years." In fact, a single gene mutation can prove fatal. No amount of radiation exposure is safe. Moreover, when combined with about 80,000 commonly used toxic chemicals and contaminated GMO foods and ingredients, it causes 80% of known cancers, putting everyone at risk everywhere. Further, the combined effects of allowable radiation exposure, uranium mining, milling operations, enrichment, and fuel fabrication can be devastating to those exposed. Besides the insoluble waste storage/disposal problem, nuclear accidents happen and catastrophic ones are inevitable. Inevitable Meltdowns Caldicott and other experts agree they're certain in one or more of the hundreds of reactors operating globally, many years after their scheduled shutdown dates unsafely. Combined with human error, imprudently minimizing operating costs, internal sabotage, or the effects of a high-magnitude quake and/or tsunami, an eventual catastrophe is certain. Aging plants alone, like Japan's Fukushima facility, pose unacceptable risks based on their record of near-misses and meltdowns, resulting from human error, old equipment, shoddy maintenance, and poor regulatory oversight. However, under optimum operating conditions, all nuclear plants are unsafe. Like any machine or facility, they're vulnerable to breakdowns, that if serious enough can cause enormous, possibly catastrophic, harm. Add nuclear war to the mix, also potentially inevitable according to some experts, by accident or intent, including Steven Starr saying: "Only a single failure of nuclear deterrence is required to start a nuclear war," the consequences of which "would be profound, potentially killing "tens of millions of people, and caus(ing) long-term, catastrophic disruptions of the global climate and massive destruction of Earth's protective ozone layer. The result would be a global nuclear famine that could kill up to one billion people." Worse still is nuclear winter, the ultimate nightmare, able to end all life if it happens. It's nuclear proliferation's unacceptable risk, a clear and present danger as long as nuclear weapons and commercial dependency exist. In 1946, Enstein knew it, saying: "Our world faces a crisis as yet unperceived by those possessing the power to make great decisions for good and evil. The unleashed power of the atom has changed everything save our modes of thinking, and thus we drift toward unparalleled catastrophe." He envisioned two choices - abolish all forms of nuclear power or face extinction. No one listened. The Doomsday Clock keeps ticking.

#### Transparent public engagement in this process is key to manage concerns and prevent visceral public backlash – turns case

Guy, 12

[Megan, investment professional at Angeleno Group, a growth equity investment firm focused on next generation energy and natural resources companies, holds an MBA from the Stanford Graduate School of Business and a Masters of Science from Stanford’s Emmett Interdisciplinary Program in Environment and Resources, Stanford Energy Journal, Spring, “NEW STRATEGIES FOR PUBLIC ENGAGEMENT,” http://energyclub.stanford.edu/index.php/Journal/Public\_Engagement\_by\_Megan\_Guy]

To shift public sentiment in its favor, proponents of nuclear energy must work against two critical factors: the psychology of risk and public distrust of institutions. On a purely quantitative basis, the risk of death or substantial harm from radiation exposure rates far below that of numerous other hazards (e.g., driving a car, being struck by lightning). Yet these figures are largely irrelevant when it comes to risk perception. Paul Slovic’s work has identified numerous qualitative factors that shape how a person understands and experiences risk: hazards that a person is involuntarily exposed to, is unfamiliar with, or which have potentially catastrophic consequences dramatically elevate perceived risk above actual risk. A nuclear accident–unexpected, technical, and “black box” in nature, conjuring images of radiation sickness and desolation–satisfies each of these criteria, activating the darkest recesses of the imagination and yielding, for many, an unacceptable level of perceived risk. Institutional distrust also undermines public confidence in nuclear energy, which has long been perceived as the domain of academics, experts, and bureaucrats. The history of nuclear crises provides plenty of evidence to illustrate that this may be well-founded. For example, the Soviet government did not publicly acknowledge the Chernobyl accident until elevated radiation levels were detected in Sweden two days after the accident occurred. During the Three Mile Island crisis, poor communication from Metropolitan Edison and state and Nuclear Regulatory Commission (NRC) officials led to conflicting public statements that heightened public confusion and alarm. And most recently, in the initial days of the Fukushima disaster the NRC perceived the accident to be much more severe than the Japanese government acknowledged. Governmental distrust and public turmoil grew rapidly among the Japanese citizenry when the Americans advocated for more drastic containment and evacuation measures than the Japanese were recommending. As such, few were surprised when an overly close relationship between Japanese regulators and TEPCO came to light in the following weeks. Similar concerns are present in the U.S., where they are compounded by a large segment of the public that is already disillusioned and suspicious of government, corporations, and expertise in the wake of the financial crisis and other recent events. If nuclear power is to play a meaningful role in addressing the world’s future energy needs, it must do a better job of engaging public support by rebuilding institutional trust and mitigating risk perception through education. Neither is easy (nor by any means guaranteed), but actions that improve controls, engagement, and transparency are all steps in the right direction. Regulatory regimes must be structured to incentivize regulators, operators, and citizens to identify and elevate safety concerns. Industry should work with regulators to develop a collaborative culture of openness and continuous improvement. For example, current technology enables real-time monitoring and analytics at a plant level. Real-time information sharing across fleets and among operators and regulators could accelerate learning and reduce costs across the industry, particularly as existing plants age and require increased maintenance. Most importantly, voicing a concern or identifying a problem must not be stigmatized. Rather, it should be rewarded to encourage candid assessment and communication. Although the fear associated with a potential nuclear accident can never be eliminated, it can be lessened through increasing the public’s understanding of, and familiarity with, nuclear science and safety processes. All stakeholders would be well served by collaboratively formulating, refining, and disseminating a proactive crisis management plan. Clearly this has limitations – every incident is different and inherently unpredictable – but by setting some expectations in advance and establishing clear channels of communication, citizens, operators, and regulators can build trust and lessen panic. Finally, the industry needs new methods of public engagement to expand the discussion to a broader audience: rather than branding individuals and regions as pro- or anti-nuclear, the industry would be better served by engaging in conversation, using expert knowledge to creatively facilitate a dialogue rather than to advocate a particular point at all costs. For example, Bill Gates’ TED Talk on energy (which features TerraPower’s Traveling Wave Reactor) has been viewed and debated by over one million people. This figure is certainly orders of magnitude greater than the number of individuals who have read any industry white paper or NRC report. People are far more likely to trust sources that both acknowledge weaknesses in their own positions, and also encourage their audiences to think critically, than those who view the world in black and white. From a technology perspective, the future of nuclear energy looks very bright – but without better strategies for public engagement, this renaissance may end before it truly begins.

#### Rushing SMR licensing increases liability cases—turns viability and supercharges the safety link

Feinstein, ‘11

[Dianne, US Senator, “AN EXAMINATION OF THE SAFETY AND ECONOMICS OF LIGHT WATER SMALL MODULAR REACTORS: HEARING before a SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION, SPECIAL HEARING, JULY 14, 2011--WASHINGTON DC,” http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72251/html/CHRG-112shrg72251.htm]

The Fukushima crisis also demonstrated the potential danger of storing spent fuel in pools on site, and yet the proposed SMR designs do not appear to make any improvements in this method of spent-fuel storage. Bluntly, I'm struggling to reconcile the lessons of Fukushima with the principal design premise of SMRs, and so I look forward to witnesses addressing these issues today. This hearing is not about spent fuel, but it's hard to have a hearing on new nuclear power without considering the issue of what we do with the waste. This country has not--and I stress not--done a good job dealing with defense or commercial nuclear waste. That's simply a fact. Today, we have no national policy to address our commercial spent nuclear fuel, and we store it at every nuclear plant in the country in pools and dry casks for decades without end. Yet, today we're considering investing $452 million in LW SMRs that will result in more spent fuel stored at sites with no permanent storage for waste. By law, the Federal Government must take this waste and store it permanently but, today, the Federal Government is being sued and is making payments for lost cases because it cannot fulfill that obligation. This is not inexpensive. The Government Accountability Office estimates that we face $12.3 billion in liability through 2020 if we fail to take the spent fuel from utilities. That's $12.3 billion of liability. Now, that's a very deep concern and should concern every one of us in this Congress. Presumably, building new plants licensed under the SMR program would only increase this liability. While we discuss the specific safety and economic issues of LW SMRs, I continue to view these issues with the absence of a spent-fuel policy. I visited our two reactors in California and, candidly, I don't know how the NRC can say it's fine to keep re-racking spent fuels, adding more rods, keeping them there in California for 24 years, transferring to dry casks, most of which are designed for transportation to permanent storage, and we have no permanent storage. We have no repository. We have no regional storage. We have no permanent storage, and yet we're looking at a new start. So I'm struggling to understand how these reactors will also be economical. The central premise I've been given is that for SMRs to be economical, they must offset the loss of economies of scale with economies of manufacturing.

### 1nc military

#### Not on forward operating bases – command PATCOM, EU Com and Centcom – 1ac evidence not specific to domestic military bases

#### The status quo solves – substantial new upgrades, backup generators and microgrid adoption

**Aimone, 9/12**/12 - Director Business Enterprise Integration Office of the Deputy Under Secretary of Defense (Installations and Environment) (Michael, Congressional Testimony, <http://homeland.house.gov/sites/homeland.house.gov/files/Testimony%20-%20Aimone.pdf>)

DoD’s facility energy strategy is also focused heavily on grid security in the name of mission assurance. Although the Department’s fixed installations traditionally served largely as a platform for training and deployment of forces, in recent years they have begun to provide direct support for combat operations, such as unmanned aerial vehicles (UAVs) flown in Afghanistan from fixed installations here in the United States. Our fixed installations also serve as staging platforms for humanitarian and homeland defense missions. These installations are largely dependent on a commercial power grid that is vulnerable to disruption due to aging infrastructure, weather-related events, and potential kinetic, cyber attack. In 2008, the Defense 2 Science Board warned that DoD’s reliance on a fragile power grid to deliver electricity to its bases places critical missions at risk. 1

Standby Power Generation

Currently, DoD ensures that it can continue mission critical activities on base largely through its fleet of on-site power generation equipment. This equipment is connected to essential mission systems and automatically operates in the event of a commercial grid outage. In addition, each installation has standby generators in storage for repositioning as required. Facility power production specialists ensure that the generators are primed and ready to work, and that they are maintained and fueled during an emergency. With careful maintenance these generators can bridge the gap for even a lengthy outage. As further back up to this installed equipment, DoD maintains a strategic stockpile of electrical power generators and support equipment that is kept in operational readiness. For example, during Hurricane Katrina, the Air Force transported more than 2 megawatts of specialized diesel generators from Florida, where they were stored, to Keesler Air Force Base in Mississippi, to support base recovery.

Next Generation Microgrids

Although the Department will continue to maintain its fleet of on-site and mobile backup generators, we are moving aggressively to adopt next generation microgrids. Advanced microgrids, combined with on-site energy generation (e.g., solar or geothermal) and energy storage, offer a more robust and cost effective approach to ensuring installation energy security than the current solution (backup generators). Although microgrid systems are in use today, they are relatively unsophisticated, with limited ability to integrate renewable and other distributed energy sources, little or no energy storage capability, uncontrolled load demands, and “dumb” distribution that is subject to excessive energy losses. By contrast, we envision advanced (or “smart”) microgrids as local power networks that can utilize distributed energy, manage local energy supply and demand, and operate seamlessly both in parallel to the grid and in “island” mode. Advanced microgrids are a “triple play” for DoD’s installations: First, they will facilitate the incorporation of renewable and other on-site energy generation. Second, they will reduce installation energy costs on a day-to-day basis by allowing for load balancing and demand response—i.e., the ability to curtail load or increase on-site generation in response to a request from the grid operator. Third, and most importantly, the combination of on-site energy and storage, together with the microgrid’s ability to manage local energy supply and demand, will allow an installation to shed non-essential loads and maintain mission-critical loads if and when the grid goes down.

DoD’s Installation Energy Test Bed, run out of the Department’s Installations and Environment office, is funding ten demonstrations of microgrid and storage technologies to evaluate the benefits and risks of alternative approaches and configurations. The Test Bed is working with multiple vendors so as to allow DoD to capture the benefits of competition. Demonstrations are underway at Twentynine Palms, CA (General Electric’s advanced microgrid system); Fort Bliss, TX (Lockheed Martin); Joint Base McGuire-Dix-Lakehurst, NJ (United Technologies); Fort Sill, OK (Eaton); and several other installations.

#### Can't solve grid—too many operational burdens

Parthemore & Rogers, ‘10

[Christine, Fellow, Will, Bacevich Fellow, Center for New American Security, “Nuclear Reactors on Military Bases May Be Risky,” Center for a New American Security, 5-20, http://www.cnas.org/node/4502]

Many serious complications must be weighed as well. Military base personnel often do not have the necessary training in nuclear reactor management, oversight and regulatory credentials. Nuclear reactors would necessitate additional qualified personnel and improved physical security requirements to meet the 24/7 operations needs. As with siting for all energy production, local public resistance could be problematic. When considering the impact of a reactor casualty, the resulting impact on the operational mission effectiveness of the tenant commands on the base must also be considered so as to avoid a single point vulnerability that disables all military operations on site. And while many private companies are touting new designs for small reactors that would work well in this capacity, the technology may still be years away from fully meeting technical requirements and federal regulatory standards.13 Proliferation considerations would also need to be part of any adjudication of what types of reactors are most suitable for these purposes.

#### Aff Doesn’t solve grid vulnerability

Baker, 6-22-12

[Matthew, American Security Project, “Do Small Modular Reactors Present a Serious Option for the Military’s Energy Needs?” http://americansecurityproject.org/blog/2012/do-small-modular-reactors-present-a-serious-option-for-the-militarys-energy-needs/]

The speakers at the DESC briefing suggested a surge is needed in SMR production to combat a major vulnerability in America’s national security: possible attacks to the power grid. Such attacks could cause blackouts for over a year according to Congressman Bartlett, leading to blackouts never before experienced in the United States. In such an event the U.S. military would still need to function 24/7. Current predictions made by the DESC suggest that up to 90% of the US military’s energy needs could be supplied by SMRs.¶ Congressman Bartlett also pointed out that current military bases such as Guam – which is fueled by the transport of diesel – are extremely vulnerable should the energy transport system be disrupted. Fuel supplies are even more unstable in Afghanistan, where one out of every twenty-four convoys results in a casualty. According to Congressman Bartlett, SMRs could make such bases energy self-sufficient.¶ Unfortunately all the hype surrounding SMRs seems to have made the proponents of SMR technology oblivious to some of its huge flaws.¶ Firstly like large reactors, one of the biggest qualms that the public has to nuclear is problems associated with nuclear waste. A more decentralized production of nuclear waste inevitably resulting from an increase in SMRs production was not even discussed. The danger of transporting gas into some military bases in the Middle East is already extremely volatile; dangers of an attack on the transit of nuclear waste would be devastating.¶ Secondly, SMRs pose many of the same problems that regular nuclear facilities face, sometimes to a larger degree. Because SMRs are smaller than conventional reactors and can be installed underground, they can be more difficult to access should an emergency occur. There are also reports that because the upfront costs of nuclear reactors go up as surface area per kilowatt of capacity decreases, SMRs will in fact be more expensive than conventional reactors.¶ Thirdly, some supporters of SMR technology seem to have a skewed opinion of public perception toward nuclear energy. Commissioner of the U.S. Nuclear Regulatory Commission, William C. Ostendorff, didn’t seem to think that the recent Fukushima disaster would have any impact on the development on SMRs. Opinion polls suggest Americans are more likely to think that the costs of nuclear outweigh its benefits since the Fukushima disaster. For SMRs to be the philosopher’s stone of the military’s energy needs the public needs to be on board.¶ The DESC’s briefing did illustrate the hype that the nuclear community has surrounding SMRs, highlighting some pressing issues surrounding the military’s energy vulnerability. But proponents of SMRs need to be more realistic about the flaws associated with SMRs and realize that the negative impacts of nuclear technology are more costly than its benefits.

**Cyberattacks won’t occur on sensitive targets**

Martin C. **LIBICKI** 20**09** (Senior Policy Analyst – RAND Corporation, “Cyberdeterrence and Cyberwar” <http://www.rand.org/pubs/monographs/2009/RAND_MG877.pdf>)

Some targets may be too risky or messy to be good targets. The risky targets include nuclear command-and-control systems (lest nervous adversaries conclude that they must use it or lose it) and space systems (many of which are also strategic). Targets that give pause because of the mess their confusion may cause include those whose malfunctioning may lead to civilian deaths, those whose disruption can create vast environmental damage, and those whose integrity and accuracy can be very difficult to restore when peace resumes (e.g., managers of bank and billing records). It would be good to think that such systems are unassailable (or at least engineered to fail safely) precisely because they are sensitive. Might a better reason to leave targets untouched be that restraint might persuade the other side to do likewise, thereby limiting mutual destruction? 13 Mutually respected safe zones may even provide a path for both sides to de-escalate.

Hegemony is unnecessary and doesn’t solve anything  
**Preble 10 -** director of foreign policy studies at the Cato Institute, taught history at St. Cloud State University and Temple University, was a commissioned officer in the U.S. Navy, Ph.D. in history from Temple University (Christopher, 8/13, “U.S. Military Power: Preeminence for What Purpose?”) <http://www.cato-at-liberty.org/u-s-military-power-preeminence-for-what-purpose/>)

Most in Washington still embraces the notion that America is, and forever will be, the world’s indispensable nation. Some scholars, however, questioned the logic of hegemonic stability theory from the very beginning. A number continue to do so today. They advance arguments diametrically at odds with the primacist consensus. Trade routes need not be policed by a single dominant power; the international economy is complex and resilient. Supply disruptions are likely to be temporary, and the costs of mitigating their effects should be borne by those who stand to lose — or gain — the most. Islamic extremists are scary, but hardly comparable to the threat posed by a globe-straddling Soviet Union armed with thousands of nuclear weapons. It is frankly absurd that we spend more today to fight Osama bin Laden and his tiny band of murderous thugs than we spent to face down Joseph Stalin and Chairman Mao. Many factors have contributed to the dramatic decline in the number of wars between nation-states; it is unrealistic to expect that a new spasm of global conflict would erupt if the United States were to modestly refocus its efforts, draw down its military power, and call on other countries to play a larger role in their own defense, and in the security of their respective regions. But while there are credible alternatives to the United States serving in its current dual role as world policeman / armed social worker, the foreign policy establishment in Washington has no interest in exploring them. The people here have grown accustomed to living at the center of the earth, and indeed, of the universe. The tangible benefits of all this military spending flow disproportionately to this tiny corner of the United States while the schlubs in fly-over country pick up the tab. In short, we shouldn’t have expected that a group of Washington insiders would seek to overturn the judgments of another group of Washington insiders. A genuinely independent assessment of U.S. military spending, and of the strategy the military is designed to implement, must come from other quarters.

### 1nc desal

#### Oceans resilient

**Kennedy 2** (Victor, Coastal and Marine Ecosystems and Global Climate Change, http://www.pewclimate.org/projects/marine.cfm)

There is evidence that marine organisms and ecosystems are resilient to environmental change. Steele (1991) hypothesized that the biological components of marine systems are tightly coupled to physical factors, allowing them to respond quickly to rapid environmental change and thus rendering them ecologically adaptable. Some species also have wide genetic variability throughout their range, which may allow for adaptation to climate change.

#### Alt causes doom solvency

**Kunich 6** – Professor of Law, Appalachian School of Law (John, Killing Our Oceans, p 122-3, AG)

It is crucial, albeit perhaps counterintuitive, that we pay close attention to land-based activities even as we focus on marine hotspots. There are enormous threats to marine biodiversity that originate, not in the oceans, but on dry land in the coastal zones of the world. Part of the reason these threats are prevalent is that an estimated 67 percent of the entire global human population lives either on the coast or within 37 miles of the coast, and that percentage is increasing.14 These huge and growing populations often cause overutilization of fishing and other resources in coastal areas, habitat destruction and degradation, pollution (both organic and inorganic), eutrophication and related issues such as pathogenic bacteria and algal toxins, introduction of invasive species, watershed alteration, marine littering, and other harms to the nearby marine regions.15 Given that so many key marine centers of biodiversity reside in the near-coast coral reefs and continental shelf areas, it is of tremendous importance that our legal approach embrace appropriate controls over these land-based threats. Any plan that shortsightedly and narrowly focuses too much on ocean-based activities will, paradoxically, miss the boat.

**No risk of water wars**

**Lawfield 10** – Thomas Lawfield is an MA candidate at the University for Peace. Water Security: War or Peace? Thomas Lawfield May 03, 2010, <http://www.monitor.upeace.org/innerpg.cfm?id_article=715>, ZBurdette) \*note: changed to BC[E]

In reality, water does not cause war. The arguments presented above, although correct in principle, have little purchase in empirical evidence. Indeed, as one author notes, there is only one case of a war where the formal declaration of war was over water.[20] This was an incident between two Mesopotamian city states, Lagash and Umma, over 2,500 years BC[E], in modern day southern Iraq.

Both the initial premises and arguments of water war theorists have been brought into question. Given this, a number of areas of contestation have emerged: "Questioning both the supply and demand side of the water war argument [...] Questioning assumptions about the costs of water resources [...and] Demonstrating the cooperative potential of the water resource."[21]

Why then is water not a cause of war? The answer lies in two factors: first, the capacity for adaptation to water stresses and, second, the political drawbacks to coupling water and conflict.

First, there is no water crisis, or more correctly, there are a number of adaptation strategies that reduce stress on water resources and so make conflict less likely. Unlike the water war discourse, which perceives water as finite in the Malthusian sense, **the capacity for adaptation to water stress has been greatly underestimated**. For instance, I will discuss in particular a trading adaptation known as ‘virtual water’, which refers to the water used to grow imported food. This water can be subtracted from the total projected agricultural water needs of a state, and hence allows water scarce states to operate on a lower in-country water requirement than would otherwise be expected.[22] This means that regions of the world that are particularly rich in water produce water intense agricultural products more easily in the global trade system, while other water scarce areas produce low intensity products.[23] The scale of this water is significant - Allan famously pointed out that more embedded water flows into the Middle East in the form of grain than flows in the Nile.[24]

In addition, there are significant problems around the hegemonic doctrine of the water crisis. Many authors point to relatively low water provision per capita by states, and suggest that this will increase the likelihood of a state engaging in war with a neighbouring state, to obtain the water necessary for its population. This is normally a conceptual leap that produces the incorrect corollary of conflict, but is also frequently **a problem of data weaknesses** around the per capita requirements. For instance, Stucki cites the case of the Palestinians being under the worst water stress, with a per capita provision being in the region of 165m³/year.[25] Unfortunately, such an analysis is based on false actual provision data in this region. Based on the authors work on water provision in Lebanese Palestinian refugee camps, the actual provision is over 90m³/month. Such a figure is highly likely to be representative of other camps in the region.[26] If this example is representative of trends to exaggerate water pressures in the region, then **we should be sceptical about claims of increasing water stress.**

Furthermore, given that many water systems have a pipe leakage rate of fifty per cent, combined with a seventy per cent loss of agricultural water, significant efficiency enhancements could be made to existing infrastructure. Combined with desalination options in many water shortage prone states, there is an overall capacity for technological and market driven solutions to water scarcity.[27]

#### Corporate control negates any benefits.

Barlow, ‘8

[Maude, The American Prospect, “Where has all the Water Gone?” Vol. 19, Iss. 6, pg. A2, June, Proquest]

THREE SCENARIOS COLLUDE TOWARD disaster. Scenario one: The world is running out of freshwater. It is not just a question of finding the money to hook up the 2 billion people living in water-stressed regions of our world. Humanity is polluting, diverting, and depleting the Earth's finite water resources at a dangerous and steadily increasing rate. The abuse and displacement of water is the ground-level equivalent of greenhouse-gas emissions and likely as great a cause of climate change.¶ Scenario two: Every day more and more people are living without access to clean water. As the ecological crisis deepens, so too does the human crisis. More children are killed by dirty water than by war, malaria, HIV/AIDS, and traffic accidents combined. The global water crisis has become a powerful symbol of the growing inequality in our world. While the wealthy enjoy boutique water at any time, millions of poor people have access only to contaminated water from local rivers and wells.¶ Scenario three: A powerful corporate water cartel has emerged to seize control of every aspect of water for its own profit. Corporations deliver drinking water and take away wastewater; corporations put massive amounts of water in plastic bottles and sell it to us at exorbitant prices; corporations are building sophisticated new technologies to recycle our dirty water and sell it back to us; corporations extract and move water by huge pipelines from watersheds and aquifers to sell to big cities and industries; corporations buy, store, and trade water on the open market, like running shoes. Most important, corporations want governments to deregulate the water sector and allow the market to set water policy. Every day, they get closer to that goal. Scenario three deepens the crises now unfolding in scenarios one and two.¶ Imagine a world in 20 years in which no substantive progress has been made to provide basic water services in the Third World; or to create laws to protect source water and force industry and industrial agriculture to stop polluting water systems; or to curb the mass movement of water by pipeline, tanker, and other diversions, which will have created huge new swaths of desert.¶ Desalination plants will ring the world's oceans, many of them run by nuclear power; corporate-controlled nanotechnology will clean up sewage water and sell it to private utilities, which will in turn sell it back to us at a huge profit; the rich will drink only bottled water found in the few remaining uncontaminated parts of the world or sucked from the clouds by corporate-controlled machines, while the poor will the in increasing numbers from a lack of water.

## 2nc

### ssp cp

#### Aff is slow too

Wald, ‘11

[Matthew L., NYT, 2-12, “Administration to Push for Small ‘Modular’ Reactors,”http://www.nytimes.com/2011/02/13/science/earth/13nuke.html?pagewanted=all&\_moc.semityn.www]

Advocates say the modules can be built inexpensively and with good quality control in a central factory and then set up quickly where they are needed. But the $500 million cost of the design and approval process, steep for a product with uncertain market appeal, is a major barrier.¶ The Energy Department’s notion is that if the government provides half the money up front and signs a contract to buy power from the reactor, a utility will be persuaded to order one. That contract, because it guarantees revenue for the utility company, would make it easier for the utility to receive financing.¶ Military bases, which also must reduce their carbon footprint 28 percent, could sign such contracts as well, Energy Department officials say. Each power purchase agreement would be negotiated at a favorable rate, compensating the Energy Department for its investment.¶ If Congress approves, the Energy Department will invite companies to apply for help. At least four companies could potentially build such a reactor. One is Babcock & Wilcox, which builds reactors for nuclear submarines whose power output is more similar to the proposed reactors than to full-size reactors.¶ The company is trying to build interest in a modular reactor called mPower. It puts into a single package many components that for conventional reactors must be shipped to a site separatelyand then assembled.¶ Another possible builder is NuScale, which is trying to commercialize a design developed at Oregon State University.¶ The department also anticipates applications from Westinghouse, which builds reactors, and Holtec, which now makes nuclear equipment.¶ Experts at the Energy Department and elsewhere suggest that a small reactor could be built in an advanced factory in the United States and delivered across the globe to replace coal-fired power plants.¶ What is more, the modular reactors would provide about the same power output as coal plants that were built in the United States in the 1950s and 1960s and are now ready for retirement, planners say.¶ Still, the actual cost and reliability of modular reactors remains uncertain.¶ There are other unknowns that are likely to raise questions from the Nuclear Regulatory Commission. Rules for control-room staffing, security and even calculation of license fees are all based on big reactors and may not be appropriate to small ones, commission officials say.¶ “We may want to modify our regulations to make them a little more tailored to the uniqueness of these design types,” the commission’s chairman, Gregory B. Jaczko, told reporters on Feb. 2 at a discussion hosted by Platts, the energy information company.¶ Smaller reactors present some advantages and some drawbacks, said David Lochbaum, a nuclear expert at the Union of Concerned Scientists, which generally opposes nuclear power.¶ Mr. Lochbaum said that reactors of 1,000 or 1,500 megawatts, the output of traditional reactors, are so big that it has been difficult to match them to anticipated demand. “Either you build it early, and like ‘Field of Dreams,’ you hope the customers come, or you’re short by 1,000 or 1,500 megawatts and you hope nobody notices while you’re building your plant,” he said.¶ But since the attacks of Sept. 11, 2001, he said, all plants have had to bolster security and keep control room operators and maintenance staff on duty, increasing overhead costs to produce a relatively small amount of energy. And the cost to build small reactors is uncertain.

#### Supply chain atrophy

ITA, ‘11

[International Trade Administration -- U.S. Department of Commerce, February, “The Commercial Outlook for U.S. Small Modular Nuclear Reactors,” http://trade.gov/mas/ian/build/groups/public/@tg\_ian/@nuclear/documents/webcontent/tg\_ian\_003185.pdf]

There are also domestic policies that hinder U.S. SMR competitiveness, with some policies relevant to all nuclear suppliers and some specific to SMR deployment, both at home and abroad. One obstacle is diminished manufacturing capacity. U.S. nuclear competitiveness is hampered because U.S. manufacturing capacity has been eroded through the lack of new reactor construction during the past few decades. Some government resources to help manufacturers are not appropriate for nuclear suppliers, or the resources exclude the suppliers entirely. For example, only two U.S. nuclear manufacturers qualified for the advanced energy manufacturing tax credit. The timeline to be eligible for the credit requires a facility to be up and running four years from certification. Some U.S. firms say that the timeline is too short for many nuclear suppliers; just acquiring the high-precision machines necessary to retool and rebuild capacity can require a lead time of several years.

#### There's a reason we don’t use SMRs—reject their authors

Szondy, ‘12

[David, Gizmag, 2-16, “Feature: Small modular nuclear reactors - the future of energy?” http://www.gizmag.com/small-modular-nuclear-reactors/20860/]

As impressive as many of these reactors sound, most of them are still in one stage or another of development or approval. It is a long way from there to flipping a switch and watching the lights go on. Most of these designs have roots that go back over half a century.¶ In the 1950s, Admiral Hyman Rickover, the architect of the US nuclear fleet, pointed out that the small research reactors, the precursors of SMRs, had a lot of advantages. They were simple, small, cheap, lightweight, easy to build, very flexible in design and needed very little development. On the other hand, practical reactors must be built on schedule, need a huge amount of development spent on "apparently trivial matters", are expensive, large, heavy and complicated. In other words, there's a large gap between what is promised by a technology in the design phase and what it ends up as once it's built.¶ So it is with the current stable of SMRs. Many hold great promise, but they have yet to prove themselves. Also, they raise many questions. Will an SMR need fewer people to run it? What are its safety parameters? Will they fulfill current regulations? Will the regulations need to be changed to suit the nature of SMRs? Will evacuation zones, insurance coverage or security standards need to be altered? What about regulations regarding earthquakes?

### politics

**SPS has bipartisan support**

**Moore 2k** (Taylor, “Renewed Interest in Space Solar Power”, EPRI Journal, Spring, academic onefile) //DH

As a result of bipartisan support from Congress and the Clinton administration, additional funding for an SPS exploratory research and technology program was authorized for fiscal year 1999 and is continuing in the current fiscal year. "Large power systems are likely to be essential for achieving ambitious space science and exploration goals, including both extra-solar system robotic probes and the development of large, permanent installations on the moon, Mars, or other targets, such as near-Earth and main-belt asteroids," says Mankins.

**Congress supports the counterplan**

**Morring, 7** (Frank, Aviation Week & Space Technology “Space Solar Power: Climate, Economy, National Security Drive Another Look At SSP; Experts see warming, economic concerns and energy security as reasons to build SSP” August 20, 2007, Proquest Search)

**Mankins = head of NASA SSP study**

Another factor that might build support in Congress and the Executive Branch is the effect building an SSP system would have on competitiveness. "Here in the U.S. we continue to be concerned about competitiveness, particularly in light of the migration of many high-tech industries overseas, and how [to] provide long-term economic and science and technology strength in the U.S. [It's] an ongoing challenge," Mankins says.

No cost arg

**NASA, 2007** (NASA, “Space Based Solar Power as an Opportunity for Strategic Security” Phase 0 Architecture Feasibility Study, October 10, 2007)

When all indirect and support costs are included, it is estimated that the DoD currently spends over $1 per kilowatt hour for electrical power delivered to troops in forward military bases in war regions. OSD(PA&E) has computed that at a wholesale price of $2.30 a gallon, the fully burdened average price of fuel for the Army exceeds $5 a gallon. For Operation\ IRAQI FREEDOM the estimated delivered price of fuel in certain areas may approach $20 a gallon. Significant numbers of American servicemen and women are injured or killed as a result of attacks on supply convoys in Iraq. Petroleum products account for approximately 70% of delivered tonnage to U.S. forces in Iraq—total daily consumption is approximately 1.6 million gallons. Any estimated cost of battlefield energy (fuel and electricity) does not include the cost in lives of American men and women. The DoD is a potential anchor tenant customer of space‐based solar power that can be reliably delivered to U.S. troops located in forward bases in hostile territory in amounts of 5‐50 megawatts continuous at an estimated price of $1 per kilowatt hour.

**Plan has strong congressional and interest group support**

**NSSO 2007**

[National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf]

The SBSP Study Group found that SBSP is an idea that appears to generate significant interest and support across a broad variety of sectors. Compared to other ideas either for space exploration or alternative energy, Space-Based Solar Power is presently not a publicly well-known idea, in part because it has no organizational advocate within government, and has not received any substantial funding or public attention for a significant period of time. Nevertheless, DoD review team leaders were virtually overwhelmed by the interest in Space-Based Solar Power that they discovered. What began as a small e-mail group became unmanageable as the social network & map-of-expertise expanded and word spread. To cope, study leaders were forced to move to an on-line collaborative group with nearly daily requests for new account access, ultimately growing to over 170 aerospace and policy experts all contributing pro-bono. This group became so large, and the need to more closely examine certain questions so acute, that the group had to be split into four additional groups. As word spread and enthusiasm grew in the space advocacy community, study leaders were invited to further expand to an open web log in collaboration with the Space Frontier Foundation. The amount of media interest was substantial. Activity was so intense that total e-mail traffic for the study leads could be as high as 200 SBSP-related e-mails a day, and the sources of interest were very diverse. There was clear interest from potential military ground customers—the Army, Marines, and USAF Security Forces, and installations personnel, all of which have an interest in clean, low environmental-impact energy sources, and especially sources that are agile without a long, vulnerable, and continuing logistics chain. There was clear interest from both traditional “big aerospace,” and the entrepreneurial space community. Individuals from each of the major American aerospace companies participated and contributed. The subject was an agenda item for the Space Resources Roundtable, a dedicated industry group. Study leaders were made aware of significant and serious discussions between aerospace companies and several major energy and construction companies both in and outside of United States. As the study progressed the study team was invited to brief in various policy circles and think tanks, including the Marshall Institute, the Center for the Study of the Presidency, the Energy Consensus Group, the National Defense Industry Association, the Defense Science Board, the Department of Commerce’s Office of Commercial Space, and the Office of Science and Technology Policy (OSTP). Interest in the idea was exceptionally strong in the space advocacy community, particularly in the Space Frontier Foundation (SFF), National Space Society (NSS), Space Development Steering Committee, and Aerospace Technology Working Group (ATWG), all of which hosted or participated in events related to this subject during the study period. There is reason to think that this interest may extend to the greater public. The most recent survey indicating public interest in SBSP was conducted in 2005 when respondents were asked where they prefer to see their space tax dollars spent. The most popular response was collecting energy from space, with support from 35% of those polled—twice the support for the second most popular response, planetary defense (17%)—and three times the support for the current space exploration goals of the Moon (4%) / Mars(10%). How does one account for such significant interest? Perhaps it is because SBSP lies “at the intersection of missionary and mercenary”—appealing both to man’s idealism and pragmatism, the United States’ special mission in the world and her citizens’ faith in business and technology. As an ambitious and optimistic project, it excites the imagination with its scale and grandeur, besting America’s previous projects, and opening new frontiers. Such interest goes directly to the concerns of the Aerospace commission, which stated, “The aerospace industry has always been a reflection of the spirit of America. It has been, and continues to be, a sector of pioneers drawn to the challenge of new frontiers in science, air, space, and engineering. For this nation to maintain its present proud heritage and leadership in the global arena, we must remain dedicated to a strong and prosperous aerospace industry. A healthy and vigorous aerospace industry also holds a promise for the future, by kindling a passion within our youth that beckons them to reach for the stars and thereby assure our nation’s destiny.”

### terrorism arg

#### Aff Doesn’t solve grid vulnerability

Baker, 6-22-12

[Matthew, American Security Project, “Do Small Modular Reactors Present a Serious Option for the Military’s Energy Needs?” http://americansecurityproject.org/blog/2012/do-small-modular-reactors-present-a-serious-option-for-the-militarys-energy-needs/]

The speakers at the DESC briefing suggested a surge is needed in SMR production to combat a major vulnerability in America’s national security: possible attacks to the power grid. Such attacks could cause blackouts for over a year according to Congressman Bartlett, leading to blackouts never before experienced in the United States. In such an event the U.S. military would still need to function 24/7. Current predictions made by the DESC suggest that up to 90% of the US military’s energy needs could be supplied by SMRs.¶ Congressman Bartlett also pointed out that current military bases such as Guam – which is fueled by the transport of diesel – are extremely vulnerable should the energy transport system be disrupted. Fuel supplies are even more unstable in Afghanistan, where one out of every twenty-four convoys results in a casualty. According to Congressman Bartlett, SMRs could make such bases energy self-sufficient.¶ Unfortunately all the hype surrounding SMRs seems to have made the proponents of SMR technology oblivious to some of its huge flaws.¶ Firstly like large reactors, one of the biggest qualms that the public has to nuclear is problems associated with nuclear waste. A more decentralized production of nuclear waste inevitably resulting from an increase in SMRs production was not even discussed. The danger of transporting gas into some military bases in the Middle East is already extremely volatile; dangers of an attack on the transit of nuclear waste would be devastating.¶ Secondly, SMRs pose many of the same problems that regular nuclear facilities face, sometimes to a larger degree. Because SMRs are smaller than conventional reactors and can be installed underground, they can be more difficult to access should an emergency occur. There are also reports that because the upfront costs of nuclear reactors go up as surface area per kilowatt of capacity decreases, SMRs will in fact be more expensive than conventional reactors.¶ Thirdly, some supporters of SMR technology seem to have a skewed opinion of public perception toward nuclear energy. Commissioner of the U.S. Nuclear Regulatory Commission, William C. Ostendorff, didn’t seem to think that the recent Fukushima disaster would have any impact on the development on SMRs. Opinion polls suggest Americans are more likely to think that the costs of nuclear outweigh its benefits since the Fukushima disaster. For SMRs to be the philosopher’s stone of the military’s energy needs the public needs to be on board.¶ The DESC’s briefing did illustrate the hype that the nuclear community has surrounding SMRs, highlighting some pressing issues surrounding the military’s energy vulnerability. But proponents of SMRs need to be more realistic about the flaws associated with SMRs and realize that the negative impacts of nuclear technology are more costly than its benefits.

#### Terrorists have 100% probability of a successful attack -- internal studies prove -- causes immediate meltdowns.

**Caldicott, ‘6**

[Helen, Founder, President -- Nuclear Policy Research Institute, “Nuclear Power is not the answer,” p. 92-4]

Let's consider the two large Indian Point reactors located in the town of Buchanan in Westchester County, thirty-five miles from midtown Manhattan. Indian Point 2 is a 971-megawatt reactor and Indian Point 3 is a 984-megawatt reactor; the licensed operator for both plants is Entergy Nuclear. Both reactors are aging and adjacent to a very large population base: More than 305,000 people live within a ten-mile radius of the plants, and 17 million live within fifty miles. They are in close proximity to a reservoir system that waters 9 million people and to the financial capital of the world. Apart from natural disaster, an Indian Point meltdown caused by a small group of people intent on wreaking disaster could read­ily be achieved in one of several ways. Terrorists with suicidal ten­dencies could easily disrupt the external electricity supply of the reactors, or obtain one small speed boat, pack it with Timothy McVeigh fertilizer explosives, and drive it full tilt into the two adja­cent intake pipes that suck almost two million gallons of Hudson River cooling water per minute into the reactors. The plant could be shut down immediately, but this would not help because of the intensity of the heat already in the reactor. Within several hours the meltdowns would be in full swing. (Several years ago, I was in a boat, owned by the antinuclear group River keeper, on the Hudson opposite the huge intake pipes of the two Indian Point reactors. Al­though the Coast Guard was supposed to be protecting them from terrorist intrusion, there was no sign of a Coast Guard boat during ¶ two early afternoon hours we were within view of the pipes.) Alternatively, a terrorist could drive a truck packed with similar explosives into a strategic area of the plant, triggering a critical situation. Concrete barriers have been erected at several nuclear power plants, but not many, and, as stated in the previous chapter, an inadequate number of guards are protecting against terrorist intrusion. A paper written by the Oak Ridge National Laboratory and the Defense Threat Reduction Agency, published in a 2004 technical journal and available on the Internet, indicates that truck bombs of various sizes would have 100% probability of success.¶ Or yet again, after a few basic flying lessons, a novice pilot could commandeer a large passenger plane loaded with fuel and fly it into the reactor itself, destroying strategic safety systems and/ or emptying the reactor of its cooling water. Or a patient individual bent on destruction could sign up for training as a nu­clear power plant operator, obtain a job at Indian Point, and at a certain strategic moment, press the wrong switches and valves, removing the cooling water and initiating a meltdown from the inside.

### 2nc smr turns overview

#### Any accident turns case

Energy Fair, 12 [Energy Fair, THE FINANCIAL RISKS OF INVESTING IN NEW NUCLEAR POWER PLANTS, www.energyfair.org.uk, March 2012 Energy Fair Email: nuclearsubsidies@gmail.com Phone: +44 (0) 1248 712962, +44 (0) 7746 290775 Web: www.energyfair.org.uk 23rdMarch 2012, http://www.nirs.org/neconomics/risks\_of\_nuclear\_investment\_published.pdf]

Political risk. Apart from the risk that politicians may decide to withdraw some or all of the subsidies for nuclear power, it is vulnerable to political action arising from events like the nuclear meltdowns in Fukushima. That disaster led to a sharp global shift in public opinion against nuclear power and it led to decisions by politicians in several different countries to close down nuclear power stations and to accelerate the roll-out of alternative sources of power. The next nuclear disaster—and the world has been averaging one such disaster every 11 years—is likely to lead to even more decisive actions by politicians, perhaps including the closing down of nuclear plants that are still under construction or are relatively new.

#### Crushes the industry

Squassoni, ‘8

[Sharon, Senior Associate, Nonproliferation Program -- Carnegie Endowment for International Peace, 3-12, “The Realities of Nuclear Expansion” Congressional Testimony: House Select Committee for Energy Independence and Global Warming, Washington, DC]

A few caveats with respect to projecting nuclear energy expansion are necessary. Nuclear energy is undoubtedly safer and more efficient now than when it began fifty years ago, but it still faces four fundamental challenges: waste, cost, proliferation, and safety. It is an inherently risky business. Most industry executives will admit that it will only take one significant accident to plunge the “renaissance” back into the nuclear Dark Ages. Because of this, estimates are highly uncertain. For example, the U.S. Energy Information Administration does not use its computer model to estimate nuclear energy growth because, among other things, key variables such as public attitudes and government policy are difficult to quantify and project. That said, estimates tend to extrapolate electricity consumption and demand from gross domestic product (GDP) growth, make assumptions about nuclear energy’s share of electricity production, and then estimate nuclear reactor capacity.

**nuclear expansion is impossible without alleviating public opposition.**

**Ramana, ‘11**

[M. V., appointed jointly with the Nuclear Futures Laboratory and the Program on Science and Global Security -- Princeton University, works on the future of nuclear energy in the context of climate change and nuclear disarmament, member of the International Panel on Fissile Materials and the Bulletin’s Science and Security Board, 7-1, “Nuclear Power and the Public,” SAGE Journals]

Opinion polls show that public support for nuclear power has declined since the Fukushima crisis began, not only in Japan but also in other nations around the world. People oppose nuclear power for a variety of reasons, but the predominant concern is the perception that it is a risky technology. Some communities that are closely associated with it even suffer from stigmatization. The nuclear industry has tried a variety of strategies to break down public resistance to nuclear power—including information campaigns, risk comparisons, and efforts to promote nuclear power as a solution to climate change. None of these strategies has worked well, mostly because the public lacks trust in the nuclear industry. Public resistance to nuclear power is likely to continue, making it difficult to site and build new reactors. This resistance may be a major obstacle to the rapid expansion of nuclear power.

### 2nc – status quo solves

#### new DOD strategy ends the risk of mission interruption during a significant grid outage

**Aimone, 9/12**/12 - Director Business Enterprise Integration Office of the Deputy Under Secretary of Defense (Installations and Environment) (Michael, Congressional Testimony, <http://homeland.house.gov/sites/homeland.house.gov/files/Testimony%20-%20Aimone.pdf>)

Chairman Lungren and distinguished Members of the Subcommittee. Thank you for the opportunity to testify. I was asked to address the question of how the Department of Defense (DoD) would operate during a significant outage of the commercial electric power grid. Although today’s hearing is focused on the prospect of an electromagnetic pulse (EMP) event, such an event is only one scenario for a grid outage. DoD is heavily dependent on the commercial electric power grid. The Department has two closely coordinated sets of activities that focus on the need to maintain critical mission activities in the event of a commercial grid outage. One set of activities, led by DoD’s office of homeland defense, is part of the Department’s explicit “mission assurance strategy.” The other set of activities, focused on the Department’s fixed installations and led by its Installations and Environment office, falls under DoD’s “facility energy strategy.”

Mission Assurance Strategy

The Department has long had a major focus on mitigating risks to high priority DoD facilities and infrastructure and the critical global missions they support. Toward that end, DoD recently adopted an explicit Mission Assurance Strategy, which is focused on ensuring operational continuity in an all-hazard threat environment.

This strategy entails a two-track approach. Track I includes "in-house" mitigation efforts-- activities that the Department can execute largely on its own. A key element is DoD’s Defense Critical Industry Program (DCIP)—an integrated risk management program designed to secure critical assets, infrastructure and key resources for our nation. DoD and the Department of Homeland Security (DHS) work closely together as part of DCIP. Under Track I of the Mission Assurance Strategy, DCIP will continue to update the list of DoD's most critical assets and target them for special mitigation efforts through DoD’s budget and other internal processes.

Track II of our Mission Assurance Strategy tackles the many challenges to DoD mission execution that require external collaboration with partners such as the Department of Energy (DOE), DHS and industry. Given that DoD mission execution relies heavily upon the energy surety of the communities surrounding our installations, Defense Industrial Base facilities spread across entire regions, and on private sector infrastructure that will collapse without electricity, this two-track approach can help meet the challenges to DoD mission assurance that lie far beyond our military bases.

### more case d

#### There are no threats – regional actors can prevent war

**Bandow 11** – senior fellow at the Cato Institute. A former special assistant to Ronald Reagan, he is the author of Foreign Follies: America's New Global Empire (Xulon) [1-31-2011, Doug Bandow, “Solving the Debt Crisis: A Military Budget for a Republic”, January 31st, <http://www.cato.org/pub_display.php?pub_id=12746>]

More than two decades after the Cold War dramatically ended, the U.S. maintains a Cold War military. America has a couple score allies, dozens of security commitments, hundreds of overseas bases, and hundreds of thousands of troops overseas. Yet international hegemonic communism has disappeared, the Soviet Union has collapsed, Maoist China has been transformed, and pro-communist Third World dictatorships have been discarded in history's dustbin.

The European Union has a larger economy and population than America does. Japan spent decades with the world's second largest economy. South Korea has 40 times the GDP and twice the population of North Korea. As Colin Powell exclaimed in 1991, "I'm running out of demons. I'm running out of enemies. I'm down to Castro and Kim Il-sung."

Yet America accounts for roughly half of the globe's military outlays. In real terms the U.S. government spends more on the military today than at any time during the Cold War, Korean War, or Vietnam War. It is difficult for even a paranoid to concoct a traditional threat to the American homeland.

Terrorism is no replacement for the threat of nuclear holocaust. Commentator Philip Klein worries about "gutting" the military and argued that military cuts at the end of the Cold War "came back to haunt us when Sept. 11 happened." Yet the reductions, which still left America by far the world's most dominant power, neither allowed the attacks nor prevented Washington from responding with two wars.

And responding with two wars turned out to be a catastrophic mistake. Evil terrorism is a threat, but existential threat it is not. Moreover, the best response is not invasions and occupations — as the U.S. has learned at high cost in both Afghanistan and Iraq. Rather, the most effective tools are improved intelligence, Special Forces, international cooperation, and restrained intervention.

Attempts at nation-building are perhaps even more misguided than subsidizing wealthy industrialized states. America's record isn't pretty. The U.S. wasn't able to anoint its preferred Somali warlord as leader of that fractured nation. Washington's allies in the still unofficial and unstable nation of Kosovo committed grievous crimes against Serb, Roma, and other minorities. Haiti remains a failed state after constant U.S. intervention. The invasion of Iraq unleashed mass violence, destroyed the indigenous Christian community, and empowered Iran; despite elections, a liberal society remains unlikely. After nine years most Afghans dislike and distrust the corrupt government created by the U.S. and sustained only by allied arms.

The last resort of those who want America to do everything everywhere is to claim that the world will collapse into various circles of fiery hell without a ubiquitous and vast U.S. military presence. Yet there is no reason to believe that scores of wars are waiting to break out. And America's prosperous and populous allies are capable of promoting peace and stability in their own regions.

### water

#### Alt causes doom solvency

**Kunich 6** – Professor of Law, Appalachian School of Law (John, Killing Our Oceans, p 122-3, AG)

It is crucial, albeit perhaps counterintuitive, that we pay close attention to land-based activities even as we focus on marine hotspots. There are enormous threats to marine biodiversity that originate, not in the oceans, but on dry land in the coastal zones of the world. Part of the reason these threats are prevalent is that an estimated 67 percent of the entire global human population lives either on the coast or within 37 miles of the coast, and that percentage is increasing.14 These huge and growing populations often cause overutilization of fishing and other resources in coastal areas, habitat destruction and degradation, pollution (both organic and inorganic), eutrophication and related issues such as pathogenic bacteria and algal toxins, introduction of invasive species, watershed alteration, marine littering, and other harms to the nearby marine regions.15 Given that so many key marine centers of biodiversity reside in the near-coast coral reefs and continental shelf areas, it is of tremendous importance that our legal approach embrace appropriate controls over these land-based threats. Any plan that shortsightedly and narrowly focuses too much on ocean-based activities will, paradoxically, miss the boat.

#### No risk of resource wars

**Pinker 11**—Harvard College Professor, Johnstone Family Professor in the Department of Psychology at Harvard University (Steven, © 2011, The Better Angels of our Nature: Why Violence has Declined, RBatra)

Once again it seems to me that the appropriate response is “maybe, but maybe not.” Though climate change can cause plenty of misery and deserves to be mitigated for that reason alone, **it will not necessarily lead to armed conflict**. The political scientists who track war and peace, such as Halvard Buhaug, Idean Salehyan, Ole Theisen, and Nils Gleditsch, are skeptical of the popular idea that people fight wars over scarce resources.290 Hunger and resource shortages are tragically common in sub-Saharan countries such as Malawi, Zambia, and Tanzania, but wars involving them are not. Hurricanes, floods, droughts, and tsunamis (such as the disastrous one in the Indian Ocean in 2004) do not generally lead to armed conflict. The American dust bowl in the 1930s, to take another example, caused plenty of deprivation but no civil war. And while temperatures have been rising steadily in Africa during the past fifteen years, civil wars and war deaths have been falling. Pressures on access to land and water can certainly cause **local skirmishes, but a genuine war requires that hostile forces be organized and armed**, and that depends more on the influence of bad governments, closed economies, and militant ideologies than on the sheer availability of land and water. Certainly any connection to terrorism is in the imagination of the terror warriors: terrorists tend to be underemployed lower-middle-class men, not subsistence farmers.291 As for genocide, the Sudanese government finds it convenient to blame violence in Darfur on desertification, distracting the world from its own role in tolerating or encouraging the ethnic cleansing.

In a regression analysis on armed conflicts from 1980 to 1992, Theisen found that conflict was more likely if a country was poor, populous, politically unstable, and abundant in oil, but not if it had suffered from droughts, water shortages, or mild land degradation. (Severe land degradation did have a small effect.) Reviewing analyses that examined a large number (N) of countries **rather than cherry-picking one or two**, he concluded, “**Those who foresee doom, because of the relationship between resource scarcity and violent internal conflict, have very little support in the large-N literature**.” Salehyan adds that relatively inexpensive advances in water use and agricultural practices in the developing world can yield massive increases in productivity with a constant or even shrinking amount of land, and that better governance can mitigate the human costs of environmental damage, as it does in developed democracies. Since the state of the environment is at most one ingredient in a mixture that depends far more on political and social organization, resource wars are far from inevitable, even in a climate-changed world.

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## 1nr

### 2nc link uniqueness

#### Nuclear power not mentioned now or perceived

JOHNSON ’12 (John; Nuclear Energy Insider, “US Campaign Trail: is nuclear in the equation?” 4/25, <http://analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation>)

Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions.¶ Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry.¶ Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S.

#### Obama distancing himself from nuclear issues in the run-up to the election

LEVINE 9/7/12 (Gregg; Contributing Editor and Former Managing Editor – Firedoglake and Contributing Writer for Truthout, “Obama Drops Nuclear from Energy Segment of Convention Speech,” <http://capitoilette.com/2012/09/07/obama-drops-nuclear-from-energy-segment-of-convention-speech/>)

President Obama no longer promises to “safely harness nuclear power”–that likely would have sounded like a cruel joke in a world now contaminated by the ongoing Fukushima disaster–but beyond that, he does not promise anything about nuclear power at all. There was no platitude, no carefully crafted signal to the industry that has subsidized much of Obama’s political career, no mention of nuclear power whatsoever.

That is not to say that the entire 2012 Democratic National Convention was a nuclear-free zone. A few hours before the president took the stage at the Time Warner Cable Arena, James Rogers, co-chair of the Charlotte host committee, and oh, by the way, CEO of Duke Energy, stepped to the lectern and endorsed Obama’s “all of the above” energy “strategy” (they keep using that word; I do not think it means what they think it means):

We need to work even harder toward a future of affordable, reliable and cleaner energy. That means we need to invest heavily in new zero-emission power sources, like new nuclear, wind and solar projects, as well as new technologies, like electric vehicles.

Well, if you are looking for a future of affordable, reliable and cleaner energy, you need look no further than nu–wait, what? If you are looking for those three features in an energy future, it is hard to imagine a worse option than the unsustainably expensive, chronically unreliable and dangerously dirty nuclear power plant. And, as has been discussed here many times, nuclear is not a zero-emission source, either. The massive carbon footprint of the nuclear fuel lifecycle rivals coal, and that doesn’t even consider the radioactive isotopes that facilities emit, even when they are not encountering one of their many “unusual events.”

But the CEO of the Charlotte-based energy giant probably has his eyes on a different prize. Rogers, who has been dogged by questions about a power grab after Duke’s merger with Progress Energy and his lackluster performance as fundraiser-in-chief for the DNC, sits atop a company that operates seven US nuclear power plants, and is partners in a plan to build two new AP1000 reactors in Cherokee County, South Carolina.

That last project, which is under active review by the Nuclear Regulatory Commission, awaiting a combined construction and operating license, is one of a small handful of proposed new nuclear facilities currently scrambling for financing. The South Carolina plant, along with a pair of reactors in Georgia, two slated for a different site in South Carolina, and possibly one more in Tennessee, represent what industry lobbyists like to call the “nuclear renaissance.”

But completion of any of the above is nowhere close to guaranteed, and even if some of these reactors are eventually built, none will be able to generate even one kilowatt of commercial power until years after President Obama completes his sought-after second term.

Which, if you really care about America’s energy future, is, of course, all for the better. As even James Rogers noted in his speech (and he gets props for this):

[W]e cannot lose sight of energy efficiency. Because the cleanest, most efficient power plant is the one we never have to build.

That Duke’s CEO thought to highlight efficiency is interesting. That President Obama, with his well-documented ties to the nuclear industry, chose not to even mention nuclear power is important.

#### Pushing SMR’s categorically more unpopular

Fairly, 2010 (Peter “Downsizing Nuclear Power Plants”, IEE Spectrum, http://spectrum.ieee.org/energy/nuclear/downsizing-nuclear-power-plants/2)

However, there are political objections to SMRs. Precisely because they are more affordable, they may well increase the risk of proliferation by bringing the cost and power output of nuclear reactors within the reach of poorer countries.

Russia’s first SMR, which the nuclear engineering group Rosatom expects to complete next year, is of particular concern. The Akademik Lomonosov is a floating nuclear power plant sporting two 35-MW reactors, which Rosatom expects to have tethered to an Arctic oil and gas operation by 2012. The reactor’s portability prompted Greenpeace Russia to call this floating plant the world’s most dangerous nuclear project in a decade.

SMRs may be smaller than today’s reactors. But, politically at least, they’re just as nuclear.

### 2nc overview

#### Relations solve war- only existential risk-

Bostrom 2 (Nick, PhD Philosophy – Oxford University, “Existential Risks: Analyzing Human Extinction Scenarios”, Journal of Evolution and Technology, Vol. 9, March, http://www.nickbostrom.com/existential/risks.html)

The unique challenge of existential risks Risks in this sixth category are a recent phenomenon. This is part of the reason why it is useful to distinguish them from other risks. We have not evolved mechanisms, either biologically or culturally, for managing such risks. Our intuitions and coping strategies have been shaped by our long experience with risks such as dangerous animals, hostile individuals or tribes, poisonous foods, automobile accidents, Chernobyl, Bhopal, volcano eruptions, earthquakes, draughts, World War I, World War II, epidemics of influenza, smallpox, black plague, and AIDS. These types of disasters have occurred many times and our cultural attitudes towards risk have been shaped by trial-and-error in managing such hazards. But tragic as such events are to the people immediately affected, in the big picture of things – from the perspective of humankind as a whole – even the worst of these catastrophes are **mere ripples** on the surface of the great sea of life. They haven’t significantly affected the total amount of human suffering or happiness or determined the long-term fate of our species. With the exception of a species-destroying comet or asteroid impact (an extremely rare occurrence), there were probably no significant existential risks in human history until the mid-twentieth century, and certainly none that it was within our power to do something about. The first manmade existential risk was the inaugural detonation of an atomic bomb. At the time, there was some concern that the explosion might start a runaway chain-reaction by “igniting” the atmosphere. Although we now know that such an outcome was physically impossible, it qualifies as an existential risk that was present at the time. For there to be a risk, given the knowledge and understanding available, it suffices that there is some subjective probability of an adverse outcome, even if it later turns out that objectively there was no chance of something bad happening. If we don’t know whether something is objectively risky or not, then it is risky in the subjective sense. The subjective sense is of course what we must base our decisions on.[[2]](http://www.nickbostrom.com/existential/risks.html#_ftn2) At any given time we must use our best current subjective estimate of what the objective risk factors are.[[3]](http://www.nickbostrom.com/existential/risks.html#_ftn3) A much greater existential risk emerged with the build-up of nuclear arsenals in the US and the USSR. An all-out nuclear war was a possibility with both a substantial probability and with consequences that might have been persistent enough to qualify as **global** and **terminal**. There was a real worry among those best acquainted with the information available at the time that a nuclear Armageddon would occur and that it might annihilate our species or permanently destroy human civilization.[[4]](http://www.nickbostrom.com/existential/risks.html#_ftn4)  Russia and the US retain large nuclear arsenals that could be used in a future confrontation, either accidentally or deliberately. There is also a risk that other states may one day build up large nuclear arsenals. Note however that a smaller nuclear exchange, between India and Pakistan for instance, is not an existential risk, since it would not destroy or thwart humankind’s potential permanently. Such a war might however be a local terminal risk for the cities most likely to be targeted. Unfortunately, we shall see that nuclear Armageddon and comet or asteroid strikes are mere preludes to the existential risks that we will encounter in the 21st century.

#### Turns hegemony

Simes ‘07 (Dimitri, President of the Nixon Center and Publisher of The National Interest, Foreign Affairs, “Losing Russia; The Costs of Renewed Confrontation,” Nov/Dec – lexis)

But if the current U.S.-Russian relationship deteriorates further, it will not bode well for the United States and would be even worse for Russia. The Russian general staff is lobbying to add a military dimension to the Shanghai Cooperation Organization, and some top officials are beginning to champion the idea of a foreign policy realignment directed against the West. There are also quite a few countries, such as Iran and Venezuela, urging Russia to work with China to play a leading role in balancing the United States economically, politically, and militarily. And post-Soviet states such as Georgia, which are adept at playing the United States and Russia off against each other, could act in ways that escalate tensions. Putin's stage management of Moscow's succession in order to maintain a dominant role for himself makes a major foreign policy shift in Russia unlikely. But new Russian leaders could have their own ideas -- and their own ambitions -- and political uncertainty or economic problems could tempt them to exploit nationalist sentiments to build legitimacy. If relations worsen, the UN Security Council may no longer be available -- due to a Russian veto -- even occasionally, to provide legitimacy for U.S. military actions or to impose meaningful sanctions on rogue states. Enemies of the United States could be emboldened by new sources of military hardware in Russia, and political and security protection from Moscow. International terrorists could find new sanctuaries in Russia or the states it protects. And the collapse of U.S.-Russian relations could give China much greater flexibility in dealing with the United States. It would not be a new Cold War, because Russia will not be a global rival and is unlikely to be the prime mover in confronting the United States. But it would provide incentives and cover for others to confront Washington, with potentially catastrophic results.

### 2nc a2 DoD

#### The DOD still links and is perceived

**Taylor 96** Director Natural Resource studies, Cato Institute [Jerry, Congressional Testimony, p. http://www.cato.org/testimony/ct-jt091296.html]

Another problem with the theory of agency expertise is the assumption that agencies are sufficiently insulated from politics to make their decisions scientifically, rather than politically. But, agencies are, of course, not really insulated from politics at all, but rather are subject to all kinds of subtle and not so subtle pressures from members of Congress and the White House staff. Agencies are vulnerable to such pressure because they and their staffs have interests of their own, such as getting wider powers, a larger budget, and access to higher appointed positions. Perhaps agency lawmaking is somewhat more removed from legislative politics than is congressional lawmaking, but, in acting behind closed doors to pressure agencies, members of Congress are largely free from electoral accountability.

**Obama is made of Velcro- everything from his administration sticks to him**

**Los Angeles Times, 7-30-10**, p. <http://articles.latimes.com/2010/jul/30/nation/la-na-velcro-presidency-20100730>

Reporting from Washington — If Ronald Reagan was the classic Teflon president, Barack Obama is made of Velcro.

Through two terms, Reagan eluded much of the responsibility for recession and foreign policy scandal. In less than two years, Obama has become ensnared in blame.

Hoping to better insulate Obama, White House aides have sought to give other Cabinet officials a higher profile and additional public exposure. They are also crafting new ways to explain the president's policies to a skeptical public.

But Obama remains the colossus of his administration — to a point where trouble anywhere in the world is often his to solve.

The president is on the hook to repair the Gulf Coast oil spill disaster, stabilize Afghanistan, help fix Greece's ailing economy and do right by Shirley Sherrod, the Agriculture Department official fired as a result of a misleading fragment of videotape.

**Leaks**

**Aftergood, 6**[Steven Aftergood - Director of Project on Government Secrecy - Federation of American Scientists, 5/26, “Statement of Steven Aftergood” www.fas.org/press/\_docs/052606aftergood.pdf]

By acts of omission and commission, Congress has inadvertently created an environment where unauthorized disclosures are more likely to occur. Specifically, there is a perception that Congress does not welcome classified disclosures from whistleblowers. Meanwhile, Congress has encouraged overclassification by blocking classification reform. 2a. Classified Communications to Congress Seem to be Unwelcome Unfortunately, Congress has discouraged those who in good faith seek to inform Congress about government misconduct on a classified basis. This was the recent experience of Mr. Russell Tice, a former National Security Agency employee who alleges illegal activity by the NSA.4 For months, he sought to brief the Senate Select Committee on Intelligence and the House Permanent Select Committee on Intelligence regarding his allegations, in accordance with the Intelligence Community Whistleblower Protection Act. According to Mr. Tice, the Senate Committee never responded to his approach. A meeting with House Committee staff, he says, was concluded when staff determined that they lacked the security clearances to receive his allegations!5 Although Mr. Tice eventually gained a hearing from the Senate Armed Services Committee, the difficulty he encountered in presenting his concerns to Congress in a classified setting might well have dissuaded a less determined person, and convinced him that the press offered the only venue to air his concerns. If Congress wishes to discourages leaks, it should therefore ensure that the alternative to leaking is simple, straightforward, and productive. Today, it is not. 2b. Congress Has Unwisely Resisted Classification Reform. By all accounts, overclassification is a systemic problem in the intelligence community and government-wide. “We overclassify very badly,” said then-HPSCI chairman Rep. Porter J. Goss in testimony before the 9-11 Commission on May 23, 2003.6 “I do think we overclassify, and I think it's because we got bad habits," said Gen. Michael V. Hayden, the nominee to be the new Director of the Central Intelligence Agency, at his May 18 confirmation hearing.7 But despite a near-universal consensus that overclassification is rampant, Congress has done little to address the problem.8 To the contrary, Congress has blocked the most significant efforts at classification reform. The single most important step that could be taken towards classification reform in intelligence is the disclosure of the intelligence budget. Every independent expert assessment has concluded that this step is feasible, necessary and desirable.9 But Congress has repeatedly blocked the move. Most recently, intelligence budget disclosure was identified by the 9-11 Commission as one of its 41 specific recommendations, based on a finding that excessive secrecy was degrading the performance of U.S. intelligence agencies.10Likewise, a decade ago the Aspin-Brown Commission on intelligence reform urged annual disclosure of the aggregate intelligence budget appropriation and the next year’s budget request.11 By repeatedly defying this bipartisan consensus, Congress has effectively stopped classification reform in its tracks. Worse, Congress has reinforced widespread contempt for the classification system by perpetuating discredited secrecy policies like intelligence budget secrecy. As long as overclassification is prevalent and classification policies lack credibility, unauthorized disclosures – however dishonorable or dangerous some of them may potentially be – can also contribute to overcoming classification abuse. From my own perspective, it seems likely that their benefits in preserving constitutional values greatly outweigh their risks to national security.

#### Makes them not topical – voting issue for jurisdiction

#### “The” means all parts

Encarta 9 (World English Dictionary, “The”, http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861719495)

2. indicating generic class: used to refer to a person or thing considered generically or universally  
bullettransExercise is good for the heart.  
bullettransShe played the violin.  
bullettransThe dog is a loyal pet.

#### “Government” is all three branches

Black’s Law 90 (Dictionary, p. 695)

“[*Government*] In the United States, government consists of the executive, legislative, and judicial branches in addition to administrative agencies. In a broader sense, includes the federal government and all its agencies and bureaus, state and county governments, and city and township governments.”

### 2nc a2 no vote switching

#### Energy key to the election

Kingston 12 – Director of News at Platts (John, “US election 2012: if not "all energy, all the time," a lot of energy for sure” The Barrel, http://china.platts.com/weblog/oilblog/2012/04/11/election\_2012\_i.html)

Get ready for the energy election of 2012. Maybe because it was at a New York Times forum devoted to energy, so the inclination was to talk with that sort of grand vision. But three reporters for the Times who are out on the campaign trail made it clear to a packed room that energy will be a key area in which Mitt Romney goes after Barack Obama in 2012. As Helene Cooper, the Times' White House correspondent, noted, the Obama adminstration has a lot of confidence going into the campaign. But if national retail gasoline prices were to head toward the $5/gal mark, "all bets would be off." And lurking in the background to that is the possibility of some sort of spike in price driven by an Iranian incident. With the Romney vs. Obama race all but assured, the campaigns are now focusing more on each other, rather than on the GOP nominating process. As as the Times' domestic correspondent Jim Rutenberg said, "so far, energy is what the campaign is all about." The panelists showed two ads, one from the Obama campaign and one from American Crossroads, the Karl Rove-led group. We weren't able to find them online, but found similar ones that pretty much say the same thing as those shown at the Times forum. You can see them here and here. The "gist" of the American Crossroads ad, according to Rutenberg, is that "the Obama administration is shirking blame for everything," and is doing so on energy policy as well. "Drilling is down on federal lands, and federal lands' output is down." But Cooper quickly noted that the Obama administration's retort is that "it's down because we took a time out (the moratorium after Macondo)." Although that move still gets criticized in some quarters, the administration is "screaming about this," since it believes the drop in federal lands' output is justified by the actions it took in the wake of the Macondo spill. (This report does show that federal onshore production has risen, though the total is down. See page 5). When the President talks about energy, the Romney campaign "just loves it," according to Ashley Parker, the Times' reporter covering the former Massachussetts governor. "They like it because it gives (them) an opening."

#### Energy policy will determine the election

**Gardett, 8/23/12** (Peter, “As Voters Focus on Energy, API Chief Begs: 'Turn Us Loose',” http://energy.aol.com/2012/08/23/as-voters-focus-on-energy-api-chief-begs-turn-us-loose/)

The US oil and natural gas business has been an unusual bright spot for the American economy over the past four years, and that success has helped highlight energy issues as a major factor in the 2012 election cycle.

Energy has not traditionally been a focus of electoral politics beyond prices at the gasoline pump, but this year the broader focus on the economy and the government's role in directing it have brought to light the successes, the potential and the risks of energy development in the US.

"We're only in the early stages of a very robust debate on energy issues," American Petroleum Institute (API) CEO Jack Gerard told AOL Energy in a recent interview.

API has played its part in surfacing energy and the sector's role as an economic engine in a large awareness building campaign called Vote4Energy, revealed in Washington, DC to great fanfare at the beginning of this year. Unlike many industry group-led campaigns, API has implemented a long-term and fully committed strategy across the year as part of the campaign, and will be present at the upcoming Presidential nominating conventions planned for Tampa, Florida and Charlotte, North Carolina over the coming weeks.

The campaign will intensify over the remaining months of 2012 with particularly robust outreach planned for voters in five key states, including Virgina, Ohio, Florida, Colorado and North Carolina.

"We've broken through to a new means of engaging with the public," Gerard said, adding that he thinks the Vote4Energy campaign has been "wildly successful" so far. A recent poll conducted by API demonstrates what it says is broad-based and bipartisan support for the economic issues that in turn underpin the group's pro-energy development agenda.

### 2nc uniqueness block

#### Obama will win but it will be close

**Blumenthal, 10/1/12** - senior polling editor of the Huffington Post and the founding editor of Pollster.com (Mark, New 2012 Polls Show Little Change In State Of Race, http://www.huffingtonpost.com/2012/10/01/2012-polls-obama-romney\_n\_1928472.html?utm\_hp\_ref=elections-2012)

WASHINGTON -- With attention turning to the first of three upcoming national debates, new polls show President Barack Obama continuing to hold a narrow lead over Republican nominee Mitt Romney, both nationwide and in the key battleground states that are likely to decide the election. Two new national surveys released on Monday morning both show a slightly closer race than most other recent polls, although those new results are consistent with previous surveys from the same organizations, indicating that Obama's September lead is holding. The new Washington Post/ABC News survey finds Obama leading by just 2 percentage points nationwide (49 percent to 47 percent) among the voters deemed most likely to vote. But that result was no different than their previous survey, taken just after the Democratic convention three weeks ago, which showed Obama with a 1-point edge (49 percent to 48 percent). However, among all registered voters nationwide, the new Post/ABC poll shows Obama leading by 5 percentage points (49 percent to 44 percent), again the same margin as their survey found three weeks ago. The Post also reports that Obama's lead over Romney is larger (52 percent to 41 percent) among a subset of likely voters in swing states. Similarly, a new Politico/George Washington University Battleground poll also finds Obama leading by 2 percentage points among likely voters (49 percent to 47 percent), a finding essentially unchanged from the 3-point Obama margin (50 percent to 47 percent) found in their previous survey. The four results have been collectively more favorable to Romney than those produced by other recent national polls, and more importantly, they have shown no statistically meaningful trend in September. The HuffPost Pollster tracking model, which draws on all national and state-level polling and corrects for consistent "house effect" differences among pollsters, continues to give Obama a slightly larger, 4 percentage point lead over Romney. Similarly, a handful of new statewide surveys released over the weekend shows results consistent with a 3- to 4-point Obama lead nationwide. In Iowa, a new Des Moines Register Iowa poll found Obama leading by 4 percentage points (49 percent to 45 percent), exactly the same margin as the Pollster tracking model. In Ohio, an automated recorded-voice survey by the Democratic-affiliated firm Public Policy Polling gives Obama a 4 percentage point advantage, while a new Columbus Dispatch mail-in survey gives Obama a 9-point lead. Not surprisingly, Obama's lead on the Pollster tracking model falls somewhere in between. Finally, another new PPP poll from North Carolina shows a dead-even race, with each candidate at 48 percent -- again, consistent with a similarly close margin on HuffPost's tracking model. North Carolina has been the closest of the 50 states over the last three weeks. Thus, the combination of national and statewide polling continues to show Obama leading Romney by statistically meaningful margins in all of the battleground states except North Carolina. Were he to carry all of the states where he is currently leading, Obama would win 332 electoral votes -- far more than the 270 needed to win. Romney currently leads in states accounting for 191 electoral votes. Can Wednesday night's nationally televised debates between Obama and Romney, the first of three to be held between now and late October, be a "game changer" for Romney? Not likely, according to George Washington University political scientist John Sides. "When it comes to shifting enough votes to decide the outcome of the election," Sides writes in the Washington Monthly, "presidential debates have rarely, if ever, mattered." Sides cites research by political scientists Robert Erikson and Christopher Wlezien, who studied polling from every election from 1952 to 2008 and found that while debates sometimes nudge results, they rarely produce substantial changes in voter preferences. Erikson and Wlezien found that since 1960, the leader in the polling before the debates remained the leader after the debates. The most significant before-and-after debate shift was toward Gerald Ford in his 1976 race against Jimmy Carter. However, as Erikson and Wlezien note, "Carter's support was in steady decline" during the final month of the race. It is worth remembering that while Obama enjoys a statistically meaningful lead in national polling, his margin remains relatively modest compared to past elections. So while a "nudge" toward Romney on the order of what debates produced in 1980, 2000 or 2004 might not be enough to move Romney ahead, it could make for a much closer race.

#### Dick Morris’ political analysis is fraudulent

**Media Matters for America, 9-8-10,** p. http://mediamatters.org/blog/2010/09/08/dick-morriss-fraudulent-political-analysis/170388

The economy's role in the Democrats' current political predicament is so obvious, it's nearly impossible that anyone -- even someone with Dick Morris's spectacular history of being wrong -- could be unaware of it. So when someone like Morris suggests that Democrats are in trouble not because the economy is lousy, but because of health care reform, the obvious conclusion is that he wants to mislead people. He's ideologically opposed to the steps that economists think need to be taken to fix the economy, and politically opposed to the Democrats doing things that would help their political fortunes. And he's ideologically opposed to things like health care reform, so he wants Democrats (and the media and the public) to believe that health care reform, rather than a poor economy, is to blame for the Democrats' political peril.

Morris's political analysis is fraudulent: It isn't intended to explain what is happening; it's intended to manipulate perceptions of what is happening. Either that or Morris is honestly unaware that 9.6 percent unemployment plays a role in the political misfortunes of the incumbent party, in which case he's so spectacularly unqualified to offer political analysis that The Hill would be better off setting a chimpanzee in front of a word processor and publishing whatever it has typed after 90 minutes.

### 2nc a2 johnson – nuclear not key

#### And, the magnitude of the link outweighs

#### ---- visceral public reactions

Mariotte 6/5/12 (Michael Mariotte, Executive Director of Nuclear Information and Resource Service, “Nuclear Power and Public Opinion: What the polls say,” http://www.dailykos.com/story/2012/06/05/1097574/-Nuclear-Power-and-Public-Opinion-What-the-polls-say)

Americans are not exactly wild about the idea of building new nuclear reactors. Polls asking the question different ways arrive at different results; at the lowest common denominator it is safe to say the country is **divided on the issue**. But Americans clearly don’t want to pay for construction of new reactors. And the reality is that no utility wants to or even can spend its own money building new reactors—they’re just too expensive. Congress, State legislatures and Public Service Commissions would do well to heed that warning, especially since it crosses all party and political lines. It is also clear that the American public does not see nuclear power as a “clean energy” source (nor, for that matter, “clean” coal or natural gas fracking). Congressional or state efforts to include these technologies in a “clean energy standard” or a clean energy bank concept are **bound to fail.**

And, distinct from renewablesr – and is consistent with historical findings

Mariotte 6/5/12 (Michael Mariotte, Executive Director of Nuclear Information and Resource Service, “Nuclear Power and Public Opinion: What the polls say,” http://www.dailykos.com/story/2012/06/05/1097574/-Nuclear-Power-and-Public-Opinion-What-the-polls-say)

Jumping back to ORC International, their March 2012 poll found this: About two out of three Americans (66 percent) – including 58 percent of Republicans, 65 percent of Independents, and 75 percent of Democrats -- agree that the term “‘clean energy standard’ should not be used to describe any energy plan that involves nuclear energy, coal-fired power, and natural gas that comes from hydraulic fracturing, also known as ‘fracking.’” and this: About three out of four Americans (73 percent) agree that “federal spending on energy should focus on developing the energy sources of tomorrow, such as wind and solar, and not the energy sources of yesterday, such as nuclear power.” Fewer than one in four (22 percent) say that “federal spending on energy should focus on existing energy sources, such as nuclear, and not emerging energy sources, such as wind and solar.” Meanwhile, the New York Times in May reported on a Harvard/Yale poll (also behind a paywall), conducted in 2011 but released in May 2012, that found that Americans are willing to pay an average of $162/year more for clean energy than they are paying now—an average 13% increase in electric bills. But when clean energy was defined as including nuclear power or natural gas, that **support plummeted**. This is **consistent with findings over the past decade**, which have shown that nuclear power has typically ranked well below renewable energy sources, especially solar and wind, in public opinion, at times battling with coal for least-favorite U.S. energy source. A March 2012 Gallup poll found that 69% of Americans support spending more government money on solar and wind power—with majorities among Democrats (84%) and Republicans (51%) alike. But support for “expanding the use of nuclear power” barely received a majority (52%) and then only due to Republican support: 64% of Republicans supported that idea, only 41% of Democrats.

And, perceived as more expensive

Mariotte 6/5/12 (Michael Mariotte, Executive Director of Nuclear Information and Resource Service, “Nuclear Power and Public Opinion: What the polls say,” http://www.dailykos.com/story/2012/06/05/1097574/-Nuclear-Power-and-Public-Opinion-What-the-polls-say)

New nuclear reactors are simply too expensive for utilities to build with their own assets. Nor are banks willing to lend money for most nuclear projects; they’re considered too risky given the long history of cost overruns, defaults, cancellations and other problems. Thus, the only two means of financing a new reactor are to either get money from taxpayers, through direct federal loans or taxpayer-backed loan guarantees, or from ratepayers in a few, mostly Southern states, which allow utilities to collect money from ratepayers before reactors are built—a concept known either as “early cost recovery” or Construction Work in Progress (CWIP). ORC International (which polls for CNN, among others) has asked a straightforward question for the past two years (March 2011 and February 2012) in polls commissioned by the Civil Society Institute: “Should U.S. Taxpayers Take on the Risk of Backing New Nuclear Reactors?” The answer? Basically identical both years: 73% opposed in 2011, 72% opposed in 2012.

#### And, they are more high profile than their link arg

Magwood, ‘11

[William D., Commissioner -- NRC, “AN EXAMINATION OF THE SAFETY AND ECONOMICS OF LIGHT WATER SMALL MODULAR REACTORS: HEARING before a SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION, SPECIAL HEARING, JULY 14, 2011--WASHINGTON DC,” http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72251/html/CHRG-112shrg72251.htm]

The various concepts known as SMRs have garnered a great deal of interest both inside the Government and in the public, and I understand this interest for all the reasons that Dr. Lyons has outlined. I won't try to repeat all those points. These are all laudable and important interests. However, I'm sure the subcommittee will hear, over the course of the morning, that all these possibilities are really just still that, possibilities. We're really only at the very early first steps of this venture and there's much work to be done.

### 2nc a2 relations defense

#### Romney win would crush US-Russian cooperation

Mark Adomanis, 4-17-2012; analyst for Forbes, Mitt Romney's Incoherent Russia Policy http://www.forbes.com/sites/markadomanis/2012/04/17/mitt-romneys-incoherent-russia-policy/

According to his campaign’s own words, Romney will basically ignore Central Asian authoritarianism, which literally everyone agrees is far nastier, more brutal, and more open than anything the Russians are guilty of, while simultaneously focusing on democracy promotion and regime change in Russia. That is to say Romney’s Russia policy will, to a large extent, be based on relentlessly confronting the Kremlin. But won’t the Kremlin react extremely poorly to an American policy that seeks not only to co-opt its longtime allies in Central Asia and but to depose the current regime? According to Romney, the answer is no: the Kremlin will be so impressed by the bravery and willpower of this American effort that it will more actively support American goals (though precisely why it would react positively to an open challenge to its authority is left unsaid). Despite the endless accusations of Obama’s “double standards” and his “moral relativism” Romney is quite openly embracing his own set of double-standards. As the campaign’s website itself says, one set of moral values will be applied to the Central Asians while a completely different, and much more exacting, set of values will be applied to the Russians. It goes almost without saying that this is the sort of bad-faith posturing that really drives the Russians batty and that they react very poorly to this sort of thing. While I personally am of a strongly realist orientation, and have little patience for the attempt to inject “values” into an international system that naturally tends to be amoral and anarchic, I understand that there is a coherent case to be made for the neoconservative position. Very intelligent people, including many of my friends and acquaintances, hold views similar to the ones Romney espouses towards, and while I can’t say I find them convincing I’m not nearly egotistical enough to think that my own views are the only “correct” ones. However Romney’s mix-and-match approach, a dollop of realism here, a large dose of neoconservatism there, a dash of accommodation here and a big helping of confrontation there, will not be a sober-minded attempt to appeal to everyone, but will instead be a disjointed mess that will simultaneously alienate and antagonize almost everyone in the region. While the foreign policy of any American president will never be perfectly within the bounds of a single school of thought, Romney’s entire Russia policy is a case study in avoiding hard choices. It quite openly attempts to be all things to all people: realists can look at it and see parts of their ideology, and neoconservatives can look at it and see parts of their ideology too. Romney will both openly confront the Russians and get more concessions from them, support democracy and work hand-in-hand with some of the world’s most repressive regimes, pursue missile defense and get Russian cooperation on Afghanistan, expand NATO and convince Russia to stop arming Syria, work to undermine Russia’s energy interests and get it to isolate Iran. There are no hard choices, no nasty compromises, and no trade-offs between values and interests: there is just the unapologetic exercise of American power and the positive consequences inevitably associated with it. Obama is himself very(!) far from being perfect, but at least his foreign policy seems to be a reasonably coherent attempt to advance America’s interests while avoiding, to the greatest extent possible, needless antagonism. As far as I can tell Romney’s main position is that Obama is bad, that everything he’s done is bad too, and that Romney would do better because… he said he will that’s why! There’s a deeper lesson in there about how this campaign is going to be waged, and a rather troubling one at that.

### approval rating

#### Approval ratings are key to the election

**Cook, The National Journal Political Analyst, 11**

(Charlie, October 27, “Underwater,” http://www.nationaljournal.com/columns/cook-report/the-cook-report-obama-underwater-20111027, d/a 7-20-12, ads)

The best barometer of how a president is going to fare is his approval rating, which starts taking on predictive value about a year out. As each month goes by, the rating becomes a better indicator of the eventual results. Presidents with approval numbers above 48 to 50 percent in the Gallup Poll win reelection. Those with approval ratings below that level usually lose. If voters don’t approve of the job you are doing after four years in office, they usually don’t vote for you. Of course, a candidate can win the popular vote and still lose the Electoral College. It happened to Samuel Tilden in 1876, Grover Cleveland in 1888, and Al Gore in 2000. But the popular votes and the Electoral College numbers usually come down on the same side.

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#### Framework –

#### Game spaces like debate are distinct from other forms of education and public speaking. There has to be a balance of ground or else one side claims the moral high ground and creates a de facto monologue

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Debate games are often based on pre-designed scenarios that include descriptions of issues to be debated, educational goals, game goals, roles, rules, time frames etc. In this way, debate games differ from textbooks and **everyday classroom instruction** as debate scenarios allow teachers and students to actively imagine, interact and communicate within a domain-specific game space. However, instead of mystifying debate games as a “magic circle” (Huizinga, 1950), I will try to overcome the epistemological dichotomy between “gaming” and “teaching” that tends to dominate discussions of educational games. In short, educational gaming is a form of teaching. As mentioned, education and games represent two different semiotic domains that both embody the three faces of knowledge: assertions, modes of representation and social forms of organisation (Gee, 2003; Barth, 2002; cf. chapter 2). In order to understand the interplay between these different domains and their interrelated knowledge forms, I will draw attention to a central assumption in Bakhtin’s dialogical philosophy. According to Bakhtin, all forms of communication and culture are subject to centripetal and centrifugal forces (Bakhtin, 1981). A centripetal force is the drive to impose one version of the truth, while a centrifugal force involves a range of possible truths and interpretations. This means that any form of expression involves a duality of centripetal and centrifugal forces: “Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear” (Bakhtin, 1981: 272). If we take teaching as an example, it is always affected by centripetal and centrifugal forces in the on-going negotiation of “truths” between teachers and students. In the words of Bakhtin: “Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction” (Bakhtin, 1984a: 110). Similarly, the dialogical space of debate games also embodies centrifugal and centripetal forces. Thus, the election scenario of The Power Game involves centripetal elements that are mainly determined by the rules and outcomes of the game, i.e. the election is based on a limited time frame and a fixed voting procedure. Similarly, the open-ended goals, roles and resources represent centrifugal elements and create virtually **endless possibilities for researching**, preparing, presenting, debating and evaluating a variety of key political issues. Consequently, **the actual process** of enacting a game scenario involves a complex negotiation between these centrifugal/centripetal forces that are inextricably linked with the teachers and students’ game activities. In this way, the enactment of The Power Game is a form of teaching that combines different pedagogical practices (i.e. group work, web quests, student presentations) and learning resources (i.e. websites, handouts, spoken language) within the interpretive frame of the election scenario. Obviously, tensions may arise if there is too much divergence between educational goals and game goals. This means that game facilitation **requires a balance** between focusing too narrowly on the rules or “facts” of a game (centripetal orientation) and a focusing too broadly on the contingent possibilities and interpretations of the game scenario (centrifugal orientation). For Bakhtin, the duality of centripetal/centrifugal forces often manifests itself as a dynamic between “monological” and “dialogical” forms of discourse. Bakhtin illustrates this point with the monological discourse of the Socrates/Plato dialogues in which **the teacher never learns anything new** from the students, despite Socrates’ ideological claims to the contrary (Bakhtin, 1984a). Thus, discourse becomes monologised when “someone who knows and possesses the truth **instructs someone** who is ignorant of it and in error”, where “a thought is either affirmed or repudiated” by the authority of the teacher (Bakhtin, 1984a: 81). In contrast to this, dialogical pedagogy fosters inclusive learning environments that are able to expand upon students’ existing knowledge and collaborative construction of “truths” (Dysthe, 1996). At this point, I should clarify that Bakhtin’s term “dialogic” is both a descriptive term (all utterances are per definition dialogic as they address other utterances as parts of a chain of communication) and a normative term as dialogue is an ideal to be worked for against the forces of “monologism” (Lillis, 2003: 197-8). In this project, I am mainly interested in describing the dialogical space of debate games. At the same time, I agree with Wegerif that “one of the goals of education, perhaps the most important goal, should be dialogue as an end in itself” (Wegerif, 2006: 61).

#### our framework translates knowledge into action

Barzowski, 12 [April, Samantha, University of Pittsburgh Department of Mechanical Engineering “THORIUM REACTORS AS AN ALTERNATIVE ENERGY SOURCE”, <http://136.142.82.187/eng12/history/spring2012/pdf/2145.pdf>]

The United States government and the public need to be educated about thorium energy, especially the fact that thorium reactors are much safer than the existing nuclear reactors. The biggest fear the public has about nuclear energy is a nuclear meltdown. As discussed in the sections above, thorium reactors have a self-shutdown system, and have a considerably lesser chance of meltdown than uranium reactors. The waste from liquid fluoride thorium reactors is less likely to be turned into bombs, is less in quantity and takes a shorter period of time to decompose. Also, by realizing that uranium reactors pose a threat to the surrounding civilians and environment in the event of a nuclear meltdown, and that LFTRs are meltdown proof, then the United States government may consider that option of building reactors that run on thorium.

#### And, their k doesn’t deny that the whole plan is bad – vote aff for another justification

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

New technology makes clean energy, cheaper than coal. New energy technology solves more problems than just global warming. Some people are still skeptical that man-made CO2 emissions are responsible for global warming. They are concerned that increasing energy costs will harm the US economy. Moreover they are concerned that international treaties might disadvantage the US and other OECD nations, by exempting developing nations from emissions constraints and by paying them to avoid CO2 emissions. There are multiple reasons to develop an energy source cheaper than coal. Any one of these reasons can justify the investment in developing a solution such as the liquid fluoride thorium reactor. Stopping particulate air pollution will save million of lives. Lowering energy costs will increase economic productivity. 9 Ending energy poverty leads to a sustainable population. Reducing CO2 emissions will check global warming. Even climate skeptics should support advanced energy technology for improved economic productivity, population sustainability, and improved human health. In the US conservative Republicans and liberal Democrats bicker over impairing economic growth by imposing taxes to address global warming. Both sides should agree to an energy technology that both improves both the environment and productivity.

#### Policy simulation is key to agency—their claim that fiat’s illusory serves to disempower engagement with the language of power and cedes the political to the karl roves of the world

**Coverstone,5**[MBA(Alan,ActingonActivism,http://home.montgomerybell.edu/~coversa/Acting%20on%20Activism%20(Nov%2017-2005).doc)]

An important concern emerges when Mitchell describes reflexive fiat as a contest strategy capable of “eschewing the power to directly control external actors” (1998b, p. 20).

Describing debates about what our government should do as attempts to control outside actors is debilitating and disempowering. Control of the US government is exactly what an active, participatory citizenry is supposed to be all about. After all, if democracy means anything, it means that citizens not only have the right, they also bear the obligation to discuss and debate what the government should be doing. Absent that discussion and debate, much of the motivation for personal political activism is also lost. Those who have co-opted Mitchell’s argument for individual advocacy often quickly respond that nothing we do in a debate round can actually change government policy, and unfortunately, an entire generation of debaters has now swallowed this assertion as an article of faith. The best most will muster is, “Of course not, but you don’t either!” The assertion that nothing we do in debate has any impact on government policy is one that carries the potential to undermine Mitchell’s entire project. If there is nothing we can do in a debate round to change government policy, then we are left with precious little in the way of pro-social options for addressing problems we face. At best, we can pursue some Pilot-like hand washing that can purify us as individuals through quixotic activism but offer little to society as a whole. It is very important to note that Mitchell (1998b) tries carefully to limit and bound his notion of reflexive fiat by maintaining that because it “views fiat as a concrete course of action, it is bounded by the limits of pragmatism” (p. 20). Pursued properly, the debates that Mitchell would like to see are those in which the relative efficacy of concrete political strategies for pro-social change is debated. In a few noteworthy examples, this approach has been employed successfully, and I must say that I have thoroughly enjoyed judging and coaching those debates. The students in my program have learned to stretch their understanding of their role in the political process because of the experience. Therefore, those who say I am opposed to Mitchell’s goals here should take care at such a blanket assertion.

However, contest debate teaches students to combine personal experience with the language of political power. Powerful personal narratives unconnected to political power are regularly co-opted by those who do learn the language of power. One need look no further than the annual state of the Union Address where personal story after personal story is used to support the political agenda of those in power. The so-called role-playing that public policy contest debates encourage promotes active learning of the vocabulary and levers of power in America. Imagining the ability to use our own arguments to influence government action is one of the great virtues of academic debate. Gerald Graff (2003) analyzed the decline of argumentation in academic discourse and found a source of student antipathy to public argument in an interesting place.

I’m up against…their aversion to the role of public spokesperson that formal writing presupposes. It’s as if such students can’t imagine any rewards for being a public actor or even imagining themselves in such a role. This lack of interest in the public sphere may in turn reflect a loss of confidence in the possibility that the arguments we make in public will have an effect on the world. Today’s students’ lack of faith inthe power of persuasion reflects the waning of the ideal of civic participation that led educators for centuries to place rhetorical and argumentative training at the center of the school and college curriculum. (Graff, 2003, p. 57)

The power to imagine public advocacy that actually makes a difference is one of the great virtues of the traditional notion of fiat that critics deride as mere simulation. Simulation of success in the public realm is far more empowering to students than completely abandoning all notions of personal power in the face of governmental hegemony by teaching students that “nothing they can do in a contest debate can ever make any difference in public policy.” Contest debating is well suited to rewarding public activism if it stops accepting as an article of faith that personal agency is somehow undermined by the so-called role playing in debate. Debate is role-playing whether we imagine government action or imagine individual action. Imagining myself starting a socialist revolution in America is no less of a fantasy than imagining myself making a difference on Capitol Hill. Furthermore, both fantasies influenced my personal and political development virtually ensuring a life of active, pro-social, political participation. Neither fantasy reduced the likelihood that I would spend my life trying to make the difference I imagined. One fantasy actually does make a greater difference: the one that speaks the language of political power. The other fantasy disables action by making one a laughingstock to those who wield the language of power. Fantasy motivates and role-playing trains through visualization. Until we can imagine it, we cannot really do it. **Role-playing without question teaches students to be comfortable with the language of power**, and that language paves the way for genuine and effective political activism.

Debates over the relative efficacy of political strategies for pro-social change must confront governmental power at some point. There is a fallacy in arguing that movements represent a better political strategy than voting and person-to-person advocacy. Sure, a full-scale movement would be better than the limited voice I have as a participating citizen going from door to door in a campaign, but so would full-scale government action. Unfortunately, the gap between my individual decision to pursue movement politics and the emergence of a full-scale movement is at least as great as the gap between my vote and democratic change. They both represent utopian fiat. Invocation of Mitchell to support utopian movement fiat is simply not supported by his work, and too often, such invocation discourages the concrete actions he argues for in favor of the personal rejectionism that under girds the political cynicism that is a fundamental cause of voter and participatory abstention in America today.

#### Epistemology doesn’t indict the need for action – knowledge is innate and biological

Willard, 6 (Dallas A. is Professor of Philosophy at the University of Southern California and the author of numerous books, including The Divine Conspiracy, Logic and the Objectivity of Knowledge, and Renovation of the Heart. “Knowledge and Naturalism,” May 18, The Independent Institute, http://www.independent.org/publications/article.asp?id=1725)

Whether or not one believes what one represents truly and has an appropriate basis for so representing, depends on factors that are irrelevant to truth, understanding and evidence. It depends, one might simply say, on how rational one is. Now I do not think that this point about belief in relation to knowledge is essential to the rest of this paper, but I mention it to indicate that the absence of any reference to belief in my general description of knowledge is not an oversight. Belief is not, I think, a necessary component of knowledge, though one would like to believe that knowledge would have some influence upon belief, and no doubt it often does. In addition, it seems to me that specification of knowledge in terms of belief is a harmfully tendentious characterization, favoring the naturalization of knowledge. This is because belief has an essential tie to action, and is therefore easily located in the natural world—say as a mere tendency of the physical organism to behave in certain ways. I suspect that it is the almost overwhelming Empiricist—and in that sense Naturalist—tendency of thought in our time that has created the general presumption that knowledge must be some kind of belief. Hence we must here at least question that presumption; and, I believe, when questioned it will not prove to be obvious or, finally, sustainable. It also should be noticed that on the view here advanced one may know without knowing that one knows. Skeptical tendencies are often associated with the mistaken view that one has to know that one knows in order to know. And in particular, one does not have to know that one actually has "an appropriate basis in thought and experience" in order to have one, and one does not have to know that one's representation is true in order to know. It has to be true, indeed, but we do not have to know that it is true. We "use" it or live it; we don't "mention" or focus upon it. Knowing that my representation is true is quite different condition from knowing the respective objective circumstance to be the case. When I know that the book in my briefcase is a copy of Kant's Critique of Pure Reason, for example, what I know is not that my representation of the book in my briefcase as being a copy of Kant's Critique is true—though of course I might know that too. What I know is something about that book, namely, that it is in my briefcase. And likewise, when I know that, I may not know that I have an "appropriate basis" for representing it as I do—though I might know that too. It is enough that it is true, and that I do I have an appropriate basis for representing it as I do. Clearly, if I cannot know without knowing that I know, then I can't know that I know without knowing that I know that I know. And so forth. This is a genuinely vicious regress. But we often do in fact know things without knowing that we know, and without even considering whether we know or not. Many familiar cases could be cited. Essential to knowledge and knowing are, then, at least truth and logical grounding. We know only if our representations in the given case are true and logically non-arbitrary. Essential to logical grounding are logical relations: especially the simple formal relations of implication, consistency and inconsistency. Noetic unity comes in because knowing and knowledge require a larger context of consciousness involving many interrelated states and acts and kinds of states and acts. Our question now becomes: Can truth, logical relations and noetic unity be understood in physicalistic—and in that sense "naturalistic" —terms? Can knowing and knowledge be accommodated within the categories of physicalism, the narrower or "Puritanical" Naturalism? Truth as "Matching Up" Truth lies at the heart of knowledge. Knowledge is a condition of the human being that involves truth, for it involves representing its subject matter as it is; and, as we shall also see, much of our knowledge is in the first instance knowledge of truths. Truth is also a vital human need, and a major part of what makes knowledge valuable. It and its opposite, falsity, are solidly at home in the midst of ordinary life. To know what truth is and to be able to recognize it and its opposite are basic components of ordinary human competence. To find one's way about, to communicate, and to give and receive directions and commands often requires us to identify the truth values of thoughts, beliefs and statements. In functioning in normal human relationships, say in a family or on a job, one must be able to recognize truth in thought, belief and statement. All of us bear a primary ethical responsibility to make sure that how we are thinking and speaking of things is as they are, that is, that our thoughts and words are true. Our view of the nature of truth must be compatible with its actual role in real life. But what is truth? We first come to know truth—and what truth is—in concrete cases of verification within our physical environment**.** An infant in its second year of life or earlier develops the ability to look for something and to recognize it—what they are looking for—when it is found. The child at that point is capable of sustaining a specific thought or representation of something and of sorting objects that come before it with respect to whether they are or are not what they are seeking. Close to the same time the "uh oh!" phenomena emerges. The child observes things as not being how they 'should' be or are expected to be and verbally expresses the felt incongruity or lack of "fit." Closely linked with these developments is the ability to think of something as being such and such, and the associated capacity to find something to be (or to not be) as it is thought to be. This is verification as a human reality. It is a primary form of knowing in the occurrent sense.

#### That means the alt causes mass violence

Elshtain 3 – Ethics Professor, Chicago (Jean, Just War Against Terror, p 148, AG)

One French social commentator, Alain Minc, suggests that Baudrillard has fallen victim to a confusion of the virtual and the real. Minc believes that Baudrillard equates the make-believe world of Disneyland (with which Baudrillard has long been obsessed) and its attempts to simulate a kind of "reality" that never existed with a real attack in which "thousands ... were killed in cold blood. Enraptured by his own verbal prestidigitation, [Baudrillard] has turned mass murder into a 'beautiful suicide." Stille concludes that "only a French philosopher could turn reality on its head in such a rhetorical flourish" and find the events of September 11 breathtaking and beautiful.

#### Crisis reps are good—key to action

Kurasawa 4– Prof Sociology, York (Fuyuki, Cautionary Tales, Constellations 11.4, AG)

And yet dystopianism need not imply despondency, paralysis, or fear. Quite the opposite, in fact, since the pervasiveness of a dystopian imaginary can help notions of historical contingency and fallibilism gain traction against their determinist and absolutist counterparts. Once we recognize that the future is uncertain and that any course of action produces both unintended and unexpected consequences, the responsibility to face up to potential disasters and intervene before they strike becomes compelling. From another angle, dystopianism lies at the core of politics in a global civil society where groups mobilize their own nightmare scenarios (‘Frankenfoods’ and a lifeless planet for environmentalists, totalitarian patriarchy of the sort depicted in Atwood’s Handmaid’s Tale for Western feminism, McWorld and a global neoliberal oligarchy for the alternative globalization movement, etc.). Such scenarios can act as catalysts for public debate and socio-political action, spurring citizens’ involvement in the work of preventive foresight.

#### Baudrillard’s critique is non-falsifiable

Marsh 95 – Philosophy Professor, Fordham (James, Critique, Action, and Liberation, p 292-3)

In such a postmodernist account is a reduction of everything to image or symbol that misses the relationship of these to realities such as corporations seeking profit, impoverished workers in these corporations, or peasants in Third-World countries trying to conduct elections. Postmodernism does not adequately distinguish here between a reduction of reality to image and a mediation of reality by image. A media idealism exists rooted in the influence of structuralism and poststructuralism and doing insufficient justice to concrete human experience, judgment, and free interaction in the world.4 It is also paradoxical or **contradictory** to say it really is true that nothing is really true, that everything is illusory or imaginary. Postmodemism makes judgments that implicitly deny the reduction of reality to image. For example, Poster and Baudrillard do want to say that we really are in a new age that is informational and postindustrial. Again, to say that everything is imploded into media images is akin logically to the Cartesian claim that everything is or might be a dream. What happens is that dream or image is absolutized or generalized to the point that its original meaning lying in its contrast to natural, human, and social reality is lost. We can discuss Disneyland as reprehensible because we know the difference between Disneyland and the larger, enveloping reality of Southern California and the United States.5

#### Baudrillard is the worst example of ivory tower academia—instead of dealing with real problems on the ground, he retreats into his safe western university and makes statements which echo colonialism and authorize genocide by cloaking war in philosophical terms. Technology makes war MORE real, not less—the correct course is ACTION to abate the CONSEQUENCES OF WAR. Star this card, because it lights their kritik on fire.

**BALSAS, 2006** [BALSAS is an interdisciplinary journal on media culture. Interview with Art Group BBM, “on first cyborgs, aliens and other sides of new technologies,” translated from lithiuanian <http://www.balsas.cc/modules.php?name=News&file=print&sid=151>]

Valentinas: We all know that Jean Baudrillard did not believe that the Gulf War did take place, as it was over-mediated and over-simulated. In fact, the Gulf War II is still not over, and Iraq became much more than just a Frankenstein laboratory for the new media, technology and “democracy” games. What can we learn from wars that do not take place, even though they cannot be finished? Are they becoming a symptom of our times as a confrontation between multiple time-lines, ideologies and technologies in a single place?

Lars: Actually, it has always been the same: new wars have been better test-beds for the state of art technologies and the latest computer-controlled firearms. The World War I already was a fully mechanized war where pre-robots were fighting each other and gassing the troops. And afterwards, the winners shape the new world order.

Olaf: **Who on hell is Baudrillard**? The one who earns money by publishing his prognoses after the things happen? **What a fuck,** **French philosophy deals too much with luxury problems and elegantly ignores the problem itself**. It’s no wonder, **this is the colonizer’s mentality**, you can hear it roaring in their words: **they use phrases made to camouflage genocide.**

I went to see that Virilio’s exhibition "Ce qui arrive" at Foundation Cartier in 2003. I was smashed by that banal presentation of  the evil of all kinds: again, natural catastrophes and evil done by man were exposed on the same wall, glued together with a piece of "theory". There you find it all, filed up in one row: the pure luxury of the Cartier-funded Jean Nouvel building, an artwork without any blood in its veins, and that late Christian philosophy about the techno-cataclysm being the revenge of God. **Pure shit, turned into gold in the holy cellars of the modern alchemists’ museums.**

The artist-made video "documents" of the Manhattan towers opposed to Iraqian war pictures: that’s not Armageddon, that’s man-invented war technology to be used to subdue others. And **there is always somebody who pushes the buttons,** even when the button is a computer mouse some ten thousand kilometers away from the place where **people die**, or even if it is a civil airplanes redirected by Islamists. Everybody knows that. **War technology has always been made to make killing easier**. And to produce martyrs as well.

Janneke: Compare Baudrillard with **Henry Dunant,** the founder of the International Committee of the Red Cross. Dunant was no philosopher, he was just an intelligent rich man in the late 19th century. But his ideas went far more in the direction where **you should hope to find** **philosophers** as well. He experienced war as a "randonneur": he passed by, he saw the suffering and the inhumanity of war. **And he felt obliged to act**. Apart from the maybe 10 days he spent on the battlefield, on the beautiful meadows in the Europeans Alps, helping wounded people to survive, as a complete medical layman he decided to do something more sustainable against these odds. He knew that his efforts couldn’t prevent war in general, but he felt that he could alter the cruelty of reality. **And he succeeded in doing it**. No wonder that in our days we find the most engaged people to support the TROIA projects intention in Geneva, where they are still based. And they are not only doing their necessary surgeon’s work in the field: they are as well **fighting with the same energy on the diplomatic battlefield.**

#### Turn—the alt cedes the political to conservative ideologies

**Norris 92** – Philosophy Professor, Wales (Christopher, Uncritical Theory, p 190-1)

Baudrillard’s alternative is stated clearly enough: ‘a hyperreal henceforth sheltered from the imaginary, and from any distinction between the real and the imaginary, leaving room only for the orbital recurrence of models and the simulated generation of difference’ (p. 167). It is a vision which should bring great comfort to government advisers, PR experts, campaign managers, opinion-pollsters, media watch-dogs, Pentagon spokesmen and others with an interest in maintaining this state of affairs. Baudrillard’s imagery of ‘orbital recurrence’ and the ‘simulated generation of difference’ should commend itself to advocates of a Star Wars program whose only conceivable purpose is to escalate East—West tensions and divert more funds to the military-industrial complex. There is no denying the extent to which this and similar strategies of disinformation have set the agenda for ‘public debate’ across a range of crucial policy issues. But the fact remains (and this phrase carries more than just a suasive or rhetorical force) that there is a difference between what we are given to believe and what emerges from the process of subjecting such beliefs to an informed critique of their content and modes of propagation. This process may amount to a straightforward demand that politicians tell the truth and be held to account for their failing to do so. Of course there are cases — like the Irangate—Contra affair or Thatcher’s role in events leading up to the Falklands war — where a correspondence-theory might seem to break down since the facts are buried away in Cabinet papers, the evidence con­cealed by some piece of high-level chicanery (‘Official Secrets’, security interests, reasons of state, etc.), or the documents conveniently shredded in time to forestall investigation of their content. But there is no reason to think —as with Baudrillard’s decidedly Orwellian prognosis — that this puts the truth forever beyond reach, thus heralding an age of out-and-out ‘hyperreality’. For one can still apply other criteria of truth and falsehood, among them a fairly basic coherence-theory that would point out the various lapses, inconsisten­cies, non-sequiturs, downright contradictions and so forth which suffice to undermine the official version of events. (Margaret Thatcher’s various state­ments on the Malvinas conflict — especially the sinking of the General Beigrano — would provide a good example here.)29 It may be argued that the truth-conditions will vary from one specific context to another; that such episodes involve very different criteria according to the kinds of evidence available; and therefore that it is no use expecting any form of generalised theory to establish the facts of this or that case. But this ignores the extent to which theories (and truth-claims) inform our every act of rational appraisal, from ‘commonsense’ decisions of a day-to-day, practical kind to the most advanced levels of speculative thought. And it also ignores the main lesson to be learnt from Baudrillard’s texts: that any politics which goes along with the current postmodernist drift will end up by effectively endorsing and promoting the work of ideological mystification.

#### This causes nihilism, making domination inevitable

**Kellner 89** – Philosophy, UCLA (Douglas, Jean Baudrillard, p 107-8)

In Baudrillard, by contrast, life does not exist as an autonomous source of value, and the body exists only as ‘the caarnality of signs,’ as a mode of display of signification. His sign fetishism erases all materialjty from the body and social life, and makes possible a fascinated aestheticized fetishism of signs as the primary ontological reality. This way of seeing erases suffering, disease, pain and the horror of death from the body and social life and replaces it with the play of signs — Baudrillard’s alternative. Politics too is reduced to a play of signs, and the ways in which different politics alleviate or intensify human suffering disappears from the Baudrillardian universe. Consequently Baudrillard’s theory spirals into a fascination with signs which leads him to embrace certain privileged forms of sign culture and to reject others (that is, the theoretical signs of modernity such as meaning, truth, the social, power and so on) and to pay less and less attention to materiality (that is, to needs, desire, suffering and so on) a trajectory will ultimately lead him to embrace nihilism (see 4.4).

## 1ar

#### Their arguments about life are inconsistent with the implication they're trying to make—if life is a constant process of becoming and we can't quantify value then it’s stupid to say you should vote for one team for having more of it—interpreting these arguments to mean premature death is good is unjustified because you can't judge a life until it’s over

**White, 90** (Alan, online book, Within Nietzsche’s Labyrinth http://www.williams.edu/philosophy/faculty/awhite/WNL%20web/beauty\_and\_goodness.htm).

Insisting that Nietzsche's perspectivism "forbids any general evaluation [of life], positive or negative," Nehamas argues: What Nietzsche eventually comes to attack directly is not any particular judgment but the very tendency to make general judgments about the value of life in itself, as if there were such a single thing with a character of its own, capable of being praised or blamed by some uniform standard. [...] Life itself has no value, but the life of an individual or a group has as great a value as that individual or group can give it. Some lives are mean or hor­rible, others magnificent. Life's value depends on what one makes of it, and this is a further sense in which Nietzsche believes that value is created and not discovered. (135) This conclusion, which follows from the forbidding of any general evaluation of life, is, it seems to me, as dangerous in its implications as any of Nietzsche's "words of war," any of his "thunder and fireworks." If "life itself has no value," and if "some lives are mean and horrible," then those who strive to live beautifully need take no account of those whose lives they deem, on whatever basis, to be ugly. "Some lives," Nehamas tells us, "are mean or horrible." I agree, but only if we read Nehamas as asserting that some lives have been mean or horrible. This correction is vital, for no life can be simply "mean or horrible" until it is over. The life that appears, as it develops, to be simply "mean or horrible" may be a life whose beauty has not yet emerged. As Nietzsche notes in what he calls "a parable," "Not every end is a goal. A melody's end is not its goal; nevertheless, so long as the melody has not reached its end, it also has not reached its goal" (HHII:WS:204). Perhaps Nehamas is right in asserting that Nietzsche's perspectivism "forbids any general evaluation [of life], positive or negative"; yet, I have argued, Nietzsche attempts to develop a "general" perspective of life, he attempts to see life as it really is. The lenses of art are not the only lenses we need; Nietzsche exhorts us to view art through the lenses of life. One of the things we see through the lenses of life is that **no final evaluation of a life can be made until, at least, the life is over. To say that a life still underway is simply "mean and horrible" is not to express a justifiable opinion, it is to judge prematurely.**

#### Responsibility turn—they can win everything on the flow and it wont dispute the idea that it’s a good orientation to the world to care about impending risks and try to reduce them—voting negative is a self-satisfied gesture that prioritizes

Barash and Lipton, 1985 David P., Professor of Psychology at the University of Washington (Seattle) and Judith Eve, psychiatrist at the Swedish Medical Center in Washington, “The Caveman and the Bomb” p.261-267

Fortunately, whatever genetic imperatives operate in Homo sapiens, they are unlikely to extend directly to nuclear weapons, any more than a tendency for body adornment necessarily leads to a Christian Dior necktie or a New Guinea penis sheath. The general patterns that char­acterize today's nuclear Neanderthal are, in fact, general, nonspecific. They may incline us to a degree of saber rattling that seems likely to trouble the world in one way or another as long as we and the world persist, but these patterns don't require that the saber be nuclear. On this level the nuclear Neanderthal doesn't even have to play "as if": We are called on to behave not as if we had free will regarding the renun­ciation of nuclear weapons and nuclear war, but to act in accord with that free will, which we assuredly have. That is honest empowerment indeed. Teilhard de Chardin wrote about the "Omega point" at which human beings become conscious of their own evolution and, hence, of them­selves. He called for a recognition of unity and connectedness, with our species born on this planet and spread over its entire surface, coming gradually to form around its earthly matrix a single, major organic unity, enclosed upon itself; a single, hypercomplex, hyperconcentrated, hyperconscious arch-molecule, coextensive with the heavenly body on which it is born.9 In overcoming the Neanderthal mentality we could finally become hu­man, or perhaps even more than this, at last able to answer affirmatively the question: Is there intelligent life on earth? As poet and novelist Nikos Kazantzakis pleaded, "Let us unite, let us hold each other tightly, let us merge our hearts, let us create for Earth a brain and a heart, let us give a human meaning to the superhuman struggle."'° Something has spoken to me in the night, burning the tapers of the waning year; something has spoken in the night, and told me I shall die, I know not where. Saying: "To lose the earth you know, for greater knowing; to lose the life you have, for greater life; to leave the friends you loved, for greater loving; to find a land more kind than home, more large than earth—Whereupon the pillars of this earth are founded, toward which the conscience of the world is tending—a wind is rising and the rivers flow." THOMAS WOLFE 11 For the existentialists the essence of humanity is in saying no—no to injustice, to murder, to the absurd and dehumanizing universe itself. But the ultimate existential tragedy is that in the long run, saying no cannot succeed. Each of us will eventually die, and this looming inevitability makes our lives absurd**.** By our very aliveness we are therefore embarked on a hopeless campaign, which may yield some victories, but only tem­porary ones. Like a cosmic poker game, we are playing against the house, but in this game the house never loses; even if we are briefly ahead, we cannot cash in our chips and go home winners. There is no other place to go. At the close of The Plague, Albert Camus lets us inside the thoughts of Dr. Rieux, who had courageously battled a typhoid epidemic in a North African city. Just as the plague has finally been overcome, and the survivors were celebrating in the streets, Dr. Rieux understood that the tale he had to tell could not be one of a final victory. It could be only the record of what had had to be done, and what assuredly would have to be done again in the never-ending fight against terror and its relentless onslaughts, despite their personal afflictions, by all who, while unable to be saints but refusing to bow down to pestilences, strive their utmost to be healers. And, indeed, as he listened to the cries of joy rising from the town, Rieux remembered that such joy is always imperiled. He knew what those jubilant crowds did not know but could have learned from books: that the plague bacillus never dies or disappears for good; that it can lie dormant for years and years in furniture and linen-chests; that it bides its time in bedrooms, cellars, trunks, and bookshelves; and that perhaps the day would come when, for the bane and the enlightening of men, it would rouse up its rats again and send them forth to die in a happy city.12 But effectiveness per se is not the issue. The rats may come again, and with them the plague, just as every person now alive must some day die. The real question—for would-be post-Neanderthals no less than for existential thinkers—concerns the obligation of human beings in the face of such a world**. "**In everlasting terms—those of eternity," wrote Thomas Wolfe, "there is no greater wisdom than the wisdom of Ecclesiastes, no acceptance finally so true as the stern fatalism of the rock. Man was born to live, to suffer, and to die, and what befalls him is a tragic lot. There is no denying this in the final end." Nonetheless, he concludes, we must "deny it all along the way." Although admitting the "stern lesson of acceptance," which calls for acknowledging the "tragic under-weft of life into which man is born, through which he must live, out of which he must die," Wolfe described his intention, "having accepted it, to try to do what was before me, what I could do, with all my might."13 Camus went farther. According to Greek mythology, Sisyphus had been condemned to spend eternity rolling an enormous rock up a steep hill;when the rock neared the top, it would roll back down, and Sisyphus would have to start again. In "The Myth of Sisyphus," Sisyphus serves not only as a metaphor for humanity but, as Camus sees it, as a model as well. His struggle is not only self-defining, but also ennobling. More­over, Camus concludes that Sisyphus is happy. There are some important differences between Sisyphus and Dr. Rieux, and the post-Neanderthal. For one thing, Dr. Rieux could afford to lose many battles and even many patients, just as Sisyphus can tolerate the constant victory of gravity**.** Sisyphus, after all, is crushed neither mentally nor literally by his stone; no matter how many people die from a plague, some survive. Dr. Rieux will never eradicate the plague; his glory comes from his fighting on in the face of that knowledge. Sisyphus will never succeed in his labor; his happiness comes from his self-defi­nition, knowing his futility. Unlike them, however, we are not doomed to failure. Before beginning their combat the Roman gladiators used to face the spectators in the Coliseum and announce, "We who are about to die salute you." Two thousand years later the poet W. H. Auden updated their credo: "We who are about to die demand a miracle." Like the gladiators, Auden was concerned about the end of his life, what Kurt Vonnegut calls "plain old death." And to overcome plain old personal death, nothing less than a bona fide miracle in the theological sense will do. We can say no to personal death and an absurd universe all we like, but in the end, like Rieux and Sisyphus, we are bound to lose. The good news, however, is that the other kind of death—the mass, meaningless annihilation that would come with nuclear war—is not inevitable. Unlike the overturning of personal death, no divine intervention is required. Unlike the eruption of a volcano or the brewing of a hurricane, nuclear war is a man-made problem, with man- and woman-made solutions. Unlike Auden and the gladiators, we have a precious and unique op­portunity: We can say no to our Neanderthal mentality, to our genes. We are the only creatures on earth who can do this. We have this op­portunity because our genes whisper to us, they do not shout. They can be stubborn, but they can be persuaded, cajoled, bribed, or, if necessary, simply overruled and strong-armed into submission. Dr. Rieux learned in a time of pestilence that "there are more things to admire in men than to despise." Similarly, the whole can be greater than the sum of its parts, if we choose to be. We can be greater than the sum of our genes. If that is our decision, evolution can't do a thing about it. Making that decision is the supreme test of our humanity, our greatest challenge and our most sublime opportunity. Nonetheless, war touches a deep chord in most human beings, and the decision to say no will not be an easy one. Sigmund Freud com­mented that prohibitions and taboos by their very existence strongly suggest a preexisting desire to perform the prohibited act, otherwise there would be no need for the prohibition: "What no human soul desires, there is no need to prohibit; it is automatically excluded. The very em­phasis of the commandment Thou Shalt Not Kill makes it certain that we spring from an endless ancestry of murderers, with whom the lust for killing was in the blood, as possibly it is to this day with ourselves." He also emphasized that wars occur because nations, like individuals, "still obey their immediate passions far more readily than their inter­ests,"14 a succinct summary of the plight of today's Neanderthal. Prior to World War I especially, the making of war was generally considered a laudable activity. Admiration and often adulation flowed to such men as Alexander, Achilles, Caesar, Charlemagne, Frederick the Great, Napoleon, and Robert E. Lee. The first masterpiece of Western literature (Homer's Iliad) and the first histories (Herodotus' account of the Persian Wars, and Thucydides' study of the Peloponnesian War) focused on war. Western culture is by no means unique in its glorification of war, as witness the cultures of ancient Africa, Mexico, and Fiji. Ac­cordingly, "the war against war," as William James pointed out, "is going to be no holiday excursion or camping party."15 The fact is that war and sanctified violence have had a powerful and persistent appeal cross‑culturally, although not in all cultures, and throughout human history. Thus, as James said, war has come to be seen as "preserving our ideals of hardihood," a supreme test of human effectiveness, the most de­manding and, hence, for many people, the most rewarding activity of which they are capable. It is revealing that whereas "war" exists in the plural, "peace" is conceived only in the singular. (A similar pattern obtains in other lan­guages as well.) We have the War of the Roses, the Napoleonic wars, the Maori wars, World Wars I and II, and so on, but only one peace, despite the fact that there must have been as many different kinds of peace as different kinds of wars. As with the Eskimos, who are said to have eleven words for what in English we simply call "snow," or the Bedouin, who have more than one hundred words for "camel," human beings distin­guish carefully among whatever is important to them. For countless generations the human Neanderthal has been obsessed with war, and indifferent to peace, even slightly bored with it. When and if peace becomes as appealing as war, perhaps then we shall focus on it, identi­fying its varieties and nuances. Words signifying normalcy, like "peace," "health," and "sanity," have lagged behind their pathological counter­parts; thus, we know more about diseases than about wellness. Yet, as the holistic health movements are demonstrating, in order to practice preventive medicine, it is necessary to define, describe, and validate the state of wellness before one can act effectively to preserve it. Much of war's appeal, according to William James, comes from its aura of extremis, embodying the most dangerous and strenuous of human struggles, and hence becoming strangely ennobling despite (or in part, because of) its extraordinary horror. The contemplation of war, the prep­aration for war, and in many cases even the fighting of war is something that most Neanderthals find compelling, exciting, and even fun. Accord­ing to James, this gut-level attraction "cannot be met effectively by mere counter-insistency on war's expensiveness and horror. The horror makes the thrill; and when the question is of getting the extremist and supremist out of human nature, talk of expense sounds ignominious." He therefore proposed a "substitute for war's disciplinary function"—his now-famous Moral Equivalent of War, suggesting a peacetime conscription which would not so much overcome the Neanderthal mentality as bypass it with a bit of social ju jitsu, sublimating dangerous human urges into constructive activity.16 In a sense, the Peace Corps was a practical example of James's con­ception; but a real peace corps can be fashioned only when peacemaking becomes recognized as an acceptable and active verb, and when peace takes its rightful place at our own core. Ironically, in a world society that is increasingly intolerant of personal violence, that forbids murder, assault, even the threat of physical abuse, and in which fistfights and even bullying are grossly out of place, in diplomatic parlors, war and the threat of war remain acceptable. Rather than finding a moral equivalent of war, we have collectively made war itself into a morally acceptable form of violence such that societies can contemplate and plan actions that would be unacceptable if undertaken by its individual members. Those old Neanderthal cravings are still alive and well, running just beneath the surface, needing only the slightest provocation to erupt, even in the most sophisticated and presumably civilized societies. Just let some Americans be taken hostage in Iran, or a Korean airliner violate Soviet airspace, and suddenly the cavemen are at it again and the old predictable tribal bellowing resumes. Homo, called sapiens, is all but drowned in an atavistic avalanche of anger, distrust, and intolerance. The structures of peace, built up with such care and needing such nurturance, seem woefully delicate and fragile before the crude, easily evoked Neanderthal onslaught. But here we note Theodore Roethke's observation, "In a dark time, the eye begins to see." Perhaps by thinking, feeling, and believing, we can see through our Neanderthal mentality, and forge a new awareness where we confront our limitations and our strengths, able to bend, but nonetheless to resist and not to break. A major impediment to this awareness has been our ignorance that the Neanderthal mentality even exists. There is also the double irony of pessimism—the assumption that the Neanderthal mentality, under the alias of "human nature," is un­changeable. Insofar as it succeeds, this assumption is a triumph for the Neanderthal mentality and, moreover, a self-fulfilling prophecy. It is also seductive; it leaves each of us free to go ahead with his or her own little life, all the while treading on unstable slopes, heedless of the danger. "The challenge to humans in our time is whether they can become aroused not just over small but over larger dangers," observed Norman Cousins. "Whether they can perceive universal problems as well as per­sonal ones, whether they can become as concerned over their survival as a species as they are over their jobs."" This arousal is growing, in part because the overriding universal problem is increasingly perceived as an intensely personal one, because it threatens the deepest personal values of every human being, and also because it demands a committed personal response. Perhaps we shall have the final laugh after all, and perhaps the laugh will be on evolution. In giving so much autonomy to the bodies they create, the genes of Homo sapiens have unwittingly sewn the seeds of their own overthrow (not the seeds of their destruction, for that would mean our own demise as well). It is precisely—and only—by overthrowing our genes, by taking the unprecedented step and saying no to their dangerous and insistent whisperings, that we can preserve them, along with everything else. By saying no to that aspect of our genes, we say yes to life, to love, and to hope, and even to the continuation of those troublesome genes themselves. There is no better time. "At this moment," wrote Albert Camus, when each of us must fit an arrow to his bow and enter the lists anew, to reconquer, within history and in spite of it, that which he owns already, the thin yield of his fields, the brief love of this earth, at this moment when at last a man is born, it is time to forsake our age and its adolescent furies. The bow bends; the wood complains. At the moment of supreme tension, there will leap into flight an unswerving arrow, a shaft that is inflexible and free.18 Maybe in the long run we shall all laugh together, as through our negation of the Neanderthal mentality we arrive at a new affirmation, a higher level of life, its most exalted accomplishment. This will be the point at which, while unable to be saints but refusing to bow down to universal murder, we resolve to overcome the Neanderthal mentality and thereby transcend,if not overcome, our biology itself.

#### Baudrillard needs to stop shitting his pants about how intense the media is getting

**March, 95** James Marsh, Professor of Philosophy, Fordham University, 95, Critique, Action, and Liberation, pp. 292-293

Such an account, however, is as one-sided or perhaps even more one-sided than that of naive modernism. We note a residual idealism that does not take into account socioeconomic realities already pointed out such as the corporate nature of media, their role in achieving and legitimating profit, and their function of manufacturing consent. In such a postmodernist account is a reduction of everything to image or symbol that misses the relationship of these to realities such as corporations seeking profit, impoverished workers in these corporations, or peasants in Third-World countries trying to conduct elections. Postmodernism does not adequately distinguish here between a reduction of reality to image and a mediation of reality by image. A media idealism exists rooted in the influence of structuralism and poststructuralism and doing insufficient justice to concrete human experience, judgment, and free interaction in the world.4 It is also paradoxical or contradictory to say it really is true that nothing is really true, that everything is illusory or imaginary. Postmodemism makes judgments that implicitly deny the reduction of reality to image. For example, Poster and Baudrillard do want to say that we really are in a new age that is informational and postindustrial. Again, to say that everything is imploded into media images is akin logically to the Cartesian claim that everything is or might be a dream. What happens is that dream or image is absolutized or generalized to the point that its original meaning lying in its contrast to natural, human, and social reality is lost. We can discuss Disneyland as reprehensible because we know the difference between Disneyland and the larger, enveloping reality of Southern California and the United States.5 We can note also that postmodernism misses the reality of the accumulation-legitimation tension in late capitalism in general and in communicative media in particular. This tension takes different forms in different times. In the United States in the 1960s and 1970s, for example, social, economic, and political reality occasionally manifested itself in the media in such a way that the electorate responded critically to corporate and political policies. Coverage of the Vietnam war, for example, did help turn people against the war. In the 1980s, by contrast, the emphasis shifted more toward accumulation in the decade dominated by the “great communicator.” Even here, however, the majority remained opposed to Reagan’s policies while voting for Reagan. Human and social reality, while being influenced by and represented by the media, transcended them and remained resistant to them.6 To the extent that postmodernists are critical of the role media play, we can ask the question about the normative adequacy of such a critique. Why, in the absence of normative conceptions of rationality and freedom, should media dominance be taken as bad rather than good? Also, the most relevant contrasting, normatively structured alternative to the media is that of the “public sphere,” in which the imperatives of free, democratic, nonmanipulable communicative action are institutionalized. Such a public sphere has been present in western democracies since the nineteenth century but has suffered erosion in the twentieth century as capitalism has more and more taken over the media and commercialized them. Even now the public sphere remains normatively binding and really operative through institutionalizing the ideals of free, full, public expression and discussion; ideal, legal requirements taking such forms as public service programs, public broadcasting, and provision for alternative media; and social movements acting and discoursing in and outside of universities in print, in demonstrations and forms of resistance, and on media such as movies, television, and radio.7

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## 2ac

### 2ac prolif

#### Status quo doesn’t take out prolif – Chinese hypocrisy

DefPro, 12 [June 13th, “Dual Use or Proliferation?: China’s Janus Face”, <http://www.defpro.com/news/details/36425/?SID=d4e1fe4abc2d0dd5bf1b3a557df2b32d>]

13:50 GMT, June 13, 2012 What is the nature of the involvement of the Chinese dual-use industrial base in the illegal transfer of nuclear material to non compliant states? To what extent can the Chinese transfers of dual-use technology be attributed to design as opposed to a lack of regulatory mechanisms? What are the dual industry challenges facing proliferation regulation? This essay explores the double standards held by China and aims at presenting an organizational rationale for this double edged stance. While evidence of a political project could not be gleaned, this this essay argues that the Chinese government cannot ignore what is happening given the nature of extant regulatory mechanisms. This leads to the conclusion of a bipolar policy where proliferation is seen as the means to an end as opposed to being the end itself. On January 2011, Robert J Einhorn (Special Advisor for Nonproliferation and Arms Control at the US Department of State) speaking at an event of the Carnegie Endowment (CEIP, 2011), pointed out the lack of compliance by China with UN sanctions on Iran. He underlined the possible collaboration of Chinese companies with Iran in the field of nuclear material export. This accusation comes while China has been repeatedly indicted for illegal transfers of sensitive technologies to Syria and Pakistan. The private intermediaries at the core of this accusation seem to play a substantial role in technological transfers. The specific disposition of the strategic industrial base towards the State and the nature of the State’s export control, bring into question the State’s level of involvement given the international obligations it subscribes to.

### 2ac china

#### Thorium expansion inevitable – the only relevant question is who will lead the process

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

IT IS, OF COURSE, NOT THAT SIMPLE. I came to realize fairly soon that the tone of the Energy from Thorium forum—geeky, high minded, theoretical, and naive—characterized the thorium movement as a whole. It seemed clear that a small band group of advocates, however committed, had little chance of influencing national energy policy or turning the giant battleship of the nuclear industry. “The nuclear industry has zero incentive to shift to a new fuel cycle,” Charlie Hess told me. A long-time executive at the architectural engineering firm Burns & Roe, Hess spent 30 years building and operating nuclear plants. Although he is a prototypical member of the nuclearati, he is an advocate of alternative nuclear power, including thorium-based reactors, and a critic of the nuke-power establishment. Fuel costs for uranium reactors are less than half a cent per kilowatthour. “They spend more on security guards than they do on fuel,” Hess told me. “Frankly they don’t care.” That was made clear to me by John Rowe, the CEO of Exelon, the country’s number one producer of nuclear power, when I pulled him aside after a speech at a National Press Club luncheon in Washington, DC. When I asked about the possibility of shifting to thorium as a primary nuclear fuel, he assured me that there “will be alternatives across the entire fuel cycle.” But inexpensive uranium works just fine for Exelon, which has a market capitalization (the total value of its outstanding shares) of $28 billion and made $18.6 billion in revenue in 2010. If it’s not broke, don’t fix it—and nuclear tycoons like John Rowe have convinced themselves that the nuclear power industry is not broken. From the perspective of his office suite, that’s certainly true: Rowe made $10.3 million in 2010, and between 2006 and 2011, his compensation totaled $153.9 million. Uranium reactors have been good to nuclear power executives. Rowe’s dismissive attitude embodies the obstacles that face the thorium movement, which is composed of outsiders. “Look, the nuclear industry in the U.S. is very conservative,” Ambassador Thomas Graham told me. “I can see interest here in the U.S. gradually developing. But it’s not going to happen here first.” Graham, a longtime diplomat and opponent of nuclear proliferation who served as President Bill Clinton’s special representative for arms control, now chairs the board of Lightbridge, a company based in McLean, Virginia, that is developing solid fuel thorium rods for conventional reactors. While Graham foresees the use of thorium in the American nuclear power industry at some point, “the initial deployments,” he said, “are going to be abroad.” Abroad. In the three years I’ve been covering the thorium movement, almost every conversation has at some point included that stipulation. The United States, which dropped the first atomic bomb on Japan at the conclusion of World War II, pioneered nuclear power, built the first commercial power reactors, and invented the liquid-core reactor and first proved that thorium could be used in power-generating reactors, is, barring some unforeseen and unlikely shift in energy policy, almost certainly destined to be a laggard in the worldwide thorium revolution. France is the world’s largest producer of nuclear power and supplier of uranium for reactors. Eighty percent of its electricity comes from nuclear power, and the energy giant Areva has an active thorium R&D program and is investigating the possibility of building Liquid fluoride thorium reactors by 2032. The Laboratoire de Physique Subatomique et de Cosmologie in Grenoble is the only facility in the world that has the resources and backing needed to actually develop a commercial LFTR by 2022. The Rei nuclear research institute in the Czech Republic is a leader in the development of MSRs and is investigating the possibility of fueling MSRs with thorium, according to the institute’s director.6 Norway, which has an estimated 180,000 tons of thorium reserves, is embarking on an ambitious long-term nuclear power program that includes the construction of thorium-fueled reactors. In Brazil, which has the world’s second-largest thorium reserves and began research into thorium power in the 1960s, R&D efforts have recently begun again to develop thorium-fueled solid fuel reactors. By far the most active thorium power programs, however, are in Asia, particularly in the emerging economic superpowers of India and China. In February 2011, China officially announced that it will start a program to develop a thorium-fueled molten salt nuclear reactor, taking a crucial step toward replacing coal with nuclear power as a primary energy source. The program was announced at the annual conference in Shanghai of the Chinese Academy of Sciences and is headed by Jiang Mianheng, son of the former Chinese president Jiang Zemin and the holder of a Ph.D. in electrical engineering from Drexel University. The People’s Republic has no intention of falling behind in the race for the next great energy source. The world’s most ambitious thorium power program, though, is in India, which has the world’s largest thorium reserves. India exploded its first nuclear weapon in 1974 in defiance of the Nuclear Nonproliferation Treaty, and it has always viewed nuclear energy — in both warheads and power reactors, as a key element of national sovereignty. The country has embarked on a three-phase program to build as many as 60 reactors, converting them to run on thorium before 2032. I will detail the Indian and Chinese programs in chapter 7 and the implications for the United States in the conclusion. Here it is enough to quote the 2011 film The Ides of March, in which the progressive presidential candidate, played by George Clooney, declares, “Either we’re going to lead the world or we’re going to bury our heads in the sand.” The question of thorium is not whether it will become a major source of energy—it will—but when—and where and who will lead the way.

### AT: Pan K

#### Permutation do the plan and vote affirmative to reject the China Threat Thesis

#### Our knowledge of China is accurate—their authors have flawed information

Chan 4—PhD in Political Science from Minnesota U, Professor and Chair of the Department of Political Science at Colorado U at Boulder (Steve, Asian Affairs, Vol 31, No. 3 (Fall, 2004), “Extended Deterrence in the Taiwan Strait: Learning from Rationalist Explanations in International Relations”, JSTOR, <http://www.jstor.org/stable/30172621>, p. 167, RBatra)

Rationalist interpretations do not imply that people are omnipotent in their ability to procure and process information. We know all too well that people are subject to a variety of cognitive and perceptual errors (for example, Jervis 1976; Levy 1997; Kahneman and Tversky 2000; Tversky and Kahneman 1977). This recognition of limits to rationality, however, hardly warrants general attributions of naiveté , even stupidity, to government leaders. On the contrary, it seems sensible to start from the premise that officials know their counterparts far better than scholars may wish to acknowledge. Washington, Beijing, and Taipei, for instance, invest enormous time, effort, and resources in trying to gain an accurate understanding of each other. Academics have a hard time claiming **any special insight** or unique source of wisdom, whether it is based on mastery of the other side's language, intimate familiarity with its culture, or access to timely and sensitive information with restricted distribution. If anything, they are usually at a considerable disadvantage on these scores when compared to diplomats, intelligence analysts, and even journalists and business people. Indeed, academics in fields such as history and political science typically operate in the realm of common knowledge, outdated information, and mundane data. This confession in turn implies that at least for some of us, our individual and collective forte lies with the analysis of persistent empirical patterns and the formulation of general models of foreign policy conduct.

#### Our reps of China are correct—they’re key to long-term cooperation

Blumenthal 10—current commissioner and former vice chairman of the U.S.-China Economic and Security Review Commission at AEI, J.D., Duke Law School M.A., School of Advanced International Studies, Johns Hopkins University B.A., Washington University Chinese language studies, Capital Normal University—AND—Michael Mazza, program manager for AEI's annual Executive Program on National Security Policy and Strategy, M.A., international relations (strategic studies and international economics), Paul H. Nitze School of Advanced International Studies (SAIS), Johns Hopkins University Inter-university Program for Chinese Language Studies, Tsinghua University, Beijing, China B.A., history, Cornell University (Dan, NBR Analysis, December 2010, “Sino-U.S. Competition and U.S. Security: How Do We Assess the Military Balance?,” RBatra)

Why Study a Sino-U.S. Military Balance?

Since the end of the Cold War, a broad consensus has emerged among policymakers and analysts that Asia is becoming the center of power in world affairs. As Asia’s prominence grows, so do U.S. interests in the region. Scholars and policymakers all agree that both the manner in which China becomes a great power and the way it exercises power is central to Asia’s future. At the same time, many have recognized that China’s growing military capabilities could disrupt the region’s ongoing peaceful transformation. Thus, U.S. policy has been based on two broad impulses. Washington seeks cooperative relations to integrate China into the international system, and it has sought to hedge against or balance China’s growing military might. Sino-U.S. relations are thus characterized by elements of cooperation and competition, which U.S. policy must balance. While this may be counterintuitive, if the United States maintains a favorable balance of power, it is more likely to have cooperative relations with Beijing.

The United States can only compete, however, if it knows over what it is competing. This in turn requires an understanding of the dynamic Sino-U.S. military balance. A clearer picture of how U.S. military forces measure up against China’s should be the basis for a sound policy. Knowledge of the military balance can help policymakers with both the cooperative and the competitive elements of the relationship with China.2 On the competitive side, presidents and their advisors can better assess how to adjust the U.S. force posture to balance China’s growing power and reassure allies that China will not dominate Asia. In doing so, they can help the world’s most rapidly growing region avoid costly, perhaps even uncontrollable (and nuclear), arms races and conflicts. On the cooperative side, a sense of where the country stands in a competition with China could help U.S. leaders decide when to accommodate Beijing in ways that would not harm national security. Once we know what really matters, in all likelihood, we will be less worried about some Chinese capabilities.

#### No link—reps about China don’t spur rivalry but they’re key to avoid disaster

Friedberg 1—Aaron L. Friedberg, Professor of Politics and International Affairs. Woodrow Wilson School, Princeton University, Commentary, Vol. 111, No. 2, February 2001, p. <https://lists.lsit.ucsb.edu/archives/gordon-newspost/2001-May/001274.html>

Is it possible, finally, that merely by talking and perhaps even by thinking about a full-blown SinoAmerican rivalry we may increase the probability of its actually coming to pass? This is the clear implication of Michael Swaine ’s letter. Mr. Swaine worries that “ordinary observers,” unable to distinguish between descriptions of present reality and “hair-raising scenarios” of the future, will conclude that “an intense geostrategic rivalry is virtually inevitable, and . . . respond accordingly.” While I am flattered by the thought that my article could somehow change the course of history, I very much doubt that it, or a hundred more like it, will have any such effect. On the other hand, I am disturbed by the suggestion that we ought to avoid discussing unpleasant possibilities for fear that someone (presumably our political representatives and “ordinary” fellow citizens) might get the wrong idea. Acknowledging real dangers is a necessary first step to avoiding them, as well as to preparing to cope with them if they should nevertheless come to pass. Refusing or neglecting to do so, it seems to me, is a far more likely formula for disaster.

#### No impact to China threat discourse – bad reps don’t influence policies towards China and our advantage solves the impact

Wenxin 5—Zhang Jiye and Chen Wenxin, Xiandai Guoji Guanxi, Ocnus, September 20, 2005, p. <http://www.ocnus.net/cgibin/exec/view.cgi?archive=78&num=20415>

Nevertheless, no matter the extent of playing up the "China military threat theory" by the US military, its influence on Sino-US relations and the development of the international situation is still limited. From the 1990s to now, the "China threat theory" had emerged once every two to three years. The US rightist forces and the US military are accustomed to using it as a "target" to play up the "China military threat theory" in order to consolidate their sphere of influence and position in the US political arena. However, the main trend of the development of Sino-US relations has not been seriously influenced. On the one hand, in the US political field, besides military intelligence and rightist groups that publicize the "China military threat theory," there are many officers and scholars who "calmly view the situation across the ocean," seriously look at China's development, and call for strengthening contacts between the United States and China. A noted US think tank, the Rand Corporation, on 19 May submitted an evaluation report to the US Air Force on "China's Defense Modernization: Opportunities and Challenges." The report holds that the Pentagon's evaluation of China's military spending is seriously "inflated" and the practice of playing up "China military threat theory" on purpose should be rectified. On 26 May, US congressional heavyweight Senator Joe Lieberman of the Democratic Party and Republican congressman Alexander jointly put forward an "Act on Cultural Exchange Between the United States and China in 2005" and asked the US Government to appropriate $1.3 billion from FY2006 to FY2011 for the promotion of cultural exchanges between the United States and China, especially for the expansion and strengthening of US education in Chinese language and a program for exchange students between the two countries. In order to guarantee the implementation of the exchange plan, the proposal also suggested establishing the United States-China Engagement Strategy Council. In introducing the act, Senator Lieberman said: "All misunderstanding between China and the United States can be solved by engagement between the two countries." Even within the US Government, views toward the "China military threat theory" are different. The "engagement group," headed by the Department of State and the National Security Council, holds a different view on the "China military threat theory," and so the US Department of Defense could not but postpone its publication of the "annual report on Chinese military power" again and again. On the other hand, due to pragmatic political considerations, the US Government needs to consider United States-China relations based on the overall interests of the country. Although the United States has made some achievements in its global war against terrorism in the current phase, the new round of terrorist attacks in Britain shows the United States still cannot extricate itself from the war against terrorism and will need China's support.

### 2ac states cp

#### Federal guarantees are vital to getting investors on board – superior credit rating

**Sullivan and Walsh, 8 -** Mary Anne Sullivan, partner in Hogan & Hartson's energy practice, has more than 25 years of experience as an energy lawyer. She previously served as general counsel of the U.S. Department of Energy and as deputy general counsel for environment and nuclear programs. Sam Walsh is an associate at Hogan & Hartson (“Federal Loan Guarantees,” Electric Light and Power, Mar/April, ABI Inform)

In their rulemaking comments, Wall Street firms emphasized that a loan guarantee must represent the unconditional commitment of the full faith and credit of the United States if the program is to succeed in attracting affordable private investment to innovative technologies. The final rule seems to have calmed concerns that the guarantees might be conditioned in a way that would preclude the "AAA" rating for the federally guaranteed debt that the program was designed to assure. The guarantees will be absolute, absent fraud or material misrepresentation by the holder of a guaranteed obligation.

#### State incentives fail – federal loan guarantees attract substantially more investment capital

**NEI, 11** – Nuclear Energy Institute “Issues in Focus Loan Guarantees For Clean Energy Development” http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjAB&url=http%3A%2F%2Fwww.nei.org%2Ffilefolder%2Floanguaranteefastfacts.pdf&ei=PCJsUNTiJKbA2gXymYAg&usg=AFQjCNEzvSlK0TiMZStFOzXeQDIf76vQBw)

State governments are doing their part. Many of the states where new nuclear plants are planned – including Florida, Virginia, Texas, Louisiana, Mississippi, North Carolina and South Carolina – have passed legislation or implemented new regulations to encourage construction of new nuclear power plants by providing financing support and/or assurance of investment recovery.

By itself, this state support is not sufficient. The federal government must also provide financing support for deployment of clean energy technologies in the numbers necessary to address growing U.S. electricity needs and reduce carbon emissions. The clean energy loan guarantee program authorized by the Energy Policy Act of 2005 is equally important.

Although tax stimulus – either in the form of tax credits or more favorable depreciation terms – can play an important role in encouraging investment, loan guarantees are a very efficient way to mobilize private capital. Tax benefits have a direct, dollar-for-dollar impact on the federal budget. Even if the credit subsidy cost associated with a loan guarantee is appropriated, loan guarantees provide substantial leverage. Tens of millions of dollars in appropriations to support a loan guarantee program can leverage tens of billions of dollars in private sector investment.

#### Certainty is essential – only effective method of catalyzing investment

**Trembath, 11** [2/4/11, [Nuclear Power and the Future of Post-Partisan Energy Policy](http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/), Alex Trembath is a policy associate in the Energy and Climate Program at Breakthrough. He is the lead or co-author of several Breakthrough publications, including the 2012 report "Beyond Boom and Bust: Putting Clean Tech on a Path to Subsidy Independence" and "Where the Shale Gas Revolution Came From." Alex is a graduate of University of California at Berkeley, <http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/>]

If there is one field of the energy sector for which certainty of political will and government policy is essential, it is nuclear power. High up front costs for the private industry, extreme regulatory oversight and public wariness necessitate a committed government partner for private firms investing in nuclear technology. In a new [report](http://www.thirdway.org/publications/370) on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy. The report, “The Future of Nuclear Energy,” makes the case for political certainty: “It is difficult for energy producers and users to estimate the relative price for nuclear-generated energy compared to fossil fuel alternatives (e.g. natural gas)–an essential consideration in making the major capital investment decision necessary for new energy production that will be in place for decades.” Are our politicians willing to match the level of certainty that the nuclear industry demands? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to [supply-side “push” policies](http://leadenergy.org/2010/09/supply-demand-energy-innovation/), or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power. One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill [included](http://www.huffingtonpost.com/2010/05/12/american-power-act-photos_n_573643.html#s90041&title=undefined) provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship. But that was last year. The changing of the guard in Congress makes this a whole different game, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times [piece](http://www.nytimes.com/2010/11/17/business/energy-environment/17NUCLEAR.html) in the aftermath of the elections forecast a difficult road ahead for nuclear energy policy, but did note Republican support for programs like a waste disposal site and loan guarantees. Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably [Lindsey Graham](http://washingtonindependent.com/99171/graham-circulating-clean-energy-standard) and [Richard Lugar](http://www.plattsenergyweektv.com/story.aspx?storyid=132784&catid=293), would throw their support behind a clean energy standard that includes nuclear and CCS. Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined [“innovation hawks,”](http://leadenergy.org/2011/01/the-rise-of-innovation-hawks/) among them Steven Hayward, David Brooks and George Will. Will has been [particularly outspoken](http://www.newsweek.com/2010/04/08/this-nuclear-option-is-nuclear.html) in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.” The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post [reports](http://www.huffingtonpost.com/2011/02/01/sen-jeff-bingaman-backs-n_n_816864.html) that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct [Section 48C](http://leadenergy.org/2010/12/clean-energy-financing-first-steps-towards-post-partisan-effort/#more-3320) of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing. Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what nuclear energy needs moving forward. It will require an agressive push from the White House, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one. The politician with perhaps the single greatest leverage over the future of nuclear energy is President Obama, and his rhetoric matches the challenge posed by our aging and poisonous energy infrastructure. “This is our generation’s Sputnik moment,” announced Obama recently. Echoing the calls of presidents past, the President used his [State of the Union](http://www.slate.com/id/2281847/) podium to signal a newly invigorated industrialism in the United States. He advocated broadly for renewed investment in infrastructure, education, and technological innovation. And he did so in a room with many more members of the opposition party than at any point during the first half of his term. The eagerness of the President to combine left and right agendas can hopefully match the hyper-partisan bitterness that dominates our political culture, and nuclear power maybe one sector of our economy to benefit from his political leadership.

#### A firm commitment to loan guarantees resolves investor uncertainty over federal restrictions

**Turnage et al, 7** – Senior Vice President, Constellation Energy Group Inc

(Joe C, and Theodore Bunting, Jr, Senior Vice President of Finance, Entergy Corp, and John F Young, Executive Vice President and CFO, Exelon Corp, and Steve Winn, Executive Vice President, NRG Energy, Inc, “Join Comments of Constellation Group, Inc, Entergy Corporation, Exelon Corporation, and NRG Energy, Inc. regarding Proposed Rule, Loan Guarantees for Projects that Employ Innovative Technologies,” addressed to Mr. Howard G Bordstrom, July 2, 2007, <http://www.lgprogram.energy.gov/nopr-comments/comment41.pdf>)

For new nuclear power plant development in the U**nited** S**tates,** Federal loan guarantees are an indispensable instrument to address a market financing gap that results from the combination of several factors including, (i)the prior nuclear plant construction cycle that was burdened by regulatory uncertaintyand resulting delays and cost overruns; (ii) perceived uncertainty of an untested (though certainly improved) licensing system**;** (iii) perceived technology risk, and (iv) an institutional loss of understanding regarding the reality of nuclear financial riskin some elements of the financial community.

### 2ac fiscal cliff

#### Shared interests check middle east war

**Gelb, 10** – President Emeritus of the Council on Foreign Relations He was a senior official in the U.S. Defense Department from 1967 to 1969 and in the State Department from 1977 to 1979 (Leslie, Foreign Affairs, “GDP Now Matters More Than Force: A U.S. Foreign Policy for the Age of Economic Power,” November/December, proquest)

Also reducing the likelihood of conflict today is that there is no arena in which the vital interests of great powers seriously clash. Indeed, the most worrisome security threats today-rogue states with nuclear weapons and terrorists with weapons of mass destruction-actually tend to unite the great powers more than divide them. In the past, and specifically during the first era of globalization, major powers would war over practically nothing. Back then, they fought over the Balkans, a region devoid of resources and geographic importance, a strategic zero. Today, they are unlikely to shoulder their arms over almost anything, even the highly strategic Middle East. All have much more to lose than to gain from turmoil in that region. To be sure, great powers such as China and Russia will tussle with one another for advantages, but they will stop well short of direct confrontation.

#### Seriously, no impact

Lawrence Korb (former assistant secretary of defense in the Reagan administration, is a senior fellow at the Center for American Progress) September 9, 2012 ‘Cuts Would Not Affect Security” http://www.nytimes.com/roomfordebate/2012/09/09/how-big-should-the-defense-budget-be/cuts-would-not-affect-security

But the United States can afford defense cuts, without undermining national security, for four reasons:¶ First, the United States has just gone through an enormous defense buildup. The budget increased, in real terms, for an unprecedented 13 straight years between 1998 and 2012. Even during the Reagan buildup, defense spending grew for only four years before dropping back to more sustainable levels.¶ Second, the cuts being discussed are smaller than they seem. The first $500 billion come from projected growth, so the budget will fall by just $6 billion next year and then grow at about the same pace as inflation. Even with sequestration, defense spending would be brought back only to its 2006 level in real terms -- more than we spent on average under Presidents Ronald Reagan and George H. W. Bush.¶ Third, ending this indiscriminate growth will force the Pentagon to manage its funds more carefully. Over the past decade, the Pentagon squandered $46 billion on weapons it later canceled, and let half its procurement programs balloon beyond their original budgets.¶ Finally, we face a world with relatively few major threats. And even with sequestration-size cuts, we would still account for more than 40 percent of the world’s defense spending, and our allies would account for about half of the rest.

#### Huge laundy list of nuclear incentives and construction now

**Johnson ’12** (US Campaign Trail: is nuclear in the equation? By John Johnson on Apr 25, 2012, nuclear energy expert and analyst, Nuclear Energy Insider, Nuclear Business Intelligence <http://analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation>

Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019.

#### Fiscal cliff won’t pass – Boehner sent the signal HOURS ago

Jake Sherman (writer for Politico) October 6, 2012 (2:28 ET) “Boehner wary of lame-duck deficit deal” http://www.politico.com/news/stories/1012/82105.html?hp=t1

For everyone pining for a sweeping deficit deal after the election, Speaker John Boehner has a message. Don’t hold your breath. In an interview here, the Ohio Republican said cobbling together a large-scale deal during the lame duck session of Congress would not only be hard, but also the wrong thing for the country. “I think that’s difficult to do,” Boehner said when asked about the prospects for a large-scale deficit deal in November and December. “You know, and frankly, I’m not sure it’s the right thing to do – have a lot of retiring members and defeated members voting on really big bills. Eh, probably not the appropriate way to handle the lame duck.” (Also on POLITICO: Simpson-Bowles comeback) Boehner’s remarks represent the most public – and serious – signal from the speaker about how he’s thinking about the lame-duck session of Congress. The comments could stoke further doubts about what kind of deal the parties can hatch in the critical weeks between Election Day and the new year. While the nation remains entranced by the races for the White House and Senate, Capitol Hill insiders are sitting tight, waiting for the legislative war that will decide tax rates on all Americans and the scope of federal spending. Boehner isn’t saying nothing will get done – in fact, he’s not making any proclamations about the prospect of a compromise with Democratic Leader Harry Reid of Nevada, Republican Leader Mitch McConnell of Kentucky and whoever occupies the White House . What he is saying is that he thinks is that the time is too short for something large – and more significantly, that he’s morally opposed to lawmakers with one foot out the door making decisions on behalf of the nation. That could seriously limit options for avoiding the so-called “fiscal cliff.” The speaker’s remarks were a peak inside the mind of one of the most important decision makers in D.C. What Congress decides to do about expiring tax rates, cuts to both defense and domestic spending, the debt ceiling and a host of other expiring provisions will reverberate not only in Washington but on Wall Street and across the world. There’s a whole menu of options available to Congress and the White House as they try to avoid the fiscal cliff. One, which Boehner seems to be ruling out, is to fashion a massive debt compromise in November and December.

#### Tons of political support for thorium

Hamlin, ‘7 [Jason, GoldStockBull -- Investment Strategies, 11-30, “Thorium Power – Investing in the Future of Nuclear Energy,” http://www.goldstockbull.com/articles/thorium-power-investing-in-the-future-of-nuclear-energy/]

There is also significant political backing for thorium, with Senators representing several Western states, including Utah’s Orrin Hatch and Senate Majority leader Harry Reid, of Nevada, working on legislation to promote thorium. They say it’s a cleaner-burning fuel for nuclear-power plants, with the potential to cut high-level nuclear-waste volumes in half. Senator Hatch is currently proposing the “Thorium Energy Independence and Security Act of 2007,” which aims to ease concerns about nuclear waste by requiring DOE to develop standards for reactors to use thorium fuel rather than uranium.

#### Obama wont spend PC on the plan

James Rainey (writer for the LA Times) September 25, 2012 “Would President Obama try stimulus spending again?” http://www.latimes.com/news/politics/la-pn-obama-stimulus-20120924,0,169153.story

Many economists on the Democratic side have been arguing vehemently that the threat from long-term debt is not nearly as great as the long-term damage from allowing the recovery to continue to sputter, costing millions of jobs and the tax receipts that come with them. It’s hard to imagine today that Obama would expend much political capital in trying to win more government spending — given the Republican Party’s control of the House and the public’s lukewarm, at best, response to increasing the deficit. Given that reality, the pro-stimulus argument has been raised only fleetingly in Washington.

#### Political capital wont be key in the lameduck – Obama’s got no leverage even after winning

Eleanor Clift (Contributing Editor to Newsweek) September 30, 2012 “If Obama Wins, What Changes for His Second Term?” http://www.thedailybeast.com/articles/2012/09/30/if-obama-wins-what-changes-for-his-second-term.html

With an Obama second term looking like a better than even probability, short of sweeping both chambers of Congress, can the newly reelected president break the stalemate in Washington and govern successfully? He says the partisan fever will break once he cannot run again. He may be right, but President Obama will have to move quickly after the election to send the right signals of strength and resolve, and position himself to take advantage of the recriminations among Republicans that inevitably will surface in the wake of a Romney defeat.¶ If the GOP loses House seats and falls short of the four seats necessary to control the Senate, there’s an opening for Obama to woo disgruntled Republicans while keeping newly energized Democrats together. Like Clinton-era triangulation, the strategy is divide-and-conquer—except this time it’s applied to Republicans.¶ Does Obama have the chops to work more effectively with Congress? “There’s no better learning experience than the first term,” says former Senate leader Tom Daschle, an Obama confidant. The inexperienced president learned the hard way he can’t trust the other side, and with time has gotten bolder and better at wielding power. Republicans are still reeling from his changing the policy on deporting illegal immigrants without congressional approval.¶ But Obama doesn’t have many friends on Capitol Hill in either party. He has allies for sure but hasn’t worked to develop personal relationships. Some think this is a fatal flaw; others say schmoozing is overrated, that the Republicans were going to block Obama’s initiatives regardless of how many White House invites they got.¶ “Reagan didn’t always enjoy meeting with 535 members; it was a means to an end,” says Ken Duberstein, who worked in the Reagan White House, first in congressional relations, then as chief of staff. “You have to have the relationships—you have to know each other. Every White House screws up and you have to have a reservoir of good will.”¶ One adviser who did not want to be quoted recalls gently suggesting Obama might want to invest more personal time in courting members of Congress. “He looked at me like I was telling him to do 10 root canals.”¶ Tom Mann and Norman Ornstein, coauthors of It’s Even Worse Than It Looks, an indictment of Republican obstructionism, say it is “utter nonsense” to think more schmoozing is the answer. “For Obama to have a successful second term, he needs a different Republican Party,” says Mann. “He has to hope the election is decisive enough to rattle the party and make [the GOP] realize that a continued strategy of obstruction will not be good for them over the long haul.”

#### Systematic research proves

**Edwards, 9** [Distinguished Professor of Political Science at Texas A&M University, holds the George and Julia Blucher Jordan Chair in Presidential Studies and has served as the Olin Professor of American Government at Oxford [George, “The Strategic President”, Printed by the Princeton University Press, pg. 149-150]

Even presidents who appeared to dominate Congress were actually facilitators rather than directors of change. They understood their own limitations and explicitly took advantage of opportunities in their environments. Working at the margins, they successfully guided legislation through Congress. When their resources diminished, they reverted to the stalemate that usually characterizes presidential-congressional relations. As legendary management expert Peter Drucker put it about Ronald Reagan, "His great strength was not charisma, as is commonly thought, but his awareness and acceptance of exactly what he could and what he could not do."134 These conclusions are consistent with systematic research by Jon Bond, Richard Fleisher, and B. Dan Wood. They have focused on determining whether the presidents to whom we attribute the greatest skills in dealing with Congress were more successful in obtaining legislative support for their policies than were other presidents. After carefully controlling for other influences on congressional voting, they found no evidence that those presidents who supposedly were the most proficient in persuading Congress were more successful than chief executives with less aptitude at influencing legislators.135 Scholars studying leadership within Congress have reached similar conclusions about **the limits on personal leadership**. Cooper and Brady found that institutional context is more important than personal leadership skills or traits in determining the influence of leaders and that there is no relationship between leadership style and effectiveness.136 Presidential legislative leadership operates in an environment largely **beyond the president's control** and must compete with other, more stable factors that affect voting in Congress in addition to party. These include ideology, personal views and commitments on **specific policies,** and the interests of constituencies. By the time a president tries to exercise influence on a vote, most members of Congress have made up their minds on the basis of these other factors. Thus, a president's legislative leadership is likely to be critical only for those members of Congress who remain open to conversion after other influences have had their impact. Although the size and composition of this group varies from issue to issue, it will almost always be a minority in each chamber.

### 2ac a2 elections

#### Romney wouldn’t start a trade war with China if elected

**Politico, 9-15-12**, p. http://www.politico.com/news/stories/0912/81254.html

Mitt Romney is hoping his tough talk on China policy will win him votes — but few of his big business donors or fellow Republicans support what he’s saying or believe he’d follow through if elected.¶ And if he did, many analysts say, he’d likely spark a disastrous and counter-productive trade war that would hurt both American consumers and the workers he says he’s trying to protect. But Romney advisers say voters shouldn’t expect him to back off the tough talk if he gets elected, and other experts say fears of a “trade war” are overblown since the Chinese need the American market just as much consumers like cheap Chinese imports.

#### China won’t retaliate—no impact

Bosco 9/6—national security consultant, master of laws from Georgetown (Joseph A., 9/6/12, <http://www.washingtonpost.com/opinions/china-and-a-mitt-romney-presidency/2012/09/06/32917432-f76f-11e1-a93b-7185e3f88849_story.html>, RBatra)

First, it takes two to wage a “trade war.” When China realizes that Mr. Romney is serious about declaring it a currency manipulator (which it is), wiser counsel may well prevail in Beijing. Playing by international rules is far more in China’s interest than is retaliating against free and fair trade. China could avoid the choice between dangerous escalation and embarrassing submission by preemptively starting to free its currency before a Romney inauguration.

#### The plan reinvigorates growth

Westenhaus, ‘10

[Brian, OilPrice.com -- Energy News, 9-14, “Thorium: A Cheap, Clean and Safe Alternative to Uranium,” http://oilprice.com/Energy/Energy-General/Thorium-A-Cheap-Clean-And-Safe-Alternative-To-Uranium.html]

With some concept tests thorium used as a nuclear fuel could end energy as a problem issue and shift the economy into a new growth phase. All the conversation in the media, politics and the economy could be moved to building the next centuries energy production with thorium and the various ways to use the metal as a fission power source. Nobel laureate Carlo Rubbia at the European Organization for Nuclear Research points out the use of thorium as a cheap, clean and safe alternative to uranium in reactors may be the magic bullet we have all been hoping for. It’s an idea well worth much more attention. The math on thorium is impressive. Dr Rubbia says a metric ton of the silvery metal produces as much energy as 200 tons of uranium, or 3,500,000 ton of coal. A handful would power a major city for a week.

#### Obama will win, it’s too late to alter swing state dynamics and most voters have already decided

**Downie, 10/4/12 –** Washington Post Opinion writer, James, Obama lost the first debate, but he will still win the election, Washington Post, http://www.washingtonpost.com/blogs/post-partisan/post/obama-lost-the-first-debate-but-he-will-still-win-the-election/2012/10/04/9c3b7eb8-0deb-11e2-bd1a-b868e65d57eb\_blog.html)

And yet, the president’s supporters would be wrong to wring their hands. Fundamentally, Obama’s loss will not matter. At most, Wednesday night was a case of “too little, too late” for Romney. Yes, the polls will probably move a point or two in Romney’s direction after the first debate. But all the evidence suggests that for Romney, whether or not you believe he should be president, closing the gap and beating Obama is a bridge too far.

Consider the task facing Romney going into Wednesday’s debate: Nationally, RealClearPolitics’s poll average had him down three points; Nate Silver’s model had him down four. He had held a lead in a major poll exactly once since the end of August. The electoral college looked even worse for him: RealClear’s map gave Obama 269 electoral votes safe or leaning to Romney’s 181 (with 88 in toss-up states); HuffPost Pollster gave Obama a 290-191 lead; and Nate Silver’s model had Obama winning an average of 319 electoral votes to Romney’s 218, a comfortable margin. Even Karl Rove had 277 votes safe or leaning to Obama, with another 70 as toss-ups.

“Ah,” you say, “that may be true, but surely the gap is small enough to close? And wouldn’t the first debate be enough to bring this race back to a dead heat?” In a word, no.

Let’s start with the second question. Incumbent presidents almost always have a poor first debate: George W. Bush lost to John Kerry in 2004, for example, and Walter Mondale beat Ronald Reagan so badly in 1984 that there was a spate of articles asking if the incumbent was too old for the presidency. Yet never has a challenger’s strong first debate performance closed as large a national polling gap as Romney faced going into last night’s debate. Furthermore, most post-debate polling bumps come from previously undecided voters, of which there is a historically small amount in this campaign, thus making it even less likely that Romney could exceed past norms. And Romney would need to outdo history by quite a distance — only Harry Truman has come back from a national deficit as large or larger than Romney’s at this point in the campaign.

If Romney would have to pull off a miracle to close the gap in national polling, he has no shot at matching the president in the electoral college. As mentioned above, forecasters commonly predict that Obama already has a big lead of safe and leaning states. If we assume Romney will improve in the polls, there would be around nine “swing states”: Colorado, Florida, Iowa, North Carolina, New Hampshire, Nevada, Ohio, Virginia and Wisconsin. There’s one problem here for Romney: He is trailing, and has been consistently trailing, in all but two — North Carolina, where he’s held a small lead, and Florida, this election’s closest thing to a 50-50 state. Romney doesn’t need to win two out of those nine; in almost every scenario, he will need six or seven out of those nine to win, including at least two or three states where he is behind by several points more than he is nationally.

All of which brings me to the final point: Given the state of the race before last night’s debate, even most Romney backers would agree that a Romney victory would require a flawless campaign the rest of the way from Romney and a blunder or two from Obama. After six years of both these men running for and/or being president of the United States, is there really anyone out there who thinks Mitt Romney can go a month without making a single mistake? Who thinks Barack Obama, who has been playing it safe for at least several months now, will suddenly make a reckless error, as opposed to a merely lackluster performance? (Or, if you’re Sean Hannity and co., do you believe the lamestream media will suddenly forget their liberal bias and stop protecting the president while assaulting Mitt Romney?)

Seriously, does anyone believe that?

The fact is that, come October, presidential elections cannot permanently change course over a few days or hours (unlike, say, media narratives). The majority of voters have already made their decision, and the debates won’t provide enough of a boost to alter the contest’s trajectory. Sadly for Romney, the path the race is stuck on ends with his defeat.

#### Energy won’t switch votes

**Farnam, 12** (T.W. Washington Post, Energy ads flood TV in swing states, 6/27, <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.

And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.

The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.

Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”

Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.

In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.

When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

#### Huge laundy list of nuclear incentives and construction now

**Johnson ’12** (US Campaign Trail: is nuclear in the equation? By John Johnson on Apr 25, 2012, nuclear energy expert and analyst, Nuclear Energy Insider, Nuclear Business Intelligence <http://analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation>

Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019.

#### No Romney traction – even if voters hate Obama’s energy policy they won’t shift to Romney

Lewis, 10/1/12 - senior contributor to The Daily Caller (Matt, The Daily Caller, “Mitt Romney’s struggle to win blue collar Ohio voters”

This sounds trivial, but it matters greatly — especially in places like Ohio.

The Atlantic’s Molly Ball is consistently a “must read,” and her latest column reinforces a point I’ve been making for a long time — that Mitt Romney is in danger of under-performing with working-class whites in key states like the Buckeye state. (Ball’s teaser says it all: “In Appalachian coal country, Romney is now viewed with nearly as much suspicion as Obama — and that may be the story of the 2012 election.”)

There is at least one substantive reason for these voters to be skeptical of Romney. While interviewing Ohio voters, Ball stumbled over an interesting blast from the past:

It turns out Romney, as governor of Massachusetts in 2003, held a press conference in front of a coal-fired power plant. “I will not create jobs or hold jobs that kill people,” he said, and then, gesturing at the facility behind him: “That plant, that plant kills people.” You can see the footage in an Obama campaign ad that’s been airing heavily here. It seems to have made an impression.

The notion that Romney would be worse for coal than Obama seems absurd. Still, Obama is using the line to effectively muddy the waters. All he really needs is for voters to conclude, “they’re both bad,” and Obama can consider that a victory. Ball sums it up thusly,

I heard it over and over again from Ohioans — the idea that Romney stands for the wealthy and not for them. Obama’s depiction of his rival as an out-of-touch rich guy, which has gotten no little assistance from Romney himself, has made a deep and effective impression with these self-consciously working-class voters.

#### Plan happens after the election

Ramsey Cox (writer for The Hill) September 24, 2012 “Congress to hold pro forma sessions until November” http://thehill.com/blogs/floor-action/senate/251313-congress-to-hold-pro-forma-sessions-until-november

Rather than being in recess for more than five weeks, both the Senate and the House decided to hold pro forma sessions until after the November elections. Both chambers will gavel in Tuesday morning for a brief session; typically, legislative business doesn't take place in pro forma sessions. At most members ask to be recognized for a speech, but rarely do. It is unclear if the legislative branch was afraid of recess appointments by the White House, yet both sides took a formal recess in August. The Senate will hold a pro forma session every Tuesday and Friday until Nov. 13 at 2 p.m. when they’ll continue work on S. 3525, the Sportsmen Act, which would increase access to federal land for hunters and fishers while also supporting conservation measures.

#### Plan wouldn’t affect states that make the difference in the election

Joel Kotkin 3-30-2012; executive editor of NewGeography.com and is a distinguished presidential fellow in urban futures at Chapman University, and contributing editor to the City Journal in New York. He is author of The City: A Global History. His newest book is The Next Hundred Million: America in 2050, released in February, 2010. Is Energy the Last Good Issue for Republicans? <http://www.newgeography.com/content/002698-is-energy-last-good-issue-republicans>

In the short run, Obama’s political exposure in the energy wars is somewhat limited. Most of the big-producing states—Oklahoma, Wyoming, Utah, Texas, Louisiana, Alaska, and North Dakota—are unlikely to vote for him anyway. Nor does he have to worry about too much pressure from inside his party; Democratic ranks in Congress from energy-producing states have thinned considerably in recent years, removing contrary voices inside the party.

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

**Nuclear power popular**

Brown ’12 (Dave Brown — Exclusive to Uranium Investing News, “United States Still Favors Nuclear Power”, <http://uraniuminvestingnews.com/11008/united-states-still-favors-nuclear-power.html>, March 28, 2012, LEQ)

According to the results of Gallup’s annual Environment survey, conducted earlier this month, the majority of Americans continue to favor nuclear energy as a source of electricity for the United States. The survey indicated that 57 percent of participants were in favor of nuclear power this year, the same amount as in 1994, the first year for the survey. This year’s results also demonstrate an equal level of support among participants as last year, just prior to the Japanese earthquake and tsunami. Support for the nuclear industry as measured by the survey has ranged from a low of 46 percent in 2001 to a high of 62 percent in 2010. These results are of significance to investors as the US is the largest consumer of uranium in the world, with 104 operational nuclear reactors. Continued public support and confidence from the country should guide future political decisions and foster economic interest in domestic and international uranium resources as well as in nuclear industry stakeholders.

#### Too late to change the election- ideology

Helling ’12 (DAVE HELLING, McClatchy Newspapers Miami Herald 7-22-12 "Is the race for president already over?"

But **a growing number** of **political scientists and campaign consultants** - backed by the **latest polling data** - think the daily campaign back-and-forth **is having no significant effect on voters.** Most Americans have **locked in** their presidential decisions, polls released Thursday suggested, and the already small number of persuadable voters **shrinks by the hour**. Put another way: America could vote for president next week, and the outcome would probably be the same as it will be in November. "That's accurate, barring some really big, big event or change in the political environment," said Alan Abramowitz, a political science professor at Emory University in Atlanta, who has studied presidential voting patterns. Kenneth Warren, a political science professor at St. Louis University, agreed. "Most people have decided who they're going to vote for early on," he said. Recent polls show those who have decided are split almost evenly between Obama and Romney. In a CBS/New York Times poll, Romney led by 1 point. In a Fox News poll, he trailed Obama by 4 points. A National Public Radio poll found Obama leading by 2 points. A Gallup tracking poll over the same time period showed the race dead even. The average of polls puts the Obama advantage at 1.2 percent, according to Real Clear Politics, a political aggregation website. The incumbent has led Romney in that average by a one- to two-point margin since last October. Political scientists and consultants said there were several reasons for early presidential decision-making. In an Internet-cable-TV age, **voters are pounded with political messages daily, helping them make up their minds far in advance** of the election. An incumbent in the race makes at least one of the candidates a known quantity. And American **voters are deeply divided, further cementing their choices.**

#### Undecided/swing votes dont pay attention

Ezra Klein http://www.bloomberg.com/news/2012-09-26/why-undecided-voters-won-t-be-deciding-this-election.html 9-26-12

Even though the ad is an exaggeration, it’s not an outright lie. This election will probably be decided by a tiny fraction of the electorate in eight or nine states. The undecided voters in those states are popularly portrayed as people who just can’t make up their minds. But that’s not quite right. They aren’t so much “undecided” as uninterested and, frankly, uninformed; in political-science parlance -- and SNL ads -- they are “low information” voters. It’s worth stopping here to clarify something: “uninformed” does not mean “dumb.” We’re all uninformed about certain topics. You wouldn’t believe how little I know about, say, baseball. I’m vaguely aware that it happens, and that it culminates in a World Series, but I can’t tell you who won last year, or who’s in contention this year. Baseball just isn’t something I pay attention to. Lynn Vavreck, a political scientist at the University of California at Los Angeles, says that uninformed voters have roughly the same relationship to politics that I have to baseball. “They are lower on political information, for sure. That’s a function of being not that interested and not paying attention,” she said. “It’s not that they can’t comprehend the information, or that they’re at a balancing point and can’t decide. They’re just not dialed in. They’re not getting all the information you or I are getting.” Vavreck asked thousands of voters -- both decided and undecided -- a battery of basic, multiple-choice questions about who’s who in politics. The questions were designed to be easy. You didn’t have to know that John Boehner is Speaker of the House. You just had to know he is a congressman rather than a judge or the vice president. According to Vavreck’s polling, only 35 percent of undecided voters could identify Boehner’s job as “congressman.” Only 69 percent could say that Joe Biden is the vice president rather than, say, a representative. Only 17 percent can identify Chief Justice John Roberts as a judge. Decided voters have an easier time rattling off the job titles of Boehner and Biden, as well as those of Harry Reid, Eric Cantor, Mitch McConnell and Nancy Pelosi. (Interestingly, they struggle more than undecideds to identify Roberts.) That’s likely because decided voters are paying more attention to the election. About 43 percent of decided voters say they’re following the presidential election “very closely.” Only 12 percent of undecided voters say the same. Recognizing that undecided voters are mostly uninterested voters helps to clarify the trajectory of the presidential campaign. In their book “The Timeline of Presidential Elections,” Robert Erikson and Christopher Wlezien show that voter preferences tend to be very stable in the fall, but that campaign observers -- the authors analyze people betting money in online political prediction markets -- tend to assume those preferences are far more volatile. Psychological Projection The misjudgment makes sense as an act of psychological projection. To people personally invested in politics, the homestretch of the campaign appears loaded with the kind of political information that could change voter opinions. There are debates, a flood of ads, inevitable gaffes, the crush of election news -- maybe even an October surprise or two. But undecided voters are precisely those least likely to tune in to the debates, which helps explain why debates typically have little effect on elections. They’re the least likely to care about a gaffe -- or even to know when one has occurred. They’re more likely to throw out political mail and tune out political ads. If they live in a swing state, they’ve already been buffeted by -- and proved immune to -- months of commercials and phone messages. Vavreck has been tracking a group of 44,000 voters since December 2011. When she started, 94 percent were already leaning toward a candidate. Of the 6 percent who were truly undecided, 33 percent now say they’re going with Mitt Romney and 37 percent with President Barack Obama. The ranks of the original undecided voters were partially replenished by voters who had expressed a preference in 2011 but have since grown uncertain. Of the new undecideds, slightly more were Romney supporters in 2011 than were Obama supporters, but the total numbers are small. There’s little reason to believe that undecided voters in this campaign will break sharply toward one candidate. The votes of the undecideds seem to be roughly evenly split, and if any big news happens between now and the election, they’re likely to be the last to know about it, and the least interested in following up on it. If Obama is going to turn this into a rout, or if Romney is to salvage a win, it will probably require changing minds that are already made up, or increasing (or suppressing) turnout among base voters. In other words, don’t expect the votes of the mythical undecideds to actually be decisive. It’s likely to be the decided who will, well, decide. (Ezra Klein is a Bloomberg View columnist. The opinions expressed are his own.)

#### Winners win elections- the plan is key to Obama’s momentum

Creamer, 11 – political strategist for over four decades

(Robert, he and his firm, Democracy Partners, work with many of the country’s most significant issue campaigns, one of the major architects and organizers of the successful campaign to defeat the privatization of Social Security, he has been a consultant to the campaigns to end the war in Iraq, pass health care, pass Wall Street reform, he has also worked on hundreds of electoral campaigns at the local, state and national level, "Why GOP Collapse on the Payroll Tax Could be a Turning Point Moment," Huffington Post, 12-23-11, www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p\_b\_1167491.html, accessed 9-1-12, mss)

2). Strength and victory are **enormous political assets.** Going into the New Year, they now belong to the President and the Democrats. One of the reasons why the debt ceiling battle inflicted political damage on President Obama is that it made him appear ineffectual - a powerful figure who had been ensnared and held hostage by the Lilliputian pettiness of hundreds of swarming Tea Party ideological zealots. In the last few months -- as he campaigned for the American Jobs Act -- he has shaken free of those bonds. Now voters have just watched James Bond or Indiana Jones escape and turn the tables on his adversary. Great stories are about a protagonist who meets and overcomes a challenge and is victorious. The capitulation of the House Tea Party Republicans is so important because it feels like the beginning of that kind of heroic narrative. Even today most Americans believe that George Bush and the big Wall Street Banks - not by President Obama -- caused the economic crisis. Swing voters have never lost their fondness for the President and don't doubt his sincerity. But they had begun to doubt his effectiveness. They have had increasing doubts that Obama was up to the challenge of leading them back to economic prosperity. The narrative set in motion by the events of the last several weeks could be a turning point in voter perception. It could well begin to convince skeptical voters that Obama is precisely the kind of leader they thought he was back in 2008 - a guy with the ability to lead them out of adversity - a leader with the strength, patience, skill, will and resoluteness to lead them to victory. That now contrasts with the sheer political incompetence of the House Republican Leadership that allowed themselves to be cornered and now find themselves in political disarray. And it certainly contrasts with the political circus we have been watching in the Republican Presidential primary campaign. 3). This victory will inspire the dispirited Democratic base. Inspiration is the feeling of empowerment - the feeling that you are part of something larger than yourself and can personally play a significant role in achieving that goal. It comes from feeling that together you can overcome challenges and win. Nothing will do more to inspire committed Democrats than the sight of their leader -- President Obama - out maneuvering the House Republicans and forcing them into complete capitulation. The events of the last several weeks will send a jolt of electricity through the Progressive community. The right is counting on Progressives to be demoralized and dispirited in the coming election. The President's victory on the payroll tax and unemployment will make it ever more likely that they will be wrong. 4). When you have them on the run, that's the time to chase them. The most important thing about the outcome of the battle over the payroll tax and unemployment is that it shifts the political momentum at a critical time. Momentum is an independent variable in any competitive activity - including politics. In a football or basketball game you can feel the momentum shift. The tide of battle is all about momentum. The same is true in politics. And in politics it is even more important because the "spectators" are also the players - the voters. **People** follow - and **vote -- for winners**. The bandwagon effect is enormously important in political decision-making. Human beings like to travel in packs. They like to be at the center of the mainstream. Momentum shifts affect their perceptions of the mainstream. For the last two years, the right wing has been on the offensive. Its Tea Party shock troops took the battle to Democratic Members of Congress. In the Mid-Terms Democrats were routed in district after district. Now the tide has turned. And when the tide turns -when you have them on the run - that's the time to chase them.

## 1ar

### reps

#### Reps don’t shape reality – it’s objective

**Kocher, 00** – Robert L., author, engineer working in the area of solid-state physics, and has done graduate study in clinical psychology (“Discourse on Reality and Sanity Part 1: What is Reality?” The Laissez Faire City Times, Vol. 4, No. 46, 11/13/00, http://web.archive.org/web/20040805084149/http://freedom.orlingrabbe.com/lfetimes/reality\_sanity1.htm)

The human senses seem remarkably able to discern a consistent and lawful reality. In the normal human being, mind and perception become so intimately connected as to produce a sense of unity with the world around us. This connection and sense of unity can be psychologically broken or regressed to primitive non-integrated levels through psychological trauma or regression, or through organic physical malfunction. For those who are in a normal functioning condition, behold, reality is all around you if you have courage to face it. Can I prove proof exists? No, I cannot. Not in the purely verbal world. Can I prove reality exists? No, not in the purely verbal world. Some things are too basic to be proven and must be accepted in day to day life. But in the purely verbal world, all things become philosophically doubtful when traced down to their primary premise, and that premise is then questioned. The World of Words While it is not possible to establish many proofs in the verbal world, and it is simultaneously possible to make many uninhibited assertions or word equations in the verbal world, it should be considered that reality is more rigid and does not abide by the artificial flexibility and latitude of the verbal world. The world of words and the world of human experience are very imperfectly correlated. That is, saying something doesn't make it true. A verbal statement in the world of words doesn't mean it will occur as such in the world of consistent human experience I call reality. In the event verbal statements or assertions disagree with consistent human experience, what proof is there that the concoctions created in the world of words should take precedence or be assumed a greater truth than the world of human physical experience that I define as reality? In the event following a verbal assertion in the verbal world produces pain or catastrophe in the world of human physical reality or experience, which of the two can and should be changed? Is it wiser to live with the pain and catastrophe, or to change the arbitrary collection of words whose direction produced that pain and catastrophe? Which do you want to live with? What proven reason is there to assume that when doubtfulness that can be constructed in verbal equations conflicts with human physical experience, human physical experience should be considered doubtful? It becomes a matter of choice and pride in intellectual argument. My personal advice is that when verbal contortions lead to chronic confusion and difficulty, better you should stop the verbal contortions rather than continuing to expect the difficulty to change. Again, it's a matter of choice. Philosophy is much like particle physics. Earlier in the 20th century the fundamental components of physical existence were considered to be the proton, the neutron, and the electron. As science developed atom smashers, and then more powerful atom smashers, these particles could be hit together and broken pieces of these components were found which might be assumed to be possible building blocks of the three primary particles. Well then, what are those building blocks made of? As more elaborate smashers are built and more discerning detection equipment is developed, perhaps still more kind of fragments or subparticles will be found. At some point in the process we will conclude that there is a material of some kind making up matter that just IS. It simply exists. Suppose the ultimate particle is found. The conclusion will be that it simply exists. There is no other conclusion possible or available. All systems of philosophy, of science, of religious theology, eventually can be traced down to one ultimate premise. There is something that exists. It exists, and that's all we know. Existence and reality exist. If an ultimate subparticulate material is found, in the world of chemistry, medicine, biology, engineering, and climbing stepladders; electrons, protons, and neutrons will still probably turn out to be the primary determining factors to be concerned about. That ignores some types of stuff like subparticle based propulsion system for future space ships or something similar in a highly specialized area. Philosophical questioning has long-since reached that parallel point of the ultimate particle or building material that just IS. There is something existent that just IS and will need to be accepted as being and following a consistent pattern of lawfulness. The fact is, the questions about proving whether reality exists, and proving proof exists are, or should be, meaningless to me beyond some degree of curiosity. I go on about my life without being able to prove proof or life exists. I can go on about my life without proving reality exists. The arguments asserted one way or another do not change how I need to live my life. Reality; A is A; what is, is; are equivalent to the protons, neutrons, and electrons of chemistry that must be accepted. Does the outcome of the philosophical question of whether reality or proof exists decide whether we should plant crops or wear clothes in cold weather to protect us from freezing? Har! Are you crazy? How many committed deconstructionist philosophers walk about naked in subzero temperatures or don't eat? Try creating and living in an alternative subjective reality where food is not needed and where you can sit naked on icebergs, and find out what happens. I emphatically encourage people to try it with the stipulation that they don't do it around me, that they don't force me to do it with them, or that they don't come to me complaining about the consequences and demanding to conscript me into paying for the cost of treating frostbite or other consequences. (sounds like there is a parallel to irresponsibility and socialism somewhere in here, doesn't it?). I encourage people to live subjective reality. I also ask them to go off far away from me to try it, where I won't be bothered by them or the consequences.

### states

#### Federal investment key to successful demonstration and licensing

**Wallace ‘5** (President of Constellation Generation Group, Mike Wallace, CQ Congressional Testimony, “NUCLEAR POWER 2010 INITIATIVE,” 4/26, lexis)

The Department of Energy's Nuclear Power 2010 program is a necessary, but not sufficient, step toward new nuclear plant construction. We must address other challenges as well. Our industry is not yet at the point where we can announce specific decisions to build. We are not yet at the point where we can take a $1.5 billion to $2 billion investment decision to our boards of directors. We do yet not have fully certified designs that are competitive, for example. We do not know the licensing process will work as intended: That is why we are working systematically through the ESP and COL processes. We must identify and contain the risks to make sure that nothing untoward occurs after we start building. We cannot make a $1.5 $2 billion investment decision and end up spending twice that because the licensing process failed us. The industry **believes** federal investment is necessary and appropriate to offset some of the risks I've mentioned. We recommend that the federal government's investment include the incentives identified by the Secretary of Energy Advisory Board's Nuclear Energy Task Force in its recent report. That investment stimulus includes: 1. secured loans and loan guarantees; 2. transferable investment tax credits that can be taken as money is expended during construction; 3. transferable production tax credits; 4. accelerated depreciation. This portfolio of incentives is necessary because it's clear that no single financial incentive is appropriate for all companies, because of differences in company-specific business attributes or differences in the marketplace - namely, whether the markets they serve are open to competition or are in a regulated rate structure. The next nuclear plants might be built as unregulated merchant plants, or as regulated rate-base projects. The next nuclear plants could be built by single entities, or by consortia of companies. Business environment and project structure have a major impact on which financial incentives work best. Some companies prefer tax-related incentives. Others expect that construction loans or loan guarantees will enable them to finance the next nuclear plants. It is important to preserve both approaches. We must maintain as much flexibility as possible. It's important to understand why federal investment stimulus and investment protection is necessary and appropriate. Federal investment stimulus is necessary to offset the higher first-time costs associated with the first few nuclear plants built. Federal investment protection is necessary to manage and contain the one type of risk that we cannot manage, and that's the risk of some kind of regulatory failure (including court challenges) that delays construction or commercial operation. The new licensing process codified in the 1992 Energy Policy Act is conceptually sound. It allows for public participation in the process at the time when that participation is most effective - before designs and sites are approved and construction begins. The new process is designed to remove the uncertainties inherent in the Part 50 process that was used to license the nuclear plants operating today. In principle, the new licensing process is intended to reduce the risk of delay in construction and commercial operation and thus the risk of unanticipated cost increases. The goal is to provide certainty before companies begin construction and place significant investment at risk. In practice, **until the process is demonstrated, the industry and the financial community cannot be assured** that licensing will proceed in a disciplined manner, without unfounded intervention and delay. **Only** the successful licensing and commissioning of several new nuclear plants (such as proposed by the NuStart and Dominion-led consortia) can demonstrate that the licensing issues discussed above have been adequately resolved. Industry and investor concern over these potential regulatory impediments may require techniques like the standby default coverage and standby interest coverage contained in S. 887, introduced by Senators Hagel, Craig and others. Let me also be clear on two other important issues: 1. The industry is not seeking a totally risk-free business environment. It is seeking government assistance in containing those risks that are beyond the private sector's control. The goal is to ensure that the level of risk associated with the next nuclear plants built in the U.S. generally approaches what the electric industry would consider normal commercial risks. The industry is fully prepared to accept construction management risks and operational risks that are properly within the private sector's control. 2. The industry's financing challenges apply largely to the first few plants in any series of new nuclear reactors. As capital costs decline to the "nth-of-a-kind" range, as investors gain confidence that the licensing process operates as intended and does not represent a source of unpredictable risk, follow-on plants can be financed more conventionally, without the support necessary for the first few projects. What is needed limited federal investment in a limited number of new plants for a limited period of time to overcome the financial and economic hurdles facing the first few plants built. In summary, we believe the industry and the federal government should work together to finance the first-of-a-kind design and engineering work and to develop an integrated package of financial incentives to stimulate construction of new nuclear power plants. Any such package must address a number of factors, including the licensing/regulatory risks; the investment risks; and the other business issues that make it difficult for companies to undertake capital-intensive projects. Such a cooperative industry/government financing program is a necessary and appropriate investment in U.S. energy security.

#### Counterplan kills certainty

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

The 50 US states have 50 additional energy policies. In the US, states have been active in changing electric power generation rules and prices. The proffered reason for most changes is to check global warming by reducing C02 emission, even though a single state’s small reductions, or even all of the states’ reductions, can’t make a dent in the global problem. The motivation seems to be to assuage pollution guilt or exhibit leadership in combating climate change, expecting others to follow suit. People feel good about taking any steps, however insignificant. The national result is a mishmash of confusing and changing rules about electric power, which crosses state boundaries and should be managed with national scope. The Regional Greenhouse Gas Initiative is a cap-and-trade market for limiting CO2 emissions, started in 2008. Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island and Vermont cooperate by requiring utilities to bid for capped rights to emit CO2 when generating power. The objective is to reduce CO2 emissions 10% by 2018. The states require power generating utilities to pay for the CO 2 emitted; the market price in 2012 is roughly $ 2/ton. This will likely rise as the cap will decrease 2.5% per year beginning in 2014. The cap was set about 20% higher than actual emissions, so CO2 reductions from this are nil. Quarterly auctions net about $40 million dollars; total to date is about $1 billion. The proceeds are divided among the participating states. The money is intended to be used for CO2- reducing projects such as improving energy efficiency, but states are free to spend the money on other purposes. New Jersey has left RGGI and New Hampshire is debating leaving. The small cost of $2/ton of CO2 has little effect on behavior; it is paid for by increased charges for electric power. Investment tax credits for renewable energy projects exist at the state level as well as the federal level. In Vermont this was 30%, but this particular tax credit has been eliminated. Feed-in tariffs are requirements forcing electric utilities to buy specified renewable-sourced power at above-market rates. In the US most states have a deregulated electric power market, where electric utilities buy power from independent companies - merchant generators. The utilities have responsibility for power transmission, distribution, and customer service. They buy power in a competitive marketplace from merchant generators who offer the lowest prices. Feed-in tariffs supersede this process in a market where price competition settles out at roughly 5 cents/kWh for hydro, nuclear, and natural gas generated electricity. For example, in Vermont, the feed-in tariff for PV solar power was 30 cents/kWh when the first plants were built. The 2012 law now sets prices, not on CO2 abatement, but on the cost of generating each type of renewable energy, for example (in cents/kWh): solar (27), hydro (12), farm methane (14), wind (11), small wind (25), biomass (12). Guaranteeing profitable prices reduces producer cost-reduction incentives. Feed-in tariffs also apply in states of the US where utilities generate power. Feed-in tariffs are common in Europe. Germany has reduced solar rates in 2012 to 23 to 30 cents/kWh. Greece pays up to 63 cents/kWh. Sunny Spain pays 27 cents/kWh. UK plans to reduce its home- scale solar feed-in tariff to 25 cents/kWh. Production tax credits are paid to power producers for actual generation of power. In addition to the federal 2.2 cent/kWh program, Iowa pays at least 1 cent/kWh to wind power producers. Arizona, New Mexico, Oklahoma, and Maryland offer production tax credits. Renewable energy certificates (RECs) represent a property right created by generating 1 MWh of C02-free electricity (except from nuclear power). Generating companies can sell the energy and certificates separately. Utilities can meet requirements for renewable energy by generating it or buying RECs in an open market. RECs are classified by energy source: wind, solar, biomass, etc. Massachusetts specifies a minimum price of 5.5 cents/kWh; elsewhere the auction market prices range from 0.1 to cents/kWh. Companies seeking to reduce their advertised net carbon footprint can buy RECs; Intel bought 2.5 billion kWh of RECs in 2011 to offset over 85% of their electricity use. Renewable -portfolio standards (RPSs) are mandates that require electric utilities to obtain certain fractions of their power from specified renewable energy sources. Every state has different rules, requiring from 10% to 40% of electricity be obtained from various renewable sources by deadlines ranging from 2015 to 2030. Some states allow meeting RPS requirements by purchasing RECs. The US Congress is considering a federal RPS law. Carbon taxes are taxes on CO2 emitted to produce power. Small carbon taxes are enacted in Colorado (0.5 cents/kWh), California (4.4 cents/ton CO2), and Maryland ($5/ton CO2). Administration of the mishmash of policies is expensive. The rules, exceptions, allowances, auctions, audits, and labor are very complex and volatile. Only clever business people can make use of the rats’ nest of regulations. One solar power project in Vermont was able to be profitable because of a 30% federal investment tax credit, a 30% state investment tax credit, accelerated depreciation, a feed-in tariff guaranteeing sales at 30 cents/kWh, and opportunities to sell RECs. Existing energy policies are failing. Carbon dioxide emissions are still rising. In 2011 global CO2 emissions rose 3.2% to 31.6 Gt, led by China and India. US emissions dropped 1.7% due to a mild winter and power generators switching from coal to natural gas. EU emissions dropped 1.9% due to a warm winter and industrial recession. Japan emissions rose 2.8% from shutting down nuclear power plants. Reducing US CO2 emissions can do little to check global warming, because the US represents just 17% of the problem. The DOE EIA projects 0.3% annual growth in US CO2 emissions. 1.3% for the world, and 2.6% for China and India. Germany is shutting down nuclear power plants, burning more coal, building 17 new coal plants, and burning natural gas from Russia. The rising price of electricity has already bankrupted an aluminum company there. Energy policy recommendations I recommend that the goals of US energy policy should be: Stopping global warming. Protecting the environment. Protecting human health and safety. Ensuring a sustainable world. Ending energy poverty. Furthering economic growth. Assuring energy security. recommend that the agents of this pursuit be the federal government of the United States, enabling corporations to develop innovative energy sources, with leadership from politicians, philanthropists, and entrepreneurs. Lead energy policy at the federal level, not the state level. Energy flows across state lines, as do EPA-regulated emissions and DOT-regulated trucks. NRC continues strong effective control over all nuclear plants. Energy policy seems largely ceded to the states, which conceive and implement feed-in tariffs, RECs, RPSs, tax credits, etc in 50 different ways. There is a Federal Energy Regulatory Commission, but it is silent on these matters.

#### Interstate compacts don’t answer this warrant

DeShazo and Freeman ‘7 – professor and director of the Lewis Center and professor of law (J.R. DeShazo and Jody Freeman, TIMING AND FORM OF FEDERAL REGULATION: THE CASE OF CLIMATE CHANGE, University of Pennsylvania Law Review, Vol. 155:1499, 2007)

States can increase regulatory uncertainty in this way either by taking action alone or by joining together with other states in regional compacts. Moreover, because states will be responding to somewhat different interest group configurations within their own jurisdictions, there is a high likelihood that different states will adopt different regulatory approaches. This practically ensures inconsistency and helps drive industry to Congress. At the same time, some states are likely to be more important than others in provoking this reaction. Historically, California seems to have been especially influential in prompting industry demand for federal uniformity, perhaps because of the state’s disproportionate market power 27 and history of engaging in product regulation targeting automobiles. 28

#### Only federal action solves worker shortages

**Kammen, 03** - professor of nuclear engineering at Berkeley (Daniel, Federal News Service, Prepared Testimony before the House Committee on Science, 6/12, lexis) //DH

The federal government plays the pivotal role in the encouragement of innovation in the energy sector. Not only are federal funds critical, but as my work and that of others has demonstrated6, private funds generally follow areas of public sector support. One particularly useful metric although certainly not the only measure --. of the relationship between funding and innovation is based on patents. Total public sector funding and the number of patents - across all disciplines in the United States have both increased steadily over at least the past three decades (Figure 5). The situation depicted here, with steadily increasing trends for funding and results (measured imperfectly, but consistently, by patents) is not as rosy when energy R&D alone is considered. In that case the same close correlation exists, but the funding pattern has been one of decreasing resources (Figure 6A). Figure 6A shows energy funding levels (symbol: o) and patents held by the national laboratories (symbol: ). The situation need not be as bleak as it seems. During the 1980s a number of changes in U.S. patent law permitted the national laboratories to engage in patent partnerships with the private sector. This increased both the interest in developing patents, and increased the interest by the private sector in pursuing patents on energy technologies. The squares (l) in figure 6 show that overall patents in the energy sector derived. Figure 6B reveals that patent levels in the nuclear field have declined, but not only that, publicprivate partnerships have taken placed (shaded bars), but have not increased as dramatically as in energy field overall (Figure 6A). There are a number of issues here, so a simple comparison of nuclear R&D to that on for example, fuel cells, is not appropriate. But it is a valid to explore ways to increase both the diversity of the R&D. This is a particularly important message for **federal** policy. Novel approaches are needed to encourage new and innovative modes of research, teaching, and industrial innovation in the nuclear energy field. To spur innovation in nuclear science a concerted effort would be needed to increase the types and levels of cooperation by universities and industries in areas that depart significantly from the current 'Generation III+' and equally, away from the 'Generation IV' designs. Similar conclusions were reached by M. Granger Morgan, head of the Engineering and Public Policy Program at Carnegie Mellon University, in his evaluation of the need for innovative in the organization and sociology of the U. S. nuclear power industrys. A second important issue that this Committee might consider is the degree of **federal** support for nuclear fission relative to other nations. Funding levels in the U.S. are significantly lower than in both Japan and France. Far from recommending higher public sector funding, what is arguably a more successful strategy would be to increase the private sector support for nuclear R&D and student training fellowships. Importantly, this is precisely the sort of expanded publicprivate partnership that has been relatively successful in the energy sector generally. It is incorrect, however, to think that this is a process that can be left to the private sector. There are key issues that inhibit private sector innovation. As one example, many nuclear operating companies have large coal assets, and thus are unlikely to push overly hard, in areas that threaten another core business. This emphasis on industry resources used to support and expanded nuclear program - under careful public sector management - has been echoed by a variety of nuclear engineering faculty members: I believe that if you. were to survey nuclear engineering department heads, most would select a national policy to support new nuclear construction, over a policy to increase direct financial support to nuclear engineering departments. A firm commitment by the federal government, to create incentives sufficient to ensure the construction of a modest number of new nuclear plants, with the incentives reduced for subsequent plants, would be the best thing that could possibly be done for nuclear engineering education and revitalization of the national workforce for nuclear science and technology. - Professor Per Peterson, Chair, Department of Nuclear Engineering, University of California, Berkeley

#### The impact is the case

**BENGELSDORF, 07** – consultant and former director of both key State and Energy Department offices that are concerned with international nuclear and nonproliferation affair (HAROLD, “THE U.S. DOMESTIC CIVIL NUCLEAR INFRASTRUCTURE AND U.S. NONPROLIFERATION POLICY”, White Paper prepared for the American Council on Global Nuclear Competitiveness May, <http://www.nuclearcompetitiveness.org/images/COUNCIL_WHITE_PAPER_Final.pdf)//DH>

Thus the challenge the U.S. nuclear industry faces today is whether the U.S. civil nuclear infrastructure will be strong enough to support a hoped for nuclear revival in this country, which could entail the construction and commissioning of up to eight nuclear power units during the 2010 to 2017 period. Several studies have been devoted to this question, and the answer is by no means certain. The shortage in skilled labor is expected to double in this country by the year 2020 and the workforce will stop growing as the baby boomers start to retire.

#### State action prevents federal action

**Weil 8**

Alan Weil ([aweil@nashp.org](mailto:aweil@nashp.org) ) is executive director of the National Academy for State Health Policy in Portland, Maine, and Washington, D.C.

[Health Affairs](http://www.healthaffairs.org), 27, no. 3 (2008): 736-747 doi: 10.1377/hlthaff.27.3.736

<http://content.healthaffairs.org/cgi/content/full/27/3/736?ck=nck>

If we rely upon states to test bold strategies for reform but fail to give them the tools or resources to implement the reforms, we may conclude that certain policies are ineffective despite the fact that under the right circumstances they would perform quite well. We could easily draw the wrong conclusions from failures—blaming the overall strategy such as play-or-pay, a tax credit approach, or an individual mandate—rather than the specific circumstances facing the state. A series of state failures could even lead to the conclusion that "nothing works," thereby motivating the nation to adopt more radical, untested changes that involve unnecessary risk.

It is also possible that **a few state successes would become an excuse for prolonged federal inaction. Pushing the nation’s most pressing domestic problem onto the states gives federal politicians permission to avoid making the difficult decisions** health reform requires.

### 1ar a2 china impact

#### Strong cooperation is impossible—but total collapse is impossible, either way there’s no impact

**Blackwill 2009** – former US ambassador to India and US National Security Council Deputy for Iraq, former dean of the Kennedy School of Government at Harvard (Robert D., RAND, “The Geopolitical Consequences of the World Economic Recession—A Caution”, http://www.rand.org/pubs/occasional\_papers/2009/RAND\_OP275.pdf, WEA)

Alternatively, will the current world economic crisis change relations between China and the United States in a much more positive and intimate direction, producing what some are calling a transcendent G-2? This seems improbable for seven reasons. First, the United States and China have profoundly different visions of Asian security. For Washington, maintaining U.S. alliances in Asia is the hub of its concept of Asian security, whereas, for Beijing, America’s alliance system is a destabilizing factor in Asian security and over time should wither away. These opposing concepts will be an enduring source of tension between the two sides. Second, these two countries systematically prepare for war against one another, which is reflected in their military doctrines, their weapons procurement and force modernization, and their deployments and military exercises. As long as this is the case, it will provide a formidable psychological and material barrier to much closer bilateral relations. Third, the United States is critical of China’s external resource acquisition policy, which Washington believes could threaten both American economic and security interests in the developing world. Fourth, despite their deep economic dependence on each other, U.S.-China economic relations are inherently fragile. China sells too much to the United States and buys too little, and the United States saves too little and borrows too much from China. This will inevitably lead to a backlash in the United States and a Chinese preoccupation with the value of its American investments. Fifth, Chinese environmental policy will be an increasing problem, both for U.S. policymakers who are committed to bringing China fully into global efforts to reduce climate degradation and for Chinese leaders who are just as determined to emphasize domestic economic growth over international climate regimes. Sixth, China and the United States have wholly different domestic political arrangements that make a sustained entente difficult to manage. Americans continue to care about human rights in China, and Beijing resents what it regards as U.S. interference in its domestic affairs. This will be a drag on the bilateral relationship for the foreseeable future. And seventh, any extended application by Washington of “Chimerica,” as Moritz Schularick of Berlin’s Free University has called it,23 would so alarm America’s Asian allies, beginning with Japan, that the United States would soon retreat from the concept.24

Nevertheless, these factors are unlikely to lead to a substantial downturn in U.S.-China bilateral ties. In addition to their economic interdependence, both nations have important reasons to keep their interaction more or less stable. As Washington wants to concentrate on its many problems elsewhere in the world, especially in the Greater Middle East, Beijing prefers to keep its focus on its domestic economic development and political stability. Neither wants the bilateral relationship to get out of hand. In sum, a positive strategic breakthrough in the U.S.-China relationship or a serious deterioration in bilateral interaction both seem doubtful in the period ahead. And the current economic downturn will not essentially affect the abiding primary and constraining factors on the two sides. Therefore, the U.S.-China relationship in five years will probably look pretty much as it does today—part cooperation, part competition, part suspicion—unaffected by today’s economic time of troubles, except in the increasing unlikely event of a cross-strait crisis and confrontation.

#### Romney is all talk- won’t actually crack down on China

NYT 12 (New York Times, John Hardwood, writer, “The Electoral Math of Romney’s Stance on Trade With China”, 3/22, http://www.nytimes.com/2012/03/23/us/politics/mitt-romneys-stance-on-china-trade.html?\_r=1&pagewanted=all)

WASHINGTON — Among all the elements of Mitt Romney’s 59-point economic plan, his vow to crack down on China’s trade policy would seem the most out of place. That is not because his promise to label China a “currency manipulator” and impose tariff penalties is unique. Plenty of politicians in both parties talk tough about Beijing. What is unusual is that Mr. Romney, a former financial executive identified with Republicans’ free-trade, pro-business wing, has promised to go further than Presidents Obama or George W. Bush in confronting China. Some other business-friendly Republicans warn that his approach could set off a counterproductive trade war that would damage the United States economy. The political question is whether Mr. Romney’s stance can attract enough votes to give him the chance to put it into effect. That question echoes through Republican primaries, in which he has struggled to connect with working-class conservatives, and a possible general election against Mr. Obama. Republican and Democratic strategists alike say that confronting China can play effectively to an anxious public’s sense of economic grievance. The Obama administration has recently lodged a complaint with the World Trade Organization against China’s handling of crucial rare earth mineral exports, and imposed tariffs on Chinese solar panels to counter what it considers unfair subsidies by Beijing. “With blue-collar voters specifically, there’s a perception that we have an economic adversary in China that doesn’t play by the rules,” said Geoff Garin, a Democratic pollster. And the concern “cuts across socioeconomic lines,” said Tony Fabrizio, a Republican pollster, who said higher-income voters fear that China’s ownership of United States government debt threatens American security. Yet prominent figures who generally share Mr. Romney’s economic outlook have criticized his stance, which the Wall Street Journal editorial page called “Romney’s China Blunder.” Business leaders, while pressing for China to open its markets and protect intellectual property, caution that labeling China a currency manipulator could backfire, harming those efforts. Jon M. Huntsman Jr., who was ambassador to China before embarking on his failed bid for the Republican presidential nomination, accused Mr. Romney of “total pandering” on the issue before exiting the race and endorsing him. Rick Santorum, now competing with Mr. Romney for blue-collar votes, has taken a similar view. “We all know Mitt Romney will do and say anything to get votes,” said Hogan Gidley, Mr. Santorum’s communications director. Mr. Obama’s advisers called Mr. Romney’s stance hypocritical. A Romney family blind trust owns a stake in an investment fund established by his former company, Bain Capital, that has bought a Chinese video surveillance company. And in his 2010 book, “No Apology,” Mr. Romney criticized Mr. Obama for levying a trade complaint against Chinese tire exports. Accusing Mr. Obama of acting to reward union supporters, he wrote, “Protectionism stifles productivity.” Mr. Romney’s China currency stance “is about as authentic as his brief flirtation with cheesy grits,” said David Axelrod, Mr. Obama’s top political strategist. “When you build a career around outsourcing, slashing jobs and wages, and profiting handsomely off of bankrupting companies, I don’t think people are going to be moved by what is an obvious election-year conversion.” One Romney adviser, Vin Weber, initially wondered whether the position reflected political calculation. When he joined internal discussions about Mr. Romney’s forthcoming economic plan last year, Mr. Weber said he sought to persuade other economic advisers to abandon the promised currency crackdown, which he still considers a policy mistake. Soon Mr. Weber was making that case directly to the candidate — who rejected the appeal and insisted his policy is the right one. “This is directly from him,” said Mr. Weber, a Washington lobbyist and former Republican congressman from Minnesota. “He believes it will strengthen his hand substantially. Mitt Romney is a person who sees himself as a successful negotiator.” Underpinning Mr. Romney’s argument is his assertion that recent presidents of both parties have been “played like a fiddle” by Chinese leaders. By keeping the yuan’s value lower against the dollar than market forces would dictate, Beijing makes exports to the United States cheaper and imports from the United States more expensive. In a Republican debate last year, Mr. Romney said China’s interest in smooth relations with a mammoth customer like the United States would preclude his actions from backfiring. “You think they want to have a trade war?” Mr. Romney said. “If you are not willing to stand up to China, you will get run over by China, and that’s what’s happened for 20 years.” That assertion grates on veterans of the Bush administration, which in 2006 began a “strategic economic dialogue” with China led by Treasury Secretary Henry M. Paulson Jr., a former chairman of Goldman Sachs. The Obama administration has extended that dialogue, pressing Beijing to raise the value of the yuan while stopping short of declaring China a currency manipulator. “Both the Bush and Obama administrations have been as aggressive as possible while protecting the American people,” said Neel T. Kashkari, a Bush administration Treasury official now at Pimco, the giant bond-trading firm. “Launching a trade war with China would hurt us as much as it would hurt them.” Mr. Romney’s economic plan makes it sounds as if he is willing to take that risk. It lists the currency crackdown among five executive orders he pledges to issue on “Day 1” of his presidency. But a close reading of the language suggests he has left himself an out. It pledges to label China a currency manipulator “if China does not quickly move to float its currency.” China has already been raising the value of its currency against the dollar somewhat in recent years, including by 4.7 percent in 2011. Some experts on China policy predict a President Romney would find a way to sidestep his pledge once electioneering gave way to governance. “It is a campaign, after all,” said Nicholas R. Lardy, a fellow at the Peterson Institute for International Economics. “My forecast is that if Romney becomes president there will be little or no change in our China policy.”

### link

#### The plan doesn’t reduce turnout

Neil Munro 8-30-2011; Daily Caller “Obama still has green energy vote for 2012” <http://dailycaller.com/2011/08/30/obama-still-has-green-energy-vote-for-2012/>

Environmentalists are staging a two-week oil-pipeline protest outside the White House to boost their importance to President Barack Obama’s political calculations in the 2012 election season. But there’s little evidence so far that progressives’ disappointment with Obama’s environmental policies threatens to reduce their turnout on election day, or that it pressures White House officials to make additional concessions to environmentalists during a political season dominated by the public’s demand for additional jobs. Monday’s colorful, TV-ready protests against the Keystone XL pipeline from Canada’s oil fields to U.S consumers took place in Lafayette Park, in front of the White House. The day’s events included 100 peaceful arrests of environmentalists and celebrities, a multi-faith spiritual event in Lafayette Park, press club speeches by environmental leaders, and numerous suggestions that approval of the pipeline by Obama will cost his campaign votes, volunteers and donations. Hundreds of others have already been arrested, and numerous environmental groups have contributed to two weeks of protest. If Obama approves the pipeline, environmental activist Andrew Driscoll predicted he would not vote to re-elect him. “He hasn’t done anything to earn our vote yet,” said the Massachusetts activist. “The fate of humanity, the fate of the planet” will be determined by Obama’s pipeline decision, he said. “If he approves it, it will be a huge blow, not only for our future, but also for this administration,” said Elijah Zarlin, a campaign manager at CREDO Action, an Atlanta-based progressive group. The protesters “are the people who are maybe going to vote for Obama, and are the people Barack will lose” if he approves the pipeline, he added. However, the leadership of the green movement isn’t threatening to break with Obama over this one decision. (RELATED: Gore: Global warming skeptics are this generation’s racists)

#### No impact to reduced turnout

Cohn, 10/1/12 [ New Republic Election Expert, Part-Time Georgetown Coach -- his articles go through a TNR editing process and are available for all on his blog, he has been profiled on New York Magazine and MSNBC, “Obama’s College Voter Trump Card, [www.tnr.com/blog/electionate/107974/obamas-college-voter-trump-card](http://www.tnr.com/blog/electionate/107974/obamas-college-voter-trump-card)]

Even if turnout among these voters is down 18 percent—and that’s beneath 2004, by the way—the total number of young, disproportionately non-white, and Obama-friendly voters actually increases from 23.5 to 25.7 million.¶ Even in this relatively low-turnout scenario, 6.5 million new 18-22 year olds will enter the electorate and they can go a long way toward helping Obama compensate for declining turnout among ’08 voters or an increase in conservative turnout. If they vote 63-37 for Obama, the president would net-1.7 million voters.¶ If non-white or young voters turned out at ’08-levels in 2012, demographics would actually ensure that Obama does even better than he did four years ago. These same demographic trends give Democrats a bit of breathing room to withstand modest declines in enthusiasm among young voters without actually falling far behind where they stood four years ago. ¶ With this in mind, it’s no surprise that Obama opened his campaign at Ohio State University, or that Michelle Obama is holding rallies on college campuses across the battleground states. Today’s college students didn’t vote four years ago, and even an underwhelming turnout from America's most diverse age group could help the Obama campaign make up for losses among voters who have abandoned their cause since 2008.

# r6 neg v northwestern mp

## 1nc

### 1nc elections

#### Obama is winning but its close and reversible – the average of recent polls puts Obama ahead

**Cook, 10/4**/12 – editor and publisher of the Cook Political Report for National Journal (Charlie, “Mitt Romney Breaks His Losing Streak” <http://www.nationaljournal.com/columns/cook-report/the-cook-report-romney-breaks-his-losing-streak-20121004?mrefid=mostViewed>)

Too many political observers see politics in an entirely binary way: Everything has to be either a “0” or a “1”; a race is either tied or it’s over; every election is either won or stolen. Some people never want to admit that their side lost. And some people think that a poll either tells them what they want to hear or is methodologically flawed—or crooked. It’s like an obnoxious sports fan (often found in Philadelphia) who views a ruling by a referee or umpire as either favorable or a bad call. Denial and simplicity reign.

The presidential election is neither tied nor over. Of the 16 most recent national polls using live telephone interviewers calling both respondents with landlines and those with cell phones (between 30 and 40 percent of voters do not have landlines and cannot legally be called by robo-pollsters), one has the race even, two have Obama with a narrow 2-point edge, five have 3-point Obama margins, two have 5-point Obama advantages, another pair have 6-point Obama leads, two have 7-point leads, and one has an 8-point Obama lead. This would strongly suggest that the Obama lead is between 3 and 6 percentage points; such brand-name polls as those by CNN, Fox News, and NBC News/Wall Street Journal are among those in that 3- to 6-point range.

Conversations with Democratic and Republican pollsters and strategists suggest that Colorado, Florida, North Carolina, and Virginia are the most competitive swing states. Some high-quality private polling shows Romney with very narrow leads in both North Carolina and Virginia, but a few other equally sophisticated surveys show Obama with narrow advantages in those two states. At least one private survey shows Florida even, but most show the Sunshine State and Colorado with narrow Obama leads, in the small- to mid-single-digit range. Just a hair or two better for Obama but still quite close are Nevada and Wisconsin, followed by Iowa. Things really get ugly for Romney in Ohio and Michigan, and, finally, in Pennsylvania, which is no longer competitive. Ohio shows a 5- to 8-point lead for Obama in private polling. In Michigan, Obama’s lead is slightly wider, and in Pennsylvania, Romney faces close to a 10-point deficit. It is mathematically possible for Romney to reach 270 electoral votes without Michigan, Ohio, or Pennsylvania, but it is in reality exceedingly unlikely.

It would take a very consequential event to change the trajectory of this race. Time will tell whether Romney’s strong debate performance on Wednesday night was the event that he needed—particularly in swing states such as Ohio. But at least he energized his supporters and sent a clear message that the race is not over.

#### It’s reversible

**Silver, 12** (Nate, 5/15, chief pollster for New York Times’ 538 election polling center. Regarded as top-level pollster based on distinct mathematical methods, http://fivethirtyeight.blogs.nytimes.com/2012/05/15/a-30000-foot-view-on-the-presidential-race/)

The last thing to remember is that when an election is quite close, it does not take very much to shift the race from one candidate being a 60/40 favorite to it being about even.

At the betting market Intrade, Mr. Obama’s odds of re-election have consistently been around 60 percent. While, on the one hand, it is good not to overreact to new data at this early stage of the race, it is also worth remembering that even a one-point shift in a president’s approval ratings, or a modest change in the economic forecasts, can move a president’s re-election odds at the margin.

#### The plan crushes Obama

**Weiss 12**. Daniel, Senior Fellow and Director of Climate Strategy at the Center for American Progress Action Fund, "Americans Say ‘Yes’ to Clean Energy, ‘No’ To Fracking Without Safeguards" Think Progress, 5/24, thinkprogress.org/climate/2012/05/24/489756/americans-say-yes-to-clean-energy-no-to-fracking-without-safeguards/

Fossil fuel companies and their political allies have spent millions of dollars on advertising to persuade Americans that drilling and mining are the best solutions to our energy problems. Despite their spending, these polluters haven’t convinced most Americans – including many Republicans — to support their proposals.

A brand new United Technologies/National Journal Congressional Connection Poll found overwhelming public support for renewable energy tax credits, a clean energy standard, and increased regulation of hydraulic fracking for oil and gas production.

The nationwide poll of 1,004 adults was conducted from May 17-20. It asked respondents about whether tax credits for renewable energy — such as the Production Tax Credit for wind set to expire the end of this year — should be extended:

Supporters of these tax credits say they should be extended because they create jobs and encourage the development of cleaner sources of energy. Opponents say they should end because they cost too much and have not been effective at encouraging the use of renewable energy. Do you think Congress should extend these energy credits, OR allow them to expire?

By better than a two to one margin, respondents wanted to extend the incentives. Independents favored such an extension by 64 to 29 percent, as did 48 percent of Republicans. Only 43 percent of Republicans opposed the PTC extension.

Today, President Obama plans to visit TPI Composites, a manufacturer of wind turbine blades in Newton, Iowa that employs 700 people. He is expected to again urge Congress to extend the PTC because it is vital for job creation and maintaining competitiveness in the wind energy industry. The National Journal poll suggests that most Americans agree with him.

Poll respondents demonstrated additional strong support for clean energy when they were asked about whether they favored a Clean Energy Standard that would require utilities to generate 80 percent of their electricity with low- or no carbon resources by 2035.

Legislation recently introduced in the U.S. Senate would create a national clean-energy standard that requires the country to generate an increasingly large percentage of its electricity from cleaner sources of energy, including renewable energy, natural gas, and nuclear power. Supporters of this policy say it would promote cleaner energy and not add an undue cost onto consumers. Opponents say imposing a national clean-energy standard would cost jobs and create higher electricity costs. What is your opinion – do you think the country should or should NOT create a national clean-energy standard?

The National Journal poll found that supporters outnumbered opponents by nearly 40 percent. This included independents who favored it by 64 to 23 percent. Even Republicans favored a Clean Energy Standard by one percent.

Fossil fuel interests are spending millions of dollars advertising and lobbying to convince Congress to leave hydraulic fracturing unregulated — despite its production of large amounts of air, water, and climate pollution. So far, it appears Big Oil has made little progress convincing the public to support their position. Respondents were asked:

Hydraulic fracturing or “fracking” is a process used to develop deposits of natural gas recently discovered in many regions of America. Environmentalists and some residents living near drilling operations worry that fracking can contaminate drinking water sources and worsen climate change. The oil and natural gas industry maintains the process is safe and can create jobs and promote energy independence. Which of the following comes closest to your view of what the federal government should do on this issue?

One of six respondents wanted to “ban fracking altogether because it’s not safe for the environment.” A majority supported an “increase in regulation of fracking to protect the environment, but NOT ban it.” A total of sixty eight percent wanted either a ban or more safeguards from fracking. Only one quarter of poll subjects wanted to “reduce regulation of fracking to encourage more natural gas production.”

Some 68 percent of independents wanted to ban or regulate fracking. A clear majority of Republicans wanted either a ban or more regulation. Only 41 percent of GOPers wanted to reduce regulation.

The National Journal poll is independent of both political parties, and provided respondents with arguments for and against each position. By overwhelming margins – including a majority or plurality of Republicans – respondents supported clean energy investments, clean energy targets, and cleaning up hydraulic fracking.

The poll suggests that people are disregarding the tens of millions of dollars in attack ads against clean energy spent by Big Oil, the dirty coal lobby, the Koch Brothers, and Mitt Romney’s oil-funded super PAC. Perhaps it’s because these ads had little credibility. The Washington Post concluded that “there is no excuse for these kinds of ads, which take facts out of context or simply invent them.”

#### Approval ratings are key to the election

**Cook, The National Journal Political Analyst, 11**

(Charlie, October 27, “Underwater,” http://www.nationaljournal.com/columns/cook-report/the-cook-report-obama-underwater-20111027, d/a 7-20-12, ads)

The best barometer of how a president is going to fare is his approval rating, which starts taking on predictive value about a year out. As each month goes by, the rating becomes a better indicator of the eventual results. Presidents with approval numbers above 48 to 50 percent in the Gallup Poll win reelection. Those with approval ratings below that level usually lose. If voters don’t approve of the job you are doing after four years in office, they usually don’t vote for you. Of course, a candidate can win the popular vote and still lose the Electoral College. It happened to Samuel Tilden in 1876, Grover Cleveland in 1888, and Al Gore in 2000. But the popular votes and the Electoral College numbers usually come down on the same side.

#### The impact is the middle east

Brooklyn Dame 8-1-2012; Mitt Romney: A Foreign Policy of Incoherence

http://www.zimbio.com/Governor+W.+Mitt+Romney/articles/6GkfmpjrRzU/Mitt+Romney+Foreign+Policy+Incoherence

If his views are to be taken seriously (and some doubt if they should) Romney politics in the Middle East line up pretty strongly with the Israeli Likud party. From this we know three things: Romney would allow Israel relative free ride on its policies, right or wrong, that the former Massachusetts Governor would take a hawkish approach to Iran (risking war and instability in the Middle East), and that a President Romney would not be very friendly towards the new regimes of Egypt or Tunisia. Part of me thinks Romney is too smart to actually believe this tripe. While Bush was a “think-with-your-gut,” “shoot-first-ask-questions-later” kind of guy, with nary a bone of pragmatism in his body, Romney appears at least removed in his behavior, and he appears to consider the pros and cons of every action (which explains his “flip-flopping” behavior in politics). So, again, part of me leans towards believing that as president, Romney would merely be a high-defense-spending, moderate, realist in the mold of Ronald Reagan or George H.W. Bush. It’s hard to realistically picture him as one truly in the camp of Paul Wolfowitz or Bill Kristol whose panacea for foreign policy comes down to “bomb! bomb! invade! invade!” That being said, we must take the candidates at their word. To dismiss their words would be folly. And Romney’s words in foreign policy arena border on disastrous. We cannot risk electing someone who — in a time of democratization and revolution in the Middle East, a trend that can easily be reversed or hijacked by illiberal forces — would turn a blind eye to pernicious Israeli policies in the region, encourage military action against Iran, and spurn the newly emergent regimes of Egypt and Tunisia for their exaggerated Islamist nature. Furthermore, as can be seen in Iraq, Syria, Lebanon, and Bahrain, the cold war between Sunni Saudi Arabia and Shia Iran is at threat of heating up across the region if not properly mediated by the international community. Why would Romney want to risk derailing the progress of the Arab Spring through unintentionally encouraging an escalation of Sunni-Shia tensions across the region with the added wild card of an unrestrained, frenetic Israel in the mix?

#### Nuclear war

Russell2009 – Editor of Strategic Insights, Senior Lecturer Department of National Security Affairs (James, Spring, “Strategic Stability Reconsidered: Prospects for Escalation and Nuclear War in the Middle East” Security Studies Center Proliferation Papers, http://www.ifri.org/downloads/PP26\_Russell\_2009.pdf)

Strategic stability in the region is thus undermined by various factors: (1) asymmetric interests in the bargaining framework that can introduce unpredictable behavior from actors; (2) the presence of non-state actors that introduce unpredictability into relationships between the antagonists; (3) incompatible assumptions about the structure of the deterrent relationship that makes the bargaining framework strategically unstable; (4) perceptions by Israel and the United States that its window of opportunity for military action is closing, which could prompt a preventive attack; (5) the prospect that Iran’s response to pre-emptive attacks could involve unconventional weapons, which could prompt escalation by Israel and/or the United States; (6) the lack of a communications framework to build trust and cooperation among framework participants.

These systemic weaknesses in the coercive bargaining framework all suggest that escalation by any the parties could happen either on purpose or as a result of miscalculation or the pressures of wartime circumstance. Given these factors, it is disturbingly easy to imagine scenarios under which a conflict could quickly escalate in which the regional antagonists would consider the use of chemical, biological, or nuclear weapons.

It would be a mistake to believe the nuclear taboo can somehow magically keep nuclear weapons from being used in the context of an unstable strategic framework. Systemic asymmetries between actors in fact suggest a certain increase in the probability of war – a war in which escalation could happen quickly and from a variety of participants. Once such a war starts, events would likely develop a momentum all their own and decision-making would consequently be shaped in unpredictable ways. The international community must take this possibility seriously, and muster every tool at its disposal to prevent such an outcome, which would be an unprecedented disaster for the peoples of the region, with substantial risk for the entire world.

#### Romney is a foreign policy disaster—leads to global war

Doug Bandow 5-15-2012; Doug Bandow is a senior fellow at the Cato Institute and former special assistant to President Ronald Reagan. “Mitt Romney: The Foreign Policy of Know-Nothingism” http://www.cato.org/publications/commentary/mitt-romney-foreign-policy-knownothingism

Romney’s overall theme is American exceptionalism and greatness, slogans that win public applause but offer no guidance for a bankrupt superpower that has squandered its international credibility. “This century must be an American century,” Romney proclaimed. “In an American century, America leads the free world and the free world leads the entire world.” He has chosen a mix of advisers, including the usual neocons and uber-hawks — Robert Kagan, Eliot Cohen, Jim Talent, Walid Phares, Kim Holmes, and Daniel Senor, for instance — that gives little reason for comfort. Their involvement suggests Romney’s general commitment to an imperial foreign policy and force structure. Romney is no fool, but he has never demonstrated much interest in international affairs. He brings to mind George W. Bush, who appeared to be largely ignorant of the nations he was invading. Romney may be temperamentally less likely to combine recklessness with hubris, but he would have just as strong an incentive to use foreign aggression to win conservative acquiescence to domestic compromise. This tactic worked well for Bush, whose spendthrift policies received surprisingly little criticism on the right from activists busy defending his war-happy foreign policy. The former Massachusetts governor has criticized President Obama for “a naked political calculation or simply sheer ineptitude” in following George W. Bush’s withdrawal timetable in Iraq and for not overriding the decision of a government whose independence Washington claims to respect. But why would any American policymaker want to keep troops in a nation that is becoming ever more authoritarian, corrupt, and sectarian? It is precisely the sort of place U.S. forces should not be tied down. In contrast, Romney has effectively taken no position on Afghanistan. At times he appears to support the Obama timetable for reducing troop levels, but he has also proclaimed that “Withdrawal of U.S. forces from Afghanistan under a Romney administration will be based on conditions on the ground as assessed by our military commanders.” Indeed, he insisted: “To defeat the insurgency in Afghanistan, the United States will need the cooperation of both the Afghan and Pakistani governments — we will only persuade Afghanistan and Pakistan to be resolute if they are convinced that the United States will itself be resolute,” and added, “We should not negotiate with the Taliban. We should defeat the Taliban.” Yet it’s the job of the president, not the military, to decide the basic policy question: why is the U.S. spending blood and treasure trying to create a Western-style nation state in Central Asia a decade after 9/11? And how long is he prepared to stay — forever? On my two trips to Afghanistan I found little support among Afghans for their own government, which is characterized by gross incompetence and corruption. Even if the Western allies succeed in creating a large local security force, will it fight for the thieves in Kabul? Pakistan is already resolute — in opposing U.S. policy on the ground. Afghans forthrightly view Islamabad as an enemy. Unfortunately, continuing the war probably is the most effective way to destabilize nuclear-armed Pakistan. What will Romney do if the U.S. military tells him that American combat forces must remain in Afghanistan for another decade or two in order to “win”? The ongoing AfPak conflict is not enough; Romney appears to desire war with Iran as well. No one wants a nuclear Iran, but Persian nuclear ambitiions began under America’s ally the Shah, and there is no reason to believe that the U.S. (and Israel) cannot deter Tehran. True, Richard Grenell, who briefly served as Romney’s foreign-policy spokesman, once made the astonishing claim that the Iranians “will surely use” nuclear weapons. Alas, he never shared his apparently secret intelligence about the leadership in Tehran’s suicidal tendencies. The Iranian government’s behavior has been rational even if brutal, and officials busy maneuvering for power and wealth do not seem eager to enter the great beyond. Washington uneasily but effectively deterred Joseph Stalin and Mao Zedong, the two most prolific mass murderers in history. Iran is no substitute for them. Romney has engaged in almost infantile ridicule of the Obama administration’s attempt to engage Tehran. Yet the U.S. had diplomatic relations with Hitler’s Germany and Stalin’s Russia. Washington came to regret not having similar contact with Mao’s China. Even the Bush administration eventually decided that ignoring Kim Jong-Il’s North Korea only encouraged it to build more nuclear weapons faster. Regarding Iran, Romney asserted, “a military option to deal with their nuclear program remains on the table.” Building up U.S. military forces “will send an unequivocal signal to Iran that the United States, acting in concert with allies, will never permit Iran to obtain nuclear weapons... Only when the ayatollahs no longer have doubts about America’s resolve will they abandon their nuclear ambitions.” Indeed, “if all else fails... then of course you take military action,” even though, American and Iranian military analysts warn, such strikes might only delay development of nuclear weapons. “Elect me as the next president,” he declared, and Iran “will not have a nuclear weapon.” Actually, if Tehran becomes convinced that an attack and attempted regime change are likely, it will have no choice but to develop nuclear weapons. How else to defend itself? The misguided war in Libya, which Romney supported, sent a clear signal to both North Korea and Iran never to trust the West. Iran’s fears likely are exacerbated by Romney’s promise to subcontract Middle East policy to Israel. The ties between the U.S. and Israel are many, but their interests often diverge. The current Israeli government wants Washington to attack Iran irrespective of the cost to America. Moreover, successive Israeli governments have decided to effectively colonize the West Bank, turning injustice into state policy and making a separate Palestinian state practically impossible. Perceived American support for this creates enormous hostility toward the U.S. across the Arab and Muslim worlds. Yet Romney promises that his first foreign trip would be to Israel “to show the world that we care about that country and that region” — as if anyone anywhere, least of all Israel’s neighbors, doesn’t realize that. He asserted that “you don’t allow an inch of space to exist between you and your friends and allies,” notably Israel. The U.S. should “let the entire world know that we will stay with them and that we will support them and defend them.” Indeed, Romney has known Israeli Prime Minister Benjamin Netanyahu for nearly four decades and has said that he would request Netanyahu’s approval for U.S. policies: “I’d get on the phone to my friend Bibi Netanyahu and say, ‘Would it help if I say this? What would you like me to do?’” Americans would be better served by a president committed to making policy in the interests of the U.S. instead. Romney’s myopic vision is just as evident when he looks elsewhere. For instance, he offered the singular judgment that Russia is “our number one geopolitical foe.” Romney complained that “across the board, it has been a thorn in our side on questions vital to America’s national security.” The Cold War ended more than two decades ago. Apparently Romney is locked in a time warp. Moscow manifestly does not threaten vital U.S. interests. Romney claimed that Vladimir “Putin dreams of ‘rebuilding the Russian empire’.” Even if Putin has such dreams, they don’t animate Russian foreign policy. No longer an ideologically aggressive power active around the world, Moscow has retreated to the status of a pre-1914 great power, concerned about border security and international respect. Russia has no interest in conflict with America and is not even much involved in most regions where the U.S. is active: Asia, the Middle East, and Latin America. Moscow has been helpful in Afghanistan, refused to provide advanced air defense weapons to Iran, supported some sanctions against Tehran, used its limited influence in North Korea to encourage nuclear disarmament, and opposes jihadist terrorism. This is curious behavior for America’s “number one geopolitical foe.” Romney’s website explains that he will “implement a strategy that will seek to discourage aggressive or expansionist behavior on the part of Russia,” but other than Georgia where is it so acting? And even if Georgia fell into a Russian trap, Tbilisi started the shooting in 2008. In any event, absent an American security guarantee, which would be madness, the U.S. cannot stop Moscow from acting to protect what it sees as vital interests in a region of historic influence. Where else is Russia threatening America? Moscow does oppose NATO expansion, which actually is foolish from a U.S. standpoint as well, adding strategic liabilities rather than military strengths. Russia strongly opposes missile defense bases in Central and Eastern Europe, but why should Washington subsidize the security of others? Moscow opposes an attack on Iran, and so should Americans. Russia backs the Assad regime in Syria, but the U.S. government once declared the same government to be “reformist.” Violent misadventures in Kosovo, Afghanistan, Iraq, and Libya demonstrate that America has little to gain and much to lose from another attempt at social engineering through war. If anything, the Putin government has done Washington a favor keeping the U.S. out of Syria. This doesn’t mean America should not confront Moscow when important differences arise. But treating Russia as an adversary risks encouraging it to act like one. Doing so especially will make Moscow more suspicious of America’s relationships with former members of the Warsaw Pact and republics of the Soviet Union. Naturally, Romney wants to “encourage democratic political and economic reform” in Russia — a fine idea in theory, but meddling in another country’s politics rarely works in practice. Just look at the Arab Spring. Not content with attempting to start a mini-Cold War, Mitt Romney dropped his nominal free-market stance to demonize Chinese currency practices. He complained about currency manipulation and forced technology transfers: “China seeks advantage through systematic exploitation of other economies.” On day one as president he promises to designate “China as the currency manipulator it is.” Moreover, he added, he would “take a holistic approach to addressing all of China’s abuses. That includes unilateral actions such as increased enforcement of U.S. trade laws, punitive measures targeting products and industries that rely on misappropriations of our intellectual property, reciprocity in government procurement, and countervailing duties against currency manipulation. It also includes multilateral actions to block technology transfers into China and to create a trading bloc open only for nations genuinely committed to free trade.” Romney’s apparent belief that Washington is “genuinely committed to free trade” is charming nonsense. The U.S. has practiced a weak dollar policy to increase exports. Washington long has subsidized American exports: the Export-Import Bank is known as “Boeing’s Bank” and U.S. agricultural export subsidies helped torpedo the Doha round of trade liberalization through the World Trade Organization. Of course, Beijing still does much to offend Washington. However, the U.S. must accommodate the rising power across the Pacific. Trying to keep China out of a new Asia-Pacific trade pact isn’t likely to work. America’s Asian allies want us to protect them — no surprise! — but are not interested in offending their nearby neighbor with a long memory. The best hope for moderating Chinese behavior is to tie it into a web of international institutions that provide substantial economic, political, and security benefits. Beijing already has good reason to be paranoid of the superpower which patrols bordering waters, engages in a policy that looks like containment, and talks of the possibility of war. Trying to isolate China economically would be taken as a direct challenge. Romney would prove Henry Kissinger’s dictum that even paranoids have enemies. Naturally, Romney also wants to “maintain appropriate military capabilities to discourage any aggressive or coercive behavior by China against its neighbors.” However, 67 years after the end of World War II, it is time for Beijing’s neighbors to arm themselves and cooperate with each other. Japan long had the second largest economy on earth. India is another rising power with reason to constrain China. South Korea has become a major power. Australia has initiated a significant military build-up. Many Southeast Asian nations are constructing submarines to help deter Chinese adventurism. Even Russia has much to fear from China, given the paucity of population in its vast eastern territory. But America’s foreign-defense dole discourages independence and self-help. The U.S. should step back as an off-shore balancer, encouraging its friends to do more and work together. It is not America’s job to risk Los Angeles for Tokyo, Seoul, or Taipei. Romney similarly insists on keeping the U.S. on the front lines against North Korea, even though all of its neighbors have far more at stake in a peaceful peninsula and are able to contain that impoverished wreck of a country. The Romney campaign proclaims: “Mitt Romney will commit to eliminating North Korea’s nuclear weapons and its nuclear-weapons infrastructure.” Alas, everything he proposes has been tried before, from tougher sanctions to tighter interdiction and pressure on China to isolate the North. What does he plan on doing when Pyongyang continues to develop nuclear weapons as it has done for the last 20 years? The American military should come home from Korea. Romney complained that the North’s nuclear capability “poses a direct threat to U.S. forces on the Korean Peninsula and elsewhere in East Asia.” Then withdraw them. Manpower-rich South Korea doesn’t need U.S. conventional support, and ground units do nothing to contain North Korea’s nuclear ambitions. Pull out American troops and eliminate North Korea’s primary threat to the U.S. Then support continuing non-proliferation efforts led by those nations with the most to fear from the North. That strategy, more than lobbying by Washington, is likely to bring China around. Romney confuses dreams with reality when criticizing President Obama over the administration’s response to the Arab Spring. “We’re facing an Arab Spring which is out of control in some respects,” he said, “because the president was not as strong as he needed to be in encouraging our friends to move toward representative forms of government.” Romney asked: “How can we try and improve the odds so what happens in Libya and what happens in Egypt and what happens in other places where the Arab Spring is in full bloom so that the developments are toward democracy, modernity and more representative forms of government? This we simply don’t know.” True, the president doesn’t know. But neither does Mitt Romney. The latter suffers from the delusion that bright Washington policymakers can remake the world. Invade another country, turn it into a Western-style democracy allied with America, and everyone will live happily every after. But George W. Bush, a member of Mitt Romney’s own party, failed miserably trying to do that in both Afghanistan and Iraq. The Arab Spring did not happen because of Washington policy but in spite of Washington policy. And Arabs demanding political freedom — which, unfortunately, is not the same as a liberal society — have not the slightest interest in what Barack Obama or Mitt Romney thinks. Yet the latter wants “convene a summit that brings together world leaders, donor organizations, and young leaders of groups that espouse” all the wonderful things that Americans do. Alas, does he really believe that such a gathering will stop, say, jihadist radicals from slaughtering Coptic Christians? Iraq’s large Christian community was destroyed even as the U.S. military occupied that country. His summit isn’t likely to be any more effective. Not everything in the world is about Washington. Which is why Romney’s demand to do something in Syria is so foolish. Until recently he wanted to work with the UN, call on the Syrian military to be nice, impose more sanctions, and “increase the possibility that the ruling minority Alawites will be able to reconcile with the majority Sunni population in a post-Assad Syria.” Snapping his fingers would be no less effective. Most recently he advocated arming the rebels. But he should be more cautious before advocating American intervention in another conflict in another land. Such efforts rarely have desirable results. Iraq was a catastrophe. Afghanistan looks to be a disaster once American troops come home. After more than a decade Bosnia and Kosovo are failures, still under allied supervision. Libya is looking bad. Even without U.S. “help,” a full-blown civil war already threatens in Syria. We only look through the glass darkly, observed the Apostle Paul. It might be best for Washington not to intervene in another Muslim land with so many others aflame. Despite his support for restoring America’s economic health, Romney wants to increase dramatically Washington’s already outsize military spending. Rather than make a case on what the U.S. needs, he has taken the typical liberal approach of setting an arbitrary number: 4 percent of GDP. It’s a dumb idea, since America already accounts for roughly half the globe’s military spending — far more if you include Washington’s wealthy allies — and spends more in real terms than at any time during the Cold War, Korean War, or Vietnam War, and real outlays have nearly doubled since 2000. By any normal measure, the U.S. possesses far more military resources than it needs to confront genuine threats. What Romney clearly wants is a military to fight multiple wars and garrison endless occupations, irrespective of cost. My Cato colleague Chris Preble figured that Romney's 4 percent gimmick would result in taxpayers spending more than twice as much on the Pentagon as in 2000 (111 percent higher, to be precise) and 45 percent more than in 1985, the height of the Reagan buildup. Over the next ten years, Romney's annual spending (in constant dollars) for the Pentagon would average 64 percent higher than annual post-Cold War budgets (1990-2012), and 42 percent more than the average during the Reagan era (1981-1989). If Mitt Romney really believes that the world today is so much more dangerous than during the Cold War, he should spell out the threat. He calls Islamic fundamentalism, the Arab Spring, the impact of failed states, the anti-American regimes of Cuba, Iran, North Korea, and Venezuela, rising China, and resurgent Russia “powerful forces.” It’s actually a pitiful list — Islamic terrorists have been weakened and don’t pose an existential threat, the Arab Spring threatens instability with little impact on America, it is easier to strike terrorists in failed states than in nominal allies like Pakistan and Saudi Arabia, one nuclear-armed submarine could vaporize all four hostile states, and Russia’s modest “resurgence” may threaten Georgia but not Europe or America. Only China deserves to be called “powerful,” but it remains a developing country surrounded by potential enemies with a military far behind that of the U.S. In fact, the greatest danger to America is the blowback that results from promiscuous intervention in conflicts not our own. Romney imagines a massive bootstrap operation: he wants a big military to engage in social engineering abroad which would require an even larger military to handle the violence and chaos that would result from his failed attempts at social engineering. Better not to start this vicious cycle. America faces international challenges but nevertheless enjoys unparalleled dominance. U.S. power is buttressed by the fact that Washington is allied with every industrialized nation except China and Russia. America shares significant interests with India, the second major emerging power; is seen as a counterweight by a gaggle of Asian states worried about Chinese expansion; remains the dominant player in Latin America; and is closely linked to most of the Middle East’s most important countries, such as Israel, Saudi Arabia, Egypt, Jordan, and Iraq. If Mitt Romney really believes that America is at greater risk today than during the Cold War, he is not qualified to be president. In this world the U.S. need not confront every threat, subsidize every ally, rebuild every failed state, and resolve every problem. Being a superpower means having many interests but few vital ones warranting war. Being a bankrupt superpower means exhibiting judgment and exercising discretion. President Barack Obama has been a disappointment, amounting in foreign policy to George W. Bush-lite. But Mitt Romney sounds even worse. His rhetoric suggests a return to the worst of the Bush administration. The 2012 election likely will be decided on economics, but foreign policy will prove to be equally important in the long-term. America can ill afford another know-nothing president.

### 1nc counterplan

#### Text: The United States federal government should refuse to lessen restrictions on natural gas production in the Environmental Protection Agency’s New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews.

### 1nc kritik (1)

#### The need to expand production rests on an object-oriented view of nature that leads to extinction

**Dahm and Bannas 2011** (Daniel, Stephen, <http://poldev.revues.org/835>)

The biosphere and geosphere exist in close dynamic interdependency. Their relational structure is gaining degrees of complexity whose causal relatedness is far beyond analytical objectivity. In particular, linear determinisms – still common in most scientific analyses – are reaching their limits. The fundamental uncertainty of ecological interdependencies and processes is multiplying within the cultural dimensions of the anthroposphere. Human value concepts and interpretations of reality (lat. res = thing) are becoming bio-ecological and climate ecological parameters. Economic and political strategies are directly affecting the geo-bio-ecological budgets, material and energy flows, accumulation, distribution and the ecological balance – in space as well as in time. 2The wide range of life-threatening conflicts today range from the destructive climate impacts by greenhouse gases as CO2, Methane and others and the atmospheric enrichment with particulate matter, up to the extensive degradation and desertification of soils and landscapes worldwide, the far-reaching pollution and exhaustion of water resources as well as the wasteful use of fossil resources, to the systematic destruction of marine and land ecosystems, and the rapid extinction of the wide variety of life forms. Humans are rarely able to understand clearly the complex chains of cause and effect, but we know that humans play a decisive role in these processes. But much easier to link directly to human behaviour and the human world of ideas is the broad spectrum of severe, destructive and far-reaching conflicts that humanity is facing daily. 3The only field in which humans are able to interact and communicate with their ecological environment is that of “culture”. It is only through culture that human-nature-relations are interpreted and strategically translated and realised. By means of cultures of knowledge, of economics, politics, social and civil relations, etc., humans set limits and openings for their position in “the world”, and their patterns of actions and opportunities. 2. The human-nature-relation: an epistemological disconnect

4Scientifically this relationship represents one of the most fundamental epistemological (of the theory of cognition) schisms in history: the contact between a materialistic view of reality and the immaterial “Wirklichkeit” of a living world in dynamic interdependency. “The insights of modern physics – of quantum physics – suggest a new interpretation of the world that carries us beyond the materialistic-mechanistic worldview. Instead of the world assumed until now – a mechanical, temporally determined “reality” of objectifiable things, the real Wirklichkeit (a world that effects) turns out to be basically “potentiality”: an indivisible, immaterial, temporally essentially indeterminate and genuinely creative bonding of relations that determines only “can”-probabilities, a differentiated potential for a material-energetic realization.” (Dürr, Dahm & Lippe, 2005) Such a “schism” cannot be resolved (as historically expected for a long time in the development of the sciences particularly in the philosophies) primarily by means of a change in our spiritual relationship to our world. Rather, and more drastically, humanity is confronted with this epistemological schism through its interaction with the living world, which both includes and borders humanity. The scenarios of bio-geo-ecological crises present human beings in a life-threatening way with the narrowness of their interpretations of the world and of their patterns of behaviour, and challenge them to adopt a new course of action. This goes hand in hand with a confrontation between the diverse cultural strategies and views of reality. 5Living complexes do not follow the mechanistic ideas of the old physics. The manifestations of life emerge and vanish in a highly dynamic flow of interactions. In this way, reality is created in a permanent transformative process. The description of ecology, biological and cultural plurality, and human impacts on nature, demands the describing and consequent inclusion of the in-betweens and go-betweens (Turnbull, D. 2004), of aspects of an inter-connected relatedness that are not measurable. Within such intelligence, the aspects of fuzziness and uncertainty are indivisibly integrated in the comprehension of nature, life and ecology. The consequences for actions and strategies from the local to the global level are presumably drastic, calling for a re-orientation in economic, political, socio-cultural and ecological matters. 6 Since the 15th century, a narrow, centralistic world view, which strives to iron out all differences between diverse philosophical outlooks and create homogeneity, has come to dominate as never before. This can be seen especially clearly in the colonisation of virtually the entire known world by western European powers. This was followed by the one-sided monopolisation of the spiritual, living and material resources of our Earth by the European-style power centres. 7 These strategies and ways of thinking, adapted all over the world, and the view of humanity that is closely connected with them, have a causal link with the materialistic-mechanistic world view that is still favoured around the globe, i.e. the object-related division of life resulting from the desire to control it (frequently referred to as the Cartesian-Newtonian world view). 8At the start of the modern era, in the 17th century, the changes wrought by the Cartesian revolution engendered diverse and far-reaching processes of social restructuring. This intellectual and philosophical change, having matured for some time, also began to affect the nature of economic activity and the organisation of the state. Put simply, a “God-given” world order was replaced by an impression of unlimited power to shape the world. This brought with it a materialistic view of reality and reduced the relationship between humans and nature to one concerned first and foremost with the production of energy and materials.

#### Our alternative prioritizes consideration of historical interests over unsustainable promises offered by messianic energy promises

**Byrne and Toly 6** (john, Noah, “Energy as a Social Project: Recovering a Discourse” Transforming Power: Energy, Environment, And Society in Conflict. Eds John Byrne, Noah Toly, and Leigh Glover. Pgs 1-32. Transaction Publishers. )

From climate change to acid rain, contaminated landscapes, mercury pollution, and biodiversity loss,2 the origins of many of our least tractable environmental problems can be traced to the operations of the modern energy system. A scan of nightfall across the planet reveals a social dilemma that also accompanies this system’s operations: invented over a century ago, electric light remains an experience only for the socially privileged. Two billion human beings—almost one-third of the planet’s population—experience evening light by candle, oil lamp, or open fire, reminding us that energy modernization has left intact—and sometimes exacerbated—social **inequalities** that **its architects promised would be banished** (Smil, 2003: 370 - 373). And there is the disturbing link between modern energy and war.3 Whether as a mineral whose control is fought over by the powerful (for a recent history of conflict over oil, see Klare, 2002b, 2004, 2006), or as the enablement of an atomic war of extinction, modern energy makes modern life possible and threatens its future. With environmental crisis, social inequality, and military conflict among the significant problems of contemporary energy-society relations, the importance of a social analysis of the modern energy system appears easy to establish. One might, therefore, expect a lively and fulsome debate of the sector’s performance, including critical inquiries into the politics, sociology, and political economy of modern energy. Yet, contemporary discourse on the subject is disappointing: instead of a social analysis of energy regimes, the field seems to be a captive of euphoric technological visions and associated studies of “energy futures” that imagine the pleasing consequences of new energy sources and devices.4 One stream of euphoria has sprung from advocates of conventional energy, perhaps best represented by the unflappable optimists of nuclear power who, early on, promised to invent a “magical fire” (Weinberg, 1972) capable of meeting any level of energy demand inexhaustibly in a manner “too cheap to meter” (Lewis Strauss, cited in the New York Times 1954, 1955). In reply to those who fear catastrophic accidents from the “magical fire” or the proliferation of nuclear weapons, a new promise is made to realize “inherently safe reactors” (Weinberg, 1985) that risk neither serious accident nor intentionally harmful use of high-energy physics. Less grandiose, but no less optimistic, forecasts can be heard from fossil fuel enthusiasts who, likewise, project more energy, at lower cost, and with little ecological harm (see, e.g., Yergin and Stoppard, 2003). Skeptics of conventional energy, eschewing involvement with dangerously scaled technologies and their ecological consequences, find solace in “sustainable energy alternatives” that constitute a second euphoric stream. Preferring to redirect attention to smaller, and supposedly more democratic, options, “green” energy advocates conceive devices and systems that prefigure a revival of human scale development, local self-determination, and a commitment to ecological balance. Among supporters are those who believe that greening the energy system embodies universal social ideals and, as a result, can overcome current conflicts between energy “haves” and “havenots.” 5 In a recent contribution to this perspective, Vaitheeswaran suggests (2003: 327, 291), “today’s nascent energy revolution will truly deliver power to the people” as “micropower meets village power.” Hermann Scheer echoes the idea of an alternative energy-led social transformation: the shift to a “solar global economy... can satisfy the material needs of all mankind and grant us the freedom to guarantee truly universal and equal human rights and to safeguard the world’s cultural diversity” (Scheer, 2002: 34).6 The euphoria of contemporary energy studies is noteworthy for its historical consistency with a **nearly unbroken social narrative of wonderment** extending from the advent of steam power through the spread of electricity (Nye, 1999). The modern energy regime that now powers nuclear weaponry and risks disruption of the planet’s climate is a product of promises pursued without sustained public examination of the political, social, economic, and ecological record of the regime’s operations. However, the discursive landscape has occasionally included thoughtful exploration of the broader contours of energy-environment-society relations. As early as 1934, Lewis Mumford (see also his two-volume Myth of the Machine, 1966; 1970) critiqued the industrial energy system for being a key source of social and ecological alienation (1934: 196): The changes that were manifested in every department of Technics rested for the most part on one central fact: the increase of energy. Size, speed, quantity, the multiplication of machines, were all reflections of the new means of utilizing fuel and the enlargement of the available stock of fuel itself. Power was dissociated from its natural human and geographic limitations: from the caprices of the weather, from the irregularities that definitely restrict the output of men and animals. By 1961, Mumford despaired that modernity had retrogressed into a lifeharming dead end (1961: 263, 248): ...an orgy of uncontrolled production and equally uncontrolled reproduction: machine fodder and cannon fodder: surplus values and surplus populations... The dirty crowded houses, the dank airless courts and alleys, the bleak pavements, the sulphurous atmosphere, the over-routinized and dehumanized factory, the drill schools, the second-hand experiences, the starvation of the senses, the remoteness from nature and animal activity—here are the enemies. The living organism demands a life-sustaining environment. Modernity’s formula for two centuries had been to increase energy in order to produce overwhelming economic growth. While diagnosing the inevitable failures of this logic, Mumford nevertheless warned that modernity’s supporters would seek to derail present-tense7 evaluations of the era’s social and ecological performance with forecasts of a bountiful future in which, finally, the perennial social conflicts over resources would end. Contrary to traditional notions of democratic governance, Mumford observed that the modern ideal actually issues from a pseudomorph that he named the “democraticauthoritarian bargain” (1964: 6) in which the modern energy regime and capitalist political economy join in a promise to produce “every material advantage, every intellectual and emotional stimulus [one] may desire, in quantities hardly available hitherto even for a restricted minority” on the condition that society demands only what the regime is capable and willing to offer. An authoritarian energy order thereby constructs an aspirational democracy while facilitating the abstraction of production and consumption from non-economic social values. The premises of the current energy paradigms are in need of critical study in the manner of Mumford’s work if a world measurably different from the present order is to be organized. Interrogating modern energy assumptions, this chapter examines the social projects of both conventional and sustainable energy as a beginning effort in this direction. The critique explores the neglected issue of the political economy of energy, underscores the pattern of democratic failure in the evolution of modern energy, and considers the discursive continuities between the premises of conventional and sustainable energy futures.

### 1nc counterplan

#### The fifty state governments should substantially increase Energy Efficiency Resource Standard programs and should institute utility profit decoupling policies modeled off of California regulations.

#### Fifty state EERS policy solves efficiency across the board

**Glatt and Schwentker 2010** – \* Technology Delivery Team Member, Office of Industrial Technologies Program, DOE, \*\*Research Associate at BCS Incorporated (July, Sandy and Beth, DOE, “State Energy Efficiency Resource Standards Analysis”, http://www1.eere.energy.gov/manufacturing/states/pdfs/eers\_web\_final.pdf, WEA)

The effect of state energy policies in supporting energy efficiency in the residential, commercial, and industrial sectors is clear—states with strong energy efficiency policies save energy. Utilities’ citing these policies as the primary impetus for offering energy efficiency and other demand-side management programs prove the impact strong policies have. One tool in the energy efficiency policy toolbox, the state-implemented Energy Efficiency Resource Standard (EERS) program, has been instrumental in encouraging energy efficiency across the nation. EERS policies are adopted by state legislatures and implemented and managed by utilities. They require that electric and natural gas utilities offer programs and incentives to encourage their customers to reduce energy use by a specified amount each year, based on a percentage of total energy sales.

EERS policy programs typically start with modest targets that increase over time. Typical savings goals can range from the relatively modest 0.25% savings annually to the more aggressive end of the scale such as 1.25% annually, with the most successful states setting even more ambitious targets. Terms of performance standard goals can vary—some are annual while others are cumulative, but an EERS is a long-term strategy to achieve energy savings and realize the financial and environmental benefits of those savings over time. EERS programs typically offer utilities the flexibility to utilize a market-based trading system to reach their set targets, and they provide support and incentives for utilities to successfully manage their own and their customers’ energy use.

Utilities can work towards these goals by improving their own processes and distribution systems, implementing new efficiency standards in equipment and infrastructure, and encouraging their end-use customers to participate in energy-saving programs. In addition, they can purchase energy credits from over-performing utilities that have exceeded the set goals. 1

EERS is a tested policy measure that has successfully reduced energy use in multiple states. Texas was the first state to adopt an EERS in 1999. As of April 2010, 24 states had some form of EERS in place, with three others strongly considering it. Having a state EERS policy in place ensures uniform energy efficiency goals across the state. It also provides a mechanism to create support programs that lead to reduced energy use. As increasing attention is focused on cutting energy consumption and the accompanying benefits of lower energy costs and less environmental pollution, it behooves states to have the ability to track performance against goals.

If all states were to adopt their own EERS, the United States could significantly lower energy costs, reduce air pollution, mitigate climate change, and improve energy reliability. These policies also lead to job creation as utilities implement new efficiency programs and monitoring systems. Despite these benefits and successes in individual states, no federal EERS mandate or Energy Efficiency Portfolio Standard (EEPS), as they are also known, currently exists.

#### The combination of both planks solves sustainable efficiency

**Gies 2010** – energy/environment writer for NYT and the Trust for Public Land (9/1, Erica, NYT, Special Report: Energy, “Doing More While Using Less Power”, http://www.nytimes.com/2010/09/02/business/global/02iht-rensave.html?\_r=1&sq=17%20percent&st=cse&scp=3&pagewanted=all, WEA)

But some market incentives are misaligned. “Major energy providers make more money out of kilowatt-hours that they sell rather than the ones that they don’t sell,” Ms. Zoi said.

Decoupling utility profits from the amount of energy sold, as California did in 1983, is a way to fix this problem, and it is a growing trend. Twenty-nine other U.S. states have since followed that lead or are about to do so, according to the Institute for Energy Efficiency.

Ms. Zoi said the U.S. Energy Department was giving the states information and grants to help them develop effective policies. One strategy is an energy efficiency resource standard, setting targets for annual efficiency improvements, accompanied by performance-based cash rewards or penalties. The institute says 25 states have implemented target-based incentives or are about to do so — mostly in association with decoupling.

#### Consumption reductions solve better

**Kushler et al 2012** – PhD, former Supervisor of Evaluation at the Michigan Public Service Commission, \*\*PhD, coordinates ACEEE's overall research efforts and leads the Agricultural Program, adjunct associate professor of Civil and Environmental Engineering at Duke University and Senior Engineering Project Manager at the N.C. Alternative Energy Corp., \*\*\*Climate and Energy research fellow at The Breakthrough Institute (September, Martin Kushler, R. Neal Elliott, Rachel Young, American Council for an Energy-Efficient Economy, White Paper, “Saving Money and Reducing Risk: How Energy Efficiency Enhances the Benefits of the Natural Gas Boom”, http://www.aceee.org/files/pdf/white-paper/saving-money-reducing-risk.pdf, WEA)

The recent boom in shale gas production and the subsequent decrease in the price of natural gas have put natural gas front and center in the national energy discussion. This abundant source of domestic fuel presents a great opportunity for the United States to increase our energy independence and reduce carbon emissions. The current low prices are likely to result in greater overall consumption of natural gas by power, industry, transportation, and export sectors, which could prematurely deplete our natural gas reserves and potentially expose our economy to renewed price volatility. Changes in the natural gas market also represent challenges and opportunities for energy efficiency measures. Electric and natural gas efficiency help reduce consumption of natural gas. Reducing natural gas consumption helps keep prices stable while still meeting energy demands. Efficiency also reduces pollution, creates jobs, bolsters economic activity, and lowers customer utility bills.

In addition to the benefits inherent in reducing energy consumption, energy efficiency measures are still cost-effective even with low natural gas prices. Energy efficiency is cheaper than new natural gas combined cycle plants. Electric efficiency measures are only marginally affected by the price of natural gas and the majority of measures are still economical. Some natural gas efficiency measures on the margin are not cost-effective with natural gas prices at $2 per million British thermal units (MMBtu) but the price of natural gas is increasing and is projected to level out between $4 and $7 per MMBtu. Under the projected natural gas price environment, well-designed natural gas efficiency programs will remain cost-effective.

Maintaining diversity in the United States’ fuel supply is crucial to a stable energy market. Though the current price of natural gas is low, states should continue to create a diverse fuel portfolio to prevent price spikes and reliability issues. Energy efficiency can substantially reduce the demand for natural gas, which helps to extend this new domestic resource and lessen the need for construction of new natural gas power plants. Therefore, states should implement energy efficiency measures prior to bringing new gas plants online and ensure that energy efficiency is in future utility regulatory plans.

Energy efficiency is an important tool in addressing and maintaining electrical reliability and the potential is large. However, there are embedded market barriers, like upfront investment costs and the unfavorable utility regulatory business model, that hinder the rapid deployment of energy efficiency programs. For the United States to realize its full energy efficiency potential it must establish a unified effort for energy savings to complement and improve on existing state policies. Implementation of energy efficiency measures will increase stability in our electricity and natural gas sectors, create jobs, lower customer utility bills, reduce pollution, and extend the available supply of natural gas.

### 1nc manufacturing adv

#### No solvency- gas productivity and reserve size over-estimated--- insider knowledge proves and investment will collapse

**Urbina, 11** -- NY Times staff (Ian, "Insiders Sound an Alarm Amid a Natural Gas Rush," NY Times, 6-25-11, [www.nytimes.com/2011/06/26/us/26gas.html?pagewanted=all](http://www.nytimes.com/2011/06/26/us/26gas.html?pagewanted=all))

Natural gas companies have been placing enormous bets on the wells they are drilling, saying they will deliver big profits and provide a vast new source of energy for the United States.

But the gas may not be as easy and cheap to extract from shale formations deep underground as the companies are saying, according to hundreds of industry e-mails and internal documents and an analysis of data from thousands of wells.

In the e-mails, energy executives, industry lawyers, state geologists and market analysts voice skepticism about lofty forecasts and question whether companies are intentionally, and even illegally, overstating the productivity of their wells and the size of their reserves. Many of these e-mails also suggest a view that is in stark contrast to more bullish public comments made by the industry, in much the same way that insiders have raised doubts about previous financial bubbles.

“Money is pouring in” from investors even though shale gas is “inherently unprofitable,” an analyst from PNC Wealth Management, an investment company, wrote to a contractor in a February e-mail. “Reminds you of dot-coms.”

“The word in the world of independents is that the shale plays are just giant Ponzi schemes and the economics just do not work,” an analyst from IHS Drilling Data, an energy research company, wrote in an e-mail on Aug. 28, 2009.

Company data for more than 10,000 wells in three major shale gas formations raise further questions about the industry’s prospects. There is undoubtedly a vast amount of gas in the formations. The question remains how affordably it can be extracted.

The data show that while there are some very active wells, they are often surrounded by vast zones of less-productive wells that in some cases cost more to drill and operate than the gas they produce is worth. Also, the amount of gas produced by many of the successful wells is falling much faster than initially predicted by energy companies, making it more difficult for them to turn a profit over the long run.

If the industry does not live up to expectations, the impact will be felt widely. Federal and state lawmakers are considering drastically increasing subsidies for the natural gas business in the hope that it will provide low-cost energy for decades to come.

But if natural gas ultimately proves more expensive to extract from the ground than has been predicted, landowners, investors and lenders could see their investments falter, while consumers will pay a price in higher electricity and home heating bills.

There are implications for the environment, too. The technology used to get gas flowing out of the ground — called hydraulic fracturing, or hydrofracking — can require over a million gallons of water per well, and some of that water must be disposed of because it becomes contaminated by the process. If shale gas wells fade faster than expected, energy companies will have to drill more wells or hydrofrack them more often, resulting in more toxic waste.

The e-mails were obtained through open-records requests or provided to The New York Times by industry consultants and analysts who say they believe that the public perception of shale gas does not match reality; names and identifying information were redacted to protect these people, who were not authorized to communicate publicly. In the e-mails, some people within the industry voice grave concerns.

“And now these corporate giants are having an Enron moment,” a retired geologist from a major oil and gas company wrote in a February e-mail about other companies invested in shale gas. “They want to bend light to hide the truth.”

Others within the industry remain optimistic. They argue that shale gas economics will improve as the price of gas rises, technology evolves and demand for gas grows with help from increased federal subsidies being considered by Congress. “Shale gas supply is only going to increase,” Steven C. Dixon, executive vice president of Chesapeake Energy, said at an energy industry conference in April in response to skepticism about well performance.

Studying the Data

“I think we have a big problem.”

Deborah Rogers, a member of the advisory committee of the Federal Reserve Bank of Dallas, recalled saying that in a May 2010 conversation with a senior economist at the Reserve, Mine K. Yucel. “We need to take a close look at this right away,” she added.

A former stockbroker with Merrill Lynch, Ms. Rogers said she started studying well data from shale companies in October 2009 after attending a speech by the chief executive of Chesapeake, Aubrey K. McClendon. The math was not adding up, Ms. Rogers said. Her research showed that wells were petering out faster than expected.

“These wells are depleting so quickly that the operators are in an expensive game of ‘catch-up,’ ” Ms. Rogers wrote in an e-mail on Nov. 17, 2009, to a petroleum geologist in Houston, who wrote back that he agreed.

“This could have profound consequences for our local economy,” she explained in the e-mail.

Fort Worth residents were already reeling from the sudden reversal of fortune for the natural gas industry.

In early 2008, energy companies were scrambling in Fort Worth to get residents to lease their land for drilling as they searched for so-called monster wells. Billboards along the highways stoked the boom-time excitement: “If you don’t have a gas lease, get one!” Oil and gas companies were in a fierce bidding war for drilling rights, offering people bonuses as high as $27,500 per acre for signing leases.

The actor Tommy Lee Jones signed on as a pitchman for Chesapeake, one of the largest shale gas companies. “The extremely long-term benefits include new jobs and capital investment and royalties and revenues that pay for public roads, schools and parks,” he said in one television advertisement about drilling in the Barnett shale in and around Fort Worth.

To investors, shale companies had a more sophisticated pitch. With better technology, they had refined a “manufacturing model,” they said, that would allow them to drop a well virtually anywhere in certain parts of a shale formation and expect long-lasting returns.

For Wall Street, this was the holy grail: a low-risk and high-profit proposition. But by late 2008, the recession took hold and the price of natural gas plunged by nearly two-thirds, throwing the drilling companies’ business model into a tailspin.

In Texas, the advertisements featuring Mr. Jones disappeared. Energy companies rescinded high-priced lease offers to thousands of residents, which prompted class-action lawsuits. Royalty checks dwindled. Tax receipts fell.

The impact of the downturn was immediate for many.

“Ruinous, that’s how I’d describe it,” said the Rev. Kyev Tatum, president of the Fort Worth chapter of the Southern Christian Leadership Conference.

Mr. Tatum explained that dozens of black churches in Fort Worth signed leases on the promise of big money. Instead, some churches were told that their land may no longer be tax exempt even though they had yet to make any royalties on the wells, he said.

That boom-and-bust volatility had raised eyebrows among people like Ms. Rogers, as well as energy analysts and geologists, who started looking closely at the data on wells’ performance.

In May 2010, the Federal Reserve Bank of Dallas called a meeting to discuss the matter after prodding from Ms. Rogers. One speaker was Kenneth B. Medlock III, an energy expert at Rice University, who described a promising future for the shale gas industry in the United States. When he was done, Ms. Rogers peppered him with questions.

Might growing environmental concerns raise the cost of doing business? If wells were dying off faster than predicted, how many new wells would need to be drilled to meet projections?

Mr. Medlock conceded that production in the Barnett shale formation — or “play,” in industry jargon — was indeed flat and would probably soon decline.

“Activity will shift toward other plays because the returns there are higher,” he predicted. Ms. Rogers turned to the other commissioners to see if they shared her skepticism, but she said she saw only blank stares.

Bubbling Doubts

Some doubts about the industry are being raised by people who work inside energy companies, too.

“Our engineers here project these wells out to 20-30 years of production and in my mind that has yet to be proven as viable,” wrote a geologist at Chesapeake in a March 17 e-mail to a federal energy analyst. “In fact I’m quite skeptical of it myself when you see the % decline in the first year of production.”

“In these shale gas plays no well is really economic right now,” the geologist said in a previous e-mail to the same official on March 16. “They are all losing a little money or only making a little bit of money.”

Around the same time the geologist sent the e-mail, Mr. McClendon, Chesapeake’s chief executive, told investors, “It’s time to get bullish on natural gas.”

In September 2009, a geologist from ConocoPhillips, one of the largest producers of natural gas in the Barnett shale, warned in an e-mail to a colleague that shale gas might end up as “the world’s largest uneconomic field.” About six months later, the company’s chief executive, James J. Mulva, described natural gas as “nature’s gift,” adding that “rather than being expensive, shale gas is often the low-cost source.” Asked about the e-mail, John C. Roper, a spokesman for ConocoPhillips, said he absolutely believed that shale gas is economically viable.

A big attraction for investors is the increasing size of the gas reserves that some companies are reporting. Reserves — in effect, the amount of gas that a company says it can feasibly access from its wells — are important because they are a central measure of an oil and gas company’s value.

Forecasting these reserves is a tricky science. Early predictions are sometimes lowered because of drops in gas prices, as happened in 2008. Intentionally overbooking reserves, however, is illegal because it misleads investors. Industry e-mails, mostly from 2009 and later, include language from oil and gas executives questioning whether other energy companies are doing just that.

The e-mails do not explicitly accuse any companies of breaking the law. But the number of e-mails, the seniority of the people writing them, the variety of positions they hold and the language they use — including comparisons to Ponzi schemes and attempts to “con” Wall Street — suggest that questions about the shale gas industry exist in many corners.

“Do you think that there may be something suspicious going with the public companies in regard to booking shale reserves?” a senior official from Ivy Energy, an investment firm specializing in the energy sector, wrote in a 2009 e-mail.

A former Enron executive wrote in 2009 while working at an energy company: “I wonder when they will start telling people these wells are just not what they thought they were going to be?” He added that the behavior of shale gas companies reminded him of what he saw when he worked at Enron.

Production data, provided by companies to state regulators and reviewed by The Times, show that many wells are not performing as the industry expected. In three major shale formations — the Barnett in Texas, the Haynesville in East Texas and Louisiana and the Fayetteville, across Arkansas — less than 20 percent of the area heralded by companies as productive is emerging as likely to be profitable under current market conditions, according to the data and industry analysts.

Richard K. Stoneburner, president and chief operating officer of Petrohawk Energy, said that looking at entire shale formations was misleading because some companies drilled only in the best areas or had lower costs. “Outside those areas, you can drill a lot of wells that will never live up to expectations,” he added.

Although energy companies routinely project that shale gas wells will produce gas at a reasonable rate for anywhere from 20 to 65 years, these companies have been making such predictions based on limited data and a certain amount of guesswork, since shale drilling is a relatively new practice.

Most gas companies claim that production will drop sharply after the first few years but then level off, allowing most wells to produce gas for decades.

Gas production data reviewed by The Times suggest that many wells in shale gas fields do not level off the way many companies predict but instead decline steadily.

“This kind of data is making it harder and harder to deny that the shale gas revolution is being oversold,” said Art Berman, a Houston-based geologist who worked for two decades at Amoco and has been one of the most vocal skeptics of shale gas economics.

The Barnett shale, which has the longest production history, provides the most reliable case study for predicting future shale gas potential. The data suggest that if the wells’ production continues to decline in the current manner, many will become financially unviable within 10 to 15 years.

A review of more than 9,000 wells, using data from 2003 to 2009, shows that — based on widely used industry assumptions about the market price of gas and the cost of drilling and operating a well — less than 10 percent of the wells had recouped their estimated costs by the time they were seven years old.

#### No econ impact

Robert Jervis 11, Professor in the Department of Political Science and School of International and Public Affairs at Columbia University, December 2011, “Force in Our Times,” Survival, Vol. 25, No. 4, p. 403-425

Even if war is still seen as evil, the security community could be dissolved if severe conflicts of interest were to arise. Could the more peaceful world generate new interests that would bring the members of the community into sharp disputes? 45 A zero-sum sense of status would be one example, perhaps linked to a steep rise in nationalism. More likely would be a worsening of the current economic difficulties, which could itself produce greater nationalism, undermine democracy and bring back old-fashioned beggar-my-neighbor economic policies. While these dangers are real, it is hard to believe that the conflicts could be great enough to lead the members of the community to contemplate fighting each other. It is not so much that economic interdependence has proceeded to the point where it could not be reversed – states that were more internally interdependent than anything seen internationally have fought bloody civil wars. Rather it is that even if the more extreme versions of free trade and economic liberalism become discredited, it is hard to see how without building on a preexisting high level of political conflict leaders and mass opinion would come to believe that their countries could prosper by impoverishing or even attacking others. Is it possible that problems will not only become severe, but that people will entertain the thought that they have to be solved by war? While a pessimist could note that this argument does not appear as outlandish as it did before the financial crisis, an optimist could reply (correctly, in my view) that the very fact that we have seen such a sharp economic down-turn without anyone suggesting that force of arms is the solution shows that even if bad times bring about greater economic conflict, it will not make war thinkable.

#### Competitiveness resilient—even with a recession and developing world

**Scott 09** Mark Scott 2009 (http://www.businessweek.com/globalbiz/content/may2009/gb20090519\_222765.htm - Competitiveness: The U.S. and Europe Are Tops - Mark Scott is a reporter in BusinessWeek's London bureau)

The global financial crisis seemingly shifted economic power away from hard-hit Western countries such as the U.S. and Britain to cash-rich emerging economies such as India and China. But while the West is limping along today, economic power may shift back when growth resumes. Why? Among the nations of the world, developed countries still enjoy considerable advantages in fundamental economic competitiveness—whether based on the quality of their infrastructure and educational systems or the sophistication of their business laws and bureaucracy. That's the conclusion of the 2009 World Competitiveness Yearbook, an annual report published by IMD business school in Lausanne, Switzerland. Based on a detailed analysis of economic output, government and business efficiency, skills, and infrastructure, the researchers ranked 57 of the world's economies to determine which are best placed to succeed in the 21st century economic race. Topping the list for the 16th consecutive year, unchanged from its No. 1 ranking in the 2008 report, was the U.S.—despite a tough economic situation and rising unemployment. With its world-class higher-education system, enormous and diverse economy, and powerful infrastructure, the U.S. continues to be the world's biggest economic engine and top destination for foreign direct investment.

#### Restrictions irrelevant- prices too low to incentivize drilling

**Harder, 12** -- National Journal energy correspondent

(Amy, "The Price Isn't Right," National Journal Daily AM, 1-31-12, General OneFile)

For the United States to really capitalize on all the natural gas President Obama is boasting about, the price of it has to go up so that companies have an incentive to drill.

Calling for high energy prices doesn't make political sense. But Obama is implicitly trying to do that by pushing incentives for natural-gas-powered trucks and cars that could boost demand for the energy source--and therefore prices.

Obama traveled to the battleground states of Nevada and Colorado last week to tout such a proposal in the wake of his State of the Union address. Legislation incentivizing natural-gas-powered trucks is politically popular and has Republican support in Congress. Such a measure would have the potential to create jobs, bolster energy independence--and raise natural-gas prices.

The administration is quietly taking two other politically controversial steps that could also boost natural-gas demand: implementing environmental regulations that are prompting utilities to shift from coal to the relatively cleaner-burning natural gas, and processing applications from companies to export natural gas.

With the nation's natural-gas prices under $3 per million British thermal units (a worldwide low, and down from nearly $14 per million Btu in 2008), oil and gas companies are shifting investments from America's recently discovered vast shale gas reserves to resources that fetch higher prices--such as oil. Energy analysts say that this trend will continue for at least the next few years until prices reach a level where it becomes more profitable to produce gas.

"There are a lot of benefits to our economy to having a relatively low price of natural gas," said Senate Energy and Natural Resources Chairman Jeff Bingaman , D-N.M. "We have the reverse circumstance right now that natural-gas producers are shutting wells because of the very low price of natural gas."

#### Imports will keep prices low

**Womack, 9** (Jason, “New LNG Imports Could Further Slam US Natural-Gas Prices,” Dow Jones News Service, 3/5, factiva

HOUSTON (Dow Jones)--Natural-gas prices, which have plunged since last summer, could be pressured further as expected new cargoes of liquefied natural gas start reaching U.S. shores this year.

Analysts project that shiploads of the supercooled, compressed gas could start berthing at terminals in the U.S. Gulf Coast in a matter of weeks. While the bulk of new shipments aren't likely until the second half of the year, any fresh LNG supplies could aggravate a market already contending with a slump in industrial demand and soaring domestic production.

Gas for April delivery settled Wednesday at $4.34 per million British thermal units, down nearly 70% from last summer's peak.

"We are going to be awash in natural gas and could have $2 gas," says Steve Johnson, president of Waterborne Energy Inc., a Houston-based firm that tracks LNG shipments.

#### Price swings inevitable

Baker Institute, ‘8 (Baker Institute for Public Policy, Rice University, Baker Institute Policy Report, January 2008, “Natural Gas in North America: Markets and Security,” http://connection.ebscohost.com/c/articles/30064519/study-lift-u-s-drilling-restrictions-avoid-international-lng-cartel)//CC

The changing supply picture for North America has created a tighter, and hence more volatile, market in recent years. Periods of extreme price movements occurred as recently as winter 2005–06, when daily prices at the Henry Hub spiked to all-time highs of more than $15/million British thermal units (MMBtu) in December 2005, reflecting production dislocations from hurricanes in the U.S. Gulf of Mexico and infrastructure and other constraints that prevented adequate supplies from reaching U.S. markets. A number of factors contribute to the volatility in U.S. natural gas prices. Extreme weather can result in wide price swings, especially when supply is constrained. Conversely, if U.S. demand is relatively low due to mild weather conditions, prices can fall substantially, as was the case in the United States in 2006, when prices dipped below $5/MMBtu. Earlier this autumn, with U.S. storage at record-high levels, natural gas prices averaged around $6.50/MMBtu. In the current world market context, swings in U.S. prices also can propagate to other regions by altering LNG flows. Similarly, high demand due to cold weather in Europe, for example, can increase demand for LNG imports. This, in turn, lowers the amount of supply flowing into the U.S. market, which will tend to exert upward pressure on U.S. prices.

#### Gas not key

Brad Plumer (The Washington Post, Former associate editor at The New Republic) May 2012 “ Will cheap shale gas revive U.S. manufacturing? Not so fast” http://www.washingtonpost.com/blogs/ezra-klein/post/will-cheap-natural-gas-revive-us-manufacturing/2012/05/21/gIQAOORZfU\_blog.html

That last claim comes via a recent report from PricewaterhouseCoopers. But over at the Council on Foreign Relations, Michael Levi casts a more skeptical eye on arguments that the age of cheap natural gas from shale will really lead to a dramatic revival of U.S. manufacturing. There are reasons to think the overall impact will be fairly muted. Energy costs are still a small factor for many manufacturers. Levi points to a 2009 paper (pdf) by Joseph Aldy and William Pizer finding that “only one tenth of U.S. manufacturing involved energy costs exceeding five percent of the total value of shipments.” Aldy and Pizer estimated that a carbon tax, which raises energy prices, would affect manufacturing employment slightly — less than 3 percent — in the most energy-intensive industries like aluminum, cement, glass, and steel. The flipside is that lower energy costs, thanks to cheap natural gas, would have a similarly marginal impact.

### 1nc exports adv

#### Russian influence over the EU is stabilizing – and key to solve organized crime, prolif and terrorism

**Rykhtik, 12** – Nizhny Novgorod State University, Nizhny Novgorod , Russia. (Mikhail, Responding to a Resurgent Russia, ed: Aggarwal and Govella, p. 28)

Russia sees the European Union as one of its key political and economic partners and will seek to promote intensive, sustained and long-term cooperation with it. So far, dialogue between the EU and Russia has been asymmetric on most issues, including the identification of priority areas for cooperation. The European Union has long been Russia’s main foreign trading partner. EU countries are the major creditors of and investors in the Russian Federation. EU countries account for 40% of all international air passenger traffic into and out of Russia. The same holds true for communications: 61% of Russia’s international telephone traffic is with the EU (Ryzhov 2002 :14–15). These and many other facts show that throughout the past decade the whole of Europe has witnessed a process of cultural, economic, and political integration and that this process has included Russia as well. And most significantly, there are signs that the EU is ready to economize its relations with Russia. There is an understanding among Russian experts and current leaders that Russia’s integration into the main European institutions will benefit everyone (Barysch et al. 2008 ) . Without an active Russian role, it would be difficult to achieve stability and security on the European landscape. Russia plays a crucial role in equipping Europe with energy, and Russia–EU scientific cooperation also has immense potential. In addition, subregional cooperation between the EU and Russia may strengthen Russia’s position, since Russia is interested in more favorable visa regimes. Russia is a key player in the Eurasian community and is eager to cooperate as long as there is no danger of interference in Russian domestic affairs.

Russia’s main strategic goal today is to preserve its national, economic, and cultural identity, while maintaining a strategic partnership with Europe. Medvedev has shown that he is interested in building relationships between Russia and the EU. The EU is obviously uncomfortable with its dependence on Russian resources and would like to switch to oil and gas supplies from other regions, including Central Asia and North Africa, or develop alternative sources of energy. But it is in the medium-term interests of both Russia and the EU to preserve the current status quo in their relationship.

The overriding question of Russian integration into the reformed security structures of Europe also needs to be resolved in a positive way. Russia is a more interesting partner for the West today, taking into account their shared security agenda of dealing with international terrorism, organized crime, illegal drug trafficking, nonproliferation, conventional arms reductions, illegal migration, and other matters. Current conditions are ripe for a new round of consultations and negotiations on a new European Security Agreement (Helsinki 2). 13 It is obvious that we are dealing with a new type of relations between Brussels and Moscow. The idea of a Helsinki 2 or Helsinki-Plus treaty has found some support in the West (Lo 2009 ) . Some experts have agreed that the 1975 Helsinki Final Act should be changed to reflect post-Cold War realities. 14 What is not welcomed by the West is Medvedev’s emphasis on hard security, which is a reflection of the realist approach which is still popular in Russia. But the new elements of Medvedev’s initiatives prompt some optimism.

#### Increasing transnational crime risks democratic and economic collapse and WMD use

**Dobriansky, 1 -** Under Secretary for Global Affairs at the State Department (Paula, “The Explosive Growth of Globalized Crime,”http://www.iwar.org.uk/ecoespionage/resources/transnational-crime/gj01.htm

Certain types of international crime -- terrorism, human trafficking, drug trafficking, and contraband smuggling -- involve serious violence and physical harm. Other forms -- fraud, extortion, money laundering, bribery, economic espionage, intellectual property theft, and counterfeiting -- don't require guns to cause major damage. Moreover, the spread of information technology has created new categories of cybercrime.

For the United States, international crime poses threats on three broad, interrelated fronts. First, the impact is felt directly on the streets of American communities. Hundreds of thousands of individuals enter the U.S. illegally each year, and smuggling of drugs, firearms, stolen cars, child pornography, and other contraband occurs on a wide scale across our borders.

Second, the expansion of American business worldwide has opened new opportunities for foreign-based criminals. When an American enterprise abroad is victimized, the consequences may include the loss of profits, productivity, and jobs for Americans at home.

Third, international criminals engage in a variety of activities that pose a grave threat to the national security of the United States and the stability and values of the entire world community. Examples include the acquisition of weapons of mass destruction, trade in banned or dangerous substances, and trafficking in women and children. Corruption and the enormous flow of unregulated, crime-generated profits are serious threats to the stability of democratic institutions and free market economies around the world.

#### EU dominance is vital to Russian gas exports – key to the Russian economy and perceived as a life or death national interest

**Weitz, 11** - senior fellow at the Hudson Institute and a World Politics Review senior editor (Richard, “Can We Manage a Declining Russia?” November, http://www.aei.org/files/2011/12/08/-can-we-manage-a-declining-russia\_152701899417.pdf)

Europe is an unavoidable partner. The European market consumes 90% of Russia's total gas exports and 60% of its crude oil, which make up only 25 and 15% of Europe's total demand, respectively. Russia presently does not have any viable alternative markets remotely equal in size to Europe. Dependence is a two-Way phenomenon. "40% of Russian public money” comes from the sale of oil and gas to Europe, and at least 75% of Russian export revenues are linked to the EU's energy market in general. Without any extant alternative markets to exploit in the near-term, Moscow requires European gas revenues to preserve its own financial solubility.

Energy overshadows other concerns. Paillard believes that while the energy trade has, in the past, been "part of a game of blackmail, lies and fear" between Europe and Russia, its new status as a "**question of life or death for Russian revitalization**" and its importance to Europe's economic growth mean that neither side can afford to use gas supplies as leverage in other international concerns. In Paillard's estimation, Brussels and Moscow both regard issues such as human rights or the Chechen conflict as not being worth risking the energy trade over. Therefore, Russian and the European Union are inextricably bound to one another by their mutual dependence on the energy trade. Russia cannot absorb the financial consequences of interrupting the EU revenue stream, while the European Union cannot do without Russian gas supplies. Europe has few alternative suppliers, and cannot develop alternative energy sources in the near term. Russia, meanwhile, is unlikely to be able to diversify its economy or target new markets any better than it has in the past.

#### Willful disregard for core interests turns Russia into a hostile challenger

**Allison and Blackwill, 11** – \* director of the Belfer Center for Science and International Affairs at Harvard’s Kennedy School AND \*\* Henry A. Kissinger senior fellow for U.S. foreign policy at the Council on Foreign Relations (Graham and Robert, “Russia and U.S. National Interests Why Should Americans Care?”, Task Force on Russia and U.S. National Interests Report, October, http://belfercenter.ksg.harvard.edu/files/Russia-and-US-NI\_final-web.pdf)

Americans often tend to focus on either Russia’s strengths or its weaknesses without seeking an integrated understanding of the real Russia. This is problematic, because it leads to dangerous assumptions about Russia’s motives and conduct. For example, those who focus on Moscow’s strengths frequently see an assertive and dangerous rival without recognizing Russia’s profound insecurity. Conversely, those who concentrate on Russia’s shortcomings see a defeated power ill-prepared to resist American pressure or preferences. While these descriptions are clearly caricatures, views like those described above can produce damaging misjudgments.

Russia is grappling with the contradictions between imperial nostalgia, on the one hand, and the dramatic decline in its power after the Soviet collapse, on the other. The Russian government’s failure to present a credible plan to reverse Russia’s decline or to develop a successful foreign policy strategy that strengthens the country’s international role makes this only more difficult and contributes to a sense of insecurity. Nevertheless, the United States has the opportunity to manage its relations with an evolving Russia in a manner that advances America’s vital national interests. The stakes are high. Russia is more than sufficiently powerful to create a host of costly—and even devastating—problems for the United States if Russian leaders believe that Washington has a hostile, or casual, disregard for Russian national interests and priorities. This is true even though most in Russia’s elite recognize that today’s Russia is not sufficiently strong to challenge American global leadership without the support of other major powers.

#### Causes global war

**Weitz, 11** - senior fellow at the Hudson Institute and a World Politics Review senior editor (Richard, “Can We Manage a Declining Russia?” November, http://www.aei.org/files/2011/12/08/-can-we-manage-a-declining-russia\_152701899417.pdf)

Conversely, a Russia relatively weaker to the United States would have less capability to challenge the United States but can provide less assistance for realizing common U.S.-Russian goals. A weaker Russia may also find it harder to control its WMD assets and become vulnerable to external predators not friendly to the United States (e. g.. China and Iran). But in all probability Russia will still have sufficiently strong nuclear forces to ward off external threats. Most worrisome, a Russian leadership that perceived Russia on a slope toward protracted decline might feel compelled to take drastic measures, internally and externally, to reverse its descent. The German Empire, Imperial Japan, and other great powers in the 20th century attempted to reverse their feared decline in ways that helped precipitate disastrous global wars.

#### Turns case – Russian obstructionism turns everything

**Allison and Blackwill, 10/30**/11 – \* director of the Belfer Center for Science and International Affairs at Harvard’s Kennedy School AND \*\* Henry A. Kissinger senior fellow for U.S. foreign policy at the Council on Foreign Relations (Graham and Robert, “10 reasons why Russia still matters,” Politico, http://www.politico.com/news/stories/1011/67178.html

That central point is that Russia matters a great deal to a U.S. government seeking to defend and advance its national interests. Prime Minister Vladimir Putin’s decision to return next year as president makes it all the more critical for Washington to manage its relationship with Russia through coherent, realistic policies.

No one denies that Russia is a dangerous, difficult, often disappointing state to do business with. We should not overlook its many human rights and legal failures. Nonetheless, Russia is a player whose choices affect our vital interests in nuclear security and energy. It is key to supplying 100,000 U.S. troops fighting in Afghanistan and preventing Iran from acquiring nuclear weapons.

Ten realities require U.S. policymakers to advance our nation’s interests by engaging and working with Moscow.

First, Russia remains the only nation that can **erase the United States** from the map **in 30 minutes**. As every president since John F. Kennedy has recognized, Russia’s cooperation is critical to averting nuclear war.

Second, Russia is our most consequential partner in preventing nuclear terrorism. Through a combination of more than $11 billion in U.S. aid, provided through the Nunn-Lugar Cooperative Threat Reduction program, and impressive Russian professionalism, two decades after the collapse of the “evil empire,” not one nuclear weapon has been found loose.

Third, Russia plays an essential role in preventing the proliferation of nuclear weapons and missile-delivery systems. As Washington seeks to stop Iran’s drive toward nuclear weapons, Russian choices to sell or withhold sensitive technologies are the difference between failure and the possibility of success.

Fourth, Russian support in sharing intelligence and cooperating in operations remains essential to the U.S. war to destroy Al Qaeda and combat other transnational terrorist groups.

Fifth, Russia provides a vital supply line to 100,000 U.S. troops fighting in Afghanistan. As U.S. relations with Pakistan have deteriorated, the Russian lifeline has grown ever more important and now accounts for half all daily deliveries.

Sixth, Russia is the world’s largest oil producer and second largest gas producer. Over the past decade, Russia has added more oil and gas exports to world energy markets than any other nation. Most major energy transport routes from Eurasia start in Russia or cross its nine time zones. As citizens of a country that imports two of every three of the 20 million barrels of oil that fuel U.S. cars daily, Americans feel Russia’s impact at our gas pumps.

Seventh, Moscow is an important player in today’s international system. It is no accident that Russia is one of the five veto-wielding, permanent members of the U.N. Security Council, as well as a member of the G-8 and G-20. A Moscow more closely aligned with U.S. goals would be significant in the balance of power to shape an environment in which China can emerge as a global power without overturning the existing order.

Eighth, Russia is the largest country on Earth by land area, abutting China on the East, Poland in the West and the United States across the Arctic. This territory provides transit corridors for supplies to global markets whose stability is **vital to the U.S. economy**.

Ninth, Russia’s brainpower is reflected in the fact that it has won more Nobel Prizes for science than all of Asia, places first in most math competitions and dominates the world chess masters list. The only way U.S. astronauts can now travel to and from the International Space Station is to hitch a ride on Russian rockets. The co-founder of the most advanced digital company in the world, Google, is Russian-born Sergei Brin.

Tenth, Russia’s potential as a spoiler is difficult to exaggerate. Consider what a Russian president intent on frustrating U.S. international objectives could do — from stopping the supply flow to Afghanistan to selling S-300 air defense missiles to Tehran to joining China in preventing U.N. Security Council resolutions.

So next time you hear a policymaker dismissing Russia with rhetoric about “who cares?” ask them to identify nations that matter more to U.S. success, or failure, in advancing our national interests.

#### No impact to Iran lashout -

**Simon and Takeyh 2006** (Steven Simon and Ray Takeyh, Senior fellows at the Council on Foreign Relations, CSM, “Cautious Iran Tehran may want to 'wipe Israel off the map,' but it won't do it with nukes.”)

The answer to such questions requires a better understanding of the nature of the Iranian-Israeli conflict. For nearly three decades, Iran's reigning mullahs have castigated Israel as a usurper of sacred Islamic lands and as an instrument of American imperialism in the Middle East. Calls for "wiping Israel off the map" may be new to casual observers of Iran, but have long been the mainstay of the theocratic regime's discourse. For Tehran, it is important for groups that keep this flame alive to survive and wage their conflict against Israel. Yet, despite its incendiary rhetoric and its pernicious conduct, Iran has regulated its conflict with Israel. The regime therefore insists that the conflict take place within distinct red lines. By prodding violence, while containing it, Iran is free to burnish its Islamist credentials without necessarily exposing itself to inordinate danger. Hence the fact that Iran has not transferred any of its more potent weapons to its fighting friends. This is especially striking in the case of Hizbullah. This powerful Shiite organization, now also a political party in Lebanon, has served faithfully as Iran's aircraft carrier, projecting Tehran's power within the region and as far away as Argentina, where Hizbullah killed hundreds of Jews in 1994. Hizbullah's operations chief, Imad Mughniya, is said to have Iranian citizenship and shuttles between Tehran and Beirut. Yet despite Hizbullah's vital role in Iran's security strategy and its vulnerability to Israeli assault, Tehran has not provided it with advanced weaponry. This is not to say that the regime has been parsimonious with its protégé. Hizbullah has received more than 10,000 Katyusha rockets, some of them newer Fajr 5s, as well as long-range mortars that can hit Haifa, and even an unmanned aerial drone. These weapons can and have drawn Israeli blood. But the blister, choking, and nerve agents in Iran's arsenal have been withheld, as have longer range, more accurate missiles. If Tehran has not transferred its deadliest wares to Hizbullah, then it is extremely unlikely it will transfer them at all. For Iran's cautious mullahs, the critical national mission is the survival of the regime and preservation of Iran's territorial integrity. As such, transferring nuclear arms to terrorist clients that may be difficult to restrain or discipline could expose the regime to an unacceptable degree of Israeli or American retaliation. Any measure that could potentially threaten the clerical leaders' hold on power will be strongly resisted by Iran's risk-averse rulers. The mullahs may be perennially hostile to Israel, but they do appreciate that should such conflict escape its controlled parameters, they could find themselves in a confrontation that would indeed threaten their hold on power.

**Iran prolif isn’t a threat – they don’t want the bomb and if they get it they won’t use it**

**Pinker, 11** [Steven, professor of psychology at Harvard University, *The Better Angels of our Nature Why Violence Has Declined*, ISBN: 067002295, for online access email alexanderdpappas@gmail.com and I will forward you the full book]

If current pundits are to be believed, then as you are reading these words the New Peace will already have been shattered by a major war, perhaps a nuclear war, with Iran. At the time of this writing, tensions have been rising over the country’s nuclear energy program. Iran is currently enriching enough uranium to fashion a nuclear arsenal, and it has defied international demands that it allow inspections and comply with other provisions of the Nuclear Nonproliferation Treaty. The president of Iran, Mahmoud Ahmadinejad, has taunted Western leaders, supported terrorist groups, accused the United States of orchestrating the 9/11 attacks, denied the Holocaust, called for Israel to be “wiped off the map,” and prayed for the reappearance of the Twelfth Imam, the Muslim savior who would usher in an age of peace and justice. In some interpretations of Shi’a Islam, this messiah will show up after a worldwide eruption of war and chaos. All this is, to say the least, disconcerting, and many writers have concluded that Ahmadinejad is another Hitler who will soon develop nuclear weapons and use them on Israel or furnish them to Hezbollah to do so. Even in less dire scenarios, he could blackmail the Middle East into acceding to Iranian hegemony. The prospect might leave Israel or the United States no choice but to bomb its nuclear facilities preemptively, even if it invited years of war and terrorism in response. A 2009 editorial in the *Washington Times* spelled it out: “War with Iran is now inevitable. The only question is: Will it happen sooner or later?”279 This chilling scenario of a nuclear attack by Iranian fanatics is certainly possible. But is it *inevitable*, or even highly likely? One can be just as contemptuous of Ahmadinejad, and just as cynical about his motives, while imagining less dire alternatives for the world ahead. John Mueller, Thomas Schelling, and many other foreign affairs analysts have imagined them for us and have concluded that **the Iranian nuclear program is not the end of the world**.280 Iran is a signatory to the Nuclear Nonproliferation Treaty, and Ahmadinejad has repeatedly declared that Iran’s nuclear program is intended only for energy and medical research. In 2005 Supreme Leader Khameini (**who wields more power than Ahmadinejad**) issued a fatwa declaring that **nuclear weapons are forbidden under Islam**.281 If the government went ahead and developed the weapons anyway, it would not be the first time in history that national leaders have lied through their teeth. But having painted themselves into this corner, the prospect of forfeiting all credibility in the eyes of the world (including major powers on whom they depend, like Russia, China, Turkey, and Brazil) might at least give them pause. Ahmadinejad’s musings about the return of the Twelfth Imam do not necessarily mean that he plans to hasten it along with a nuclear holocaust. Two of the deadlines by which writers confidently predicted that he would set off the apocalypse (2007 and 2009) have already come and gone.282 And for what it’s worth, here is how he explained his beliefs in a 2009 television interview with NBC correspondent Ann Curry: *Curry:* You’ve said that you believe that his arrival, the apocalypse, would happen in your own lifetime. What do you believe that you should do to hasten his arrival? *Ahmadinejad:* I have never said such a thing.... I was talking about peace.... What is being said about an apocalyptic war and—global war, things of that nature. This is what the Zionists are claiming. Imam . . . will come with logic, with culture, with science. He will come so that there is no more war. No more enmity, hatred. No more conflict. He will call on everyone to enter a brotherly love. Of course, he will return with Jesus Christ. The two will come back together. And working together, they would fill this world with love. The stories that have been disseminated around the world about extensive war, apocalyptic wars, so on and so forth, these are false. 283 As a Jewish atheist, I can’t say I find these remarks completely reassuring. But with one obvious change they are not appreciably different from those held by devout Christians; indeed, they are milder, as many Christians do believe in an apocalyptic war and have fantasized about it in bestselling novels. As for the speech containing the phrase that was translated as “wiping Israel off the map,” the *New York Times* writer Ethan Bronner consulted Persian translators and analysts of Iranian government rhetoric on the meaning of the phrase in context, and they were unanimous that Ahmadinejad was daydreaming about regime change in the long run, not genocide in the days ahead.284 The perils of translating foreign bombast bring to mind Khrushchev’s boast “We will bury you,” which turned out to mean “outlive” rather than “entomb.” There is a parsimonious alternative explanation of Iran’s behavior. In 2002 George W. Bush identified Iraq, North Korea, and Iran as the “axis of evil” and proceeded to invade Iraq and depose its leadership. North Korea’s leaders saw the writing on the wall and promptly developed a nuclear capability, which (as they no doubt anticipated) has put an end to any musings about the United States invading them too. Shortly afterward Iran put its nuclear program into high gear, aiming to create enough ambiguity as to whether it possesses nuclear weapons, or could assemble them quickly, to squelch any thought of an invasion in the mind of the Great Satan. If Iran does become a confirmed or suspected nuclear power, the history of the nuclear age suggests that the most likely outcome would be nothing. As we have seen, nuclear weapons have turned out to be useless for anything but deterrence against annihilation, which is why the nuclear powers have repeatedly been defied by their nonnuclear adversaries. The most recent episode of proliferation bears this out. In 2004 it was commonly predicted that if North Korea acquired a nuclear capability, then by the end of the decade it would share it with terrorists and set off a nuclear arms race with South Korea, Japan, and Taiwan.285 In fact, North Korea did acquire a nuclear capability, the end of the decade has come and gone, and nothing has happened. It’s also unlikely that any nation would furnish nuclear ammunition to the loose cannons of a terrorist band, thereby giving up control over how they would be used while being on the hook for the consequences.286 In the case of Iran, before it decided to bomb Israel (or license Hezbollah to do so in an incriminating coincidence), with no conceivable benefit to itself, its leaders would have to anticipate a nuclear reprisal by Israeli commanders, who could match them hothead for hothead, together with an invasion by a coalition of powers enraged by the violation of the nuclear taboo. Though the regime is detestable and in many ways irrational, one wonders whether its principals are so indifferent to continuing their hold on power as to choose to annihilate themselves in pursuit of perfect justice in a radioactive Palestine or the arrival of the Twelfth Imam, with or without Jesus at his side. As Thomas Schelling asked in his 2005 Nobel Prize lecture, “What else can Iran accomplish, except possibly the destruction of its own system, with a few nuclear warheads? Nuclear weapons should be too precious to give away or to sell, too precious to waste killing people when they could, held in reserve, make the United States, or Russia, or any other nation, hesitant to consider military action.”287 Though it may seem dangerous to consider alternatives to the worst-case scenario, the dangers go both ways. In the fall of 2002 George W. Bush warned the nation, “America must not ignore the threat gathering against us. Facing clear evidence of peril, we cannot wait for the final proof —the smoking gun—that could come in the form of a mushroom cloud.” The “clear evidence” led to a war that has cost more than a hundred thousand lives and almost a trillion dollars and has left the world no safer. A cocksure certainty that Iran will use nuclear weapons, in defiance of sixty-five years of history in which authoritative predictions of inevitable catastrophes were repeatedly proven wrong, could lead to adventures with even greater costs.

#### Sanctions fail

Hadaf Zubi 7-2-2012; manager at Liquid Capital Corp., North America’s most geographically diverse commercial finance firm; writer for OilPrice.com, “Are US Sanctions Against Iran Working?” http://www.cnbc.com/id/48048870/Are\_US\_Sanctions\_Against\_Iran\_Working

Iran’s main success in thwarting attempts to curb its oil sales has been the provision of temporary insurance policies. Protection and Indemnity (P&I) Insurance is a form of marine insurance provided by a mutual insurance association whose members lay off risk on one another. This form of insurance is necessary to cover the liabilities that heavy tankers carrying oil in sensitive coastal areas incur. As of July 1, European P&I clubs cannot extend coverage to ships carrying Iranian oil, which greatly hamper Iranian efforts to market their oil. Necessity has led to the diminishment of this harm to Iran’s oil exports, though. Japan, prior to the closing of its nuclear power facilities earlier this year, generated almost 30 percent of its energy through nuclear power. After the Fukushima disaster, Japan has largely been forced to import oil to make up for the shortfall. Japan tried to gain an EU exemption to this insurance ban, but to no avail. Due to these circumstances, the absence of Eurozone-based P&I insurance has been replaced by a $7.6 billion Japanese government-sponsored insurance facility which was offered beginning June 27. Although this will decrease the amount of Iranian oil imported to Japan, it shows the flexibility of some of the arrangements that have taken place in order to circumvent economic sanctions. India has also skirted sanctions and the insurance ban by securing an exemption from U.S. sanctions by cutting its imports of Iranian oil by 20 percent, which allow its to continue to import Iranian oil while furthering Delhi’s own nuclear ambitions. In this case, P&I coverage is being provided by the Iranian government. Additionally, Iranian trade delegations have arranged to buy rice, sugar and soybeans from India with rupees, not dollars, which mitigates the effects of Iran not being able to readily access U.S. funds. Following this lead, Iran has also entered into negotiations with Pakistan to barter wheat for oil.

## 2nc

### solves gas

#### Comparative solvency advocate—efficiency programs solve all the benefits of natural gas at a lower cost with greater reliability

**Young 9/13**/2012 (Rachel, American Council for an Energy-Efficient Economy, “Energy Efficiency Looks Beyond the Natural Gas Boom”, http://www.aceee.org/blog/2012/09/energy-efficiency-looks-beyond-natura, WEA)

The recent boom in shale gas production and the subsequent decrease in the price of natural gas have left some wondering what the role for energy efficiency will be in the future. As a new ACEEE white paper explains, energy efficiency measures are still cost-effective in any foreseeable natural gas price environment. States should deploy cost-effective and readily available energy efficiency measures now to help provide long-term stability to the electric and natural gas markets and ensure that natural gas resources are used as efficiently as possible.

Historically, the natural gas market has experienced booms and busts where prices ranged from $2 to $16 per million British thermal units (MMBtu). Last winter, the United States entered a boom period driven by unseasonably warm weather and an explosion of domestic shale gas production and prices at historic lows—under $2 per MMBtu. Looking forward, ICF International forecasts that prices will not remain at the current low levels. ICF estimates a steady increase in the price of natural gas to more than $4 per MMBtu by the end of 2012. Over the long term ICF forecasts that prices will increase as demand accelerates, bringing the price closer to $7 per MMBtu ($2010). The current wellhead price of gas is currently around $3 per MMBtu, up from $1.89 in April of this year.

The low prices have called into question the cost-effectiveness of energy efficiency programs, particularly those targeted at saving natural gas directly. However, despite the low natural gas wellhead prices, energy efficiency is still the lowest cost new energy resource compared to new electricity generation resources of any fuel type. In addition, natural gas prices only affect retail electricity prices minimally because generation costs are just a small portion of the total electricity price. The average retail electricity prices are expected to remain relatively stable through 2030 while the wellhead natural gas prices are expected to rise. This means that electricity efficiency measures will not be greatly affected by natural gas prices, and the vast majority of measures remain cost-effective. Since both wellhead and retail prices are unlikely to stay low, utilities should look toward the long-term benefits of efficiency and continue supporting programs that reduce customer energy consumption.

Even as sources of natural gas continue to increase, energy efficiency is still the number one new resource. Many states and utilities already recognize the benefits of energy efficiency. Over the past 15 years, there has been a rapid increase in the use of energy efficiency (see figure), and this trend is expected to continue.

Natural gas has been a historically volatile fuel, vulnerable to storage and distribution constraints, and accidents and production disruptions. New fracking regulations and an anticipated increase in natural gas exports are adding to the risk factors. Deploying energy efficiency measures lowers the demand for natural gas, which in turn reduces the threat of future price volatility, helps prevent natural gas price spikes, and assists in maintaining electrical grid reliability. Efficiency lessens a utility’s exposure to fuel price volatility by diversifying energy resources across multiple small and moderate-sized projects. Efficiency also reduces the need to deploy peaking generation resources, which prevents outages by lessening the load and stress of the power distribution network.

Energy efficiency can significantly cut into the demand for natural gas in the power sector and lessen the need for construction of new natural gas power plants. New natural gas power plants require a large upfront investment and take time to come online; costs are transferred to ratepayers. Since energy efficiency is still the most cost-effective resource compared to new combined-cycle natural gas plants, energy efficiency should be deployed by states as the first measure to prevent costly construction of new natural gas plants thereby saving ratepayers money. And while natural gas is a less dirty fossil fuel with nearly half the emissions compared to coal, natural gas still emits pollutants. Energy efficiency is a zero emission energy resource.

Though the United States has made progress advancing energy efficiency, there is still an abundance of untapped energy efficiency resources available. States should make investments in energy efficiency measures first before undertaking expensive fuel switching projects. Doing so will increase stability in the electricity and natural gas sectors creates jobs, lower customer utility bills, reduce pollution, and extend the available supply of natural gas.

#### Solves for lest cost—even with low gas prices

**Kushler et al 2012** – PhD, former Supervisor of Evaluation at the Michigan Public Service Commission, \*\*PhD, coordinates ACEEE's overall research efforts and leads the Agricultural Program, adjunct associate professor of Civil and Environmental Engineering at Duke University and Senior Engineering Project Manager at the N.C. Alternative Energy Corp., \*\*\*Climate and Energy research fellow at The Breakthrough Institute (September, Martin Kushler, R. Neal Elliott, Rachel Young, American Council for an Energy-Efficient Economy, White Paper, “Saving Money and Reducing Risk: How Energy Efficiency Enhances the Benefits of the Natural Gas Boom”, http://www.aceee.org/files/pdf/white-paper/saving-money-reducing-risk.pdf, WEA)

Alternatively, energy efficiency as a resource helps avoid these natural gas market problems, and delivers substantial economic benefits. Continuing to improve and implement electric and natural gas energy efficiency measures reduces natural gas demand, which mitigates price and reliability risks associated with natural gas and prevents the need for costly construction of new natural gas plants and pipeline infrastructure (Elliott 2005). However, current low prices of natural gas may cause some to question the cost-effectiveness of electric and natural gas efficiency programs. Even with those current low prices, energy efficiency programs will generally be cost-effective. In this white paper we assess the current and future natural gas market, the cost-effectiveness of energy efficiency, and the ability for efficiency to substantially reduce demand for natural gas.

### solves externally

#### Solves the entire economy

**Goldstein 2010** – PhD in physics from UC Berkeley, Fellow of the American Physical Society, MacArthur Fellow, helped developed efficiency policy standards in the United States, Russia, Kazakhstan, and China (6/11, David, Natural Resources Defense Council, Switchboard, “America's Future: Austerity or Invisible Energy?”, http://switchboard.nrdc.org/blogs/dgoldstein/americas\_future\_austerity\_or\_i.html, WEA)

What is missing from this analysis is a key factor: the role energy efficiency could play in getting us away from the Hobson’s choice of spending money we don’t have or else allowing the economy to drift. I discuss this problem in my book [Invisible Energy](http://www.baytreepublish.com/invisible-energy-fr.html); which has the title that it does because efficiency is invisible in the economic discussions in America despite its immense potential. Invisible Energy shows how efficiency could contribute will over a trillion dollars annually to economic growth.

How can such an immense number be demonstrated? As Invisible Energy shows, the National Academy of Sciences, along with other scientific and business organizations, has estimated that efficiency could produce 30 percent of the energy America would otherwise need by 2030, even if we limit efficiency options to those where the technology is already available and where the costs are lower than business as usual. We spend about a trillion dollars annually on energy; a figure that without efficiency investment would grow to about $1.5 trillion a year, even if energy costs don’t grow. So a 30-percent savings is worth about $500 billion a year! And even better yet, the costs of efficiency investment pay themselves back on average in just three years. These facts mean that we could, as a nation, borrow the entire amount we needed to invest in efficiency from abroad and then pay back the entire amount with interest in three years. The benefits would continue to accrue for decades, however. This would lead to a self-sustaining economic recovery. But it gets better than this. If we really reduce the demand for energy by this much, energy prices will come down. The logic is simple: If OPEC can raise prices by a lot by restricting supply by a little, America can cut prices a lot by limiting demand by a little. And a 30-percent savings is not a little. There are immense environmental benefits in this course of action as well. To start with the most obvious—limiting the risk of oil spills—cutting demand, and therefore price, through efficiency will depress incentives to drill in dangerous, sensitive (and expensive) places either offshore or on-shore. Furthermore, the 30 percent estimate of savings is just the tip of the iceberg. As you might expect, the [National Academy of Sciences study](http://www.nap.edu/catalog.php?record_id=12621) and its companions were extremely cautious in estimating the size of the efficiency resource. This is not just my interpretation: the studies themselves say so explicitly.

How much difference would a realistic, as opposed to cautious, estimate make? In Invisible Energy, I show that if we change just one assumption in the Academy’s [study](http://www.nap.edu/catalog.php?record_id=12621)—namely that efficiency is stagnant at 2008 levels—the efficiency resource doubles or triples in size. So the economic stimulus can be several trillions of dollars per year. It is time to break free of the dismal choices that dominate the economic dialogue. By looking at our problems in a bit more detail, making efficiency visible in the discussion, we can dig our way out of the recession with a lot less pain and austerity.

#### Efficiency makes renewable energy viable

**Montague 2012** – PhD, executive director of Environmental Research Foundation, serves on the board of the Science and Environmental Health Network (6/29, Peter, Environmental Research Foundation, “ENERGY EFFICIENCY: GOOD JOBS, LOW CARBON, AVAILABLE NOW”, http://www.precaution.org/lib/efficiency\_bib.htm, WEA)

Can low-carbon, renewable sources of energy (wind, solar, tidal, and¶ geothermal) meet all the energy needs of a growing national and global¶ economy? Yes they can if we use energy more efficiently.¶ Luckily, proven, affordable energy efficiency technologies are¶ available off-the-shelf right now. No waiting. Furthermore, energy¶ efficiency creates good jobs immediately, and provides an excellent¶ return on investment -- thus freeing up the capital needed to deploy¶ renewables quickly enough to reduce the threat of climate change.

#### Sequencing key—efficiency gains must exist BEFORE ramping up production

**Sovacool and Watts 2009** – \*Assistant Professor at the Lee Kuan Yew School of Public Policy at the National University of Singapore, Research Fellow in the Energy Governance Program at the Centre on Asia and Globalization, \*\*renewable energy consultant and the CEO of the Sustainable Electricity Association New Zealand (May, Benjamin and Charmaine, The Electricity Journal, 22.4, “Going Completely Renewable: Is It Possible (Let Alone Desirable)?”, http://www.precaution.org/lib/going\_renewable.101228.pdf, WEA)

This section lays out a seven-step policy agenda for how policymakers and regulators in New Zealand, the United States, and other countries could harness the world’s vast renewable resources, and accomplish a 100 percent renewable power sector by 2020. When reading our list of seven policy recommendations relating to energy efﬁciency, elimination of subsidies, standardization, feed-in tariffs, grid interconnection, permitting, and information, three caveats must be mentioned. First, our list is not exhaustive and does not include every possible policy mechanism. However, it does highlight what we believe to be the combined tools most effective at promoting renewable power. Second, the sequence of the mechanisms is important. Promoting energy efﬁciency and eliminating subsidies for undesirable technologies augments the effectiveness of the mechanisms to follow. Third, the list is also noteworthy for what is excluded. It emphasizes that some mechanisms, such as investment tax credits or R&D expenditures, may be less important at promoting some renewables now that they have reached technological maturity and are cost-competitive with conventional resources.

A. Promote energy efﬁciency

Regulators should ﬁrst aggressively implement demand-side management programs and maximize investments in energy efﬁciency. Almost all electric utilities can save electricity more cheaply than the cost of operating existing plants, meaning efﬁciency can improve cash ﬂow, appease investors, and save consumers’ money at the same time. For example, the average DSM program saves electricity at a cost of between 2.1 and 3.2¢/ kWh, making it well below the cost of supplying electricity (regardless of the source). Investing in energy efﬁciency also means that less renewable supply has to be built to fulﬁll customer demand, and it displaces the need to build new transmission and distribution lines. Energy efﬁciency operates automatically through customers coincident with the use of underlying equipment, meaning it is always ‘‘on’’ and ‘‘dispatched’’ without delay or the needed intervention by system operators. One kWh saved can also be worth more than one kWh generated, since a kWh saved displaces reserve capacity along with dispatched generation (usually 1 kWh of energy efﬁciency offsets 1.18 kWh of total electricity capacity during peak times). 35 Lastly, targeted DSM programs can accrue huge savings. In many electric utility systems, about 10 percent of generation capacity is tapped only 1 percent of the time, and less than 1 percent of industrial customers constitute greater than 30 percent of total electricity demand. Relatively small DSM programs directed at a miniscule proportion of electricity customers or generators can produce mammoth beneﬁts in terms of total demand reductions.

#### Efficiency solves competitiveness and reinvestment

**Gies 2010** – energy/environment writer for NYT and the Trust for Public Land (9/1, Erica, NYT, Special Report: Energy, “Doing More While Using Less Power”, http://www.nytimes.com/2010/09/02/business/global/02iht-rensave.html?\_r=1&sq=17%20percent&st=cse&scp=3&pagewanted=all, WEA)

\*NOTE: citing David Goldstein, PhD in physics from UC Berkeley, Fellow of the American Physical Society, MacArthur Fellow

“We spend about $1.1 trillion each year on our utility bills in this country,” said Ms. Zoi, of the Energy Department. “And let’s just say we could really easily reduce this by 20 percent. That’s an extra $200 billion you could put into productivity of other things like health care, schools, businesses that grow.”

Being more efficient would also make the U.S. economy more competitive. “There’s a tremendous amount of energy — and money — to be saved in the commercial and industrial sectors,” Mr. Lave said.

#### Recent industrial efficiency XO solves manufacturing sustainability

**Gowrishankar 8/30**/2012 – PhD in solar cells from Stanford, former McKinsey consultant and policy adviser on climate change related issues to the Premier of the Australian State of Victoria (Vignesh, Natural Resources Defense Council, NRDC Switchboard, “White House seeks to harness the multiple benefits of industrial energy efficiency”, http://switchboard.nrdc.org/blogs/vgowrishankar/white\_house\_seeks\_to\_harness\_t.html?utm\_source=feedburner&utm\_medium=feed&utm\_campaign=Feed%3A+switchboard\_all+%28Switchboard%3A+Blogs+from+NRDC%27s+Environmental+Experts%29&utm\_content=Google+Reader, WEA)

In an Executive Order issued by the White House earlier today, the President committed to pursuing industrial energy efficiency as a means to achieve many significant benefits for America’s industrial and manufacturing sector: lower energy costs for industry and improved global competitiveness, more jobs in manufacturing, construction, operations and maintenance, and other fields across the sector, less pollution, and improved grid reliability and security. NRDC fully supports the Executive Order, which would formalize and expand existing close interagency coordination, and catalyze activities at the state and federal levels, and among utilities, industrial companies and the non-governmental sector, in order to accelerate greater investment in industrial energy efficiency and Combined Heat and Power (CHP).

The U.S. industrial and manufacturing sector is a cornerstone of our nation’s economy—it not only provides millions of good-paying jobs but also produces high-quality goods that account for approximately 60 percent of total U.S. exports. The industrial sector is one of the largest energy-using sectors too; it consumes more than 30 percent of all energy in the U.S. Helping our industries to better control and reduce their energy costs is critical to ensuring the sector’s long-term competitiveness. Fortunately, there’s ample opportunity to do so.

According to a 2009 McKinsey report, there are numerous cost-effective investments in the industrial sector that can reduce this energy use by about 20 percent through 2020. Investments totaling a little over $100 billion in the industrial sector can harness energy savings almost five times that. As President Obama stated in his 2012 State of the Union address, one of the easiest ways “to save money is to waste less energy,” and that our country should “help manufacturers eliminate energy waste in their factories and give business incentives to upgrade their buildings.” Industrial energy efficiency offers many other benefits too (discussed below).

However, the report, on which NRDC provided some input, acknowledged that significant and persistent barriers exist, which need to be addressed at multiple levels through a comprehensive and innovative approach.

The White House Executive Order is a great first step towards exactly that – it appreciates the importance of industrial energy efficiency, sets significant goals and throws its policy support behind achieving them, and provides a structured framework within which existing and new government, private sector and non-governmental initiatives can be coordinated to unlock the energy-efficiency potential.

The Executive Order stresses the key benefits of industrial energy efficiency:

Improving U.S. manufacturing competitiveness: Industrial energy efficiency saves money by making processes more efficient and installing cutting-edge energy-efficient equipment. This can save at least $100 billion (and perhaps almost $500 billion according the McKinsey report). These enormous cost savings can make American-made products more cost-competitive and gain share in the global marketplace. Also, products become cheaper so consumers save.

Leading US-based companies such as 3M, Dow Chemical, ArcelorMittal, General Motors, Ford, Boeing, Colgate-Palmolive, Pepsi, Merck and a number of others have achieved significant, ongoing energy use reductions worth many millions of dollars.

Creating jobs now through investments upgrading our manufacturing facilities: Tapping industrial energy efficiency requires an in-depth understanding of the industrial facility, regular monitoring of its processes, and deep engineering experience and skill to install and operate equipment. This provides the basis for the creation of countless skilled, long-term and high-paying jobs. Energy cost savings also help to keep existing jobs and potentially create new ones at these facilities.

The Executive Order’s focus on installing 40 gigawatts of CHP, a readily available energy efficiency technology, immediately over the next decade can create those jobs right away. Other investments will continue to create and maintain job growth.

#### States are spearheading EERS policy—no industry confusion

**ACEEE no date** (American Council for an Energy-Efficient Economy, “Utility Regulation and Policy”, http://www.aceee.org/topics/utility-regulation-and-policy, WEA)

Beyond program cost recovery, utilities face key financial disincentives and barriers to investments in energy efficiency. Consequently, leading states have enacted regulations and policies to create new business models for their investor-owned utilities – models that eliminate the financial disincentives that prevent utilities from saving energy and provide incentives for developing successful and effective energy efficiency programs.

State policymakers and regulators also can provide clear direction to regulated utilities about the importance of energy efficiency. As a first step, legislators and regulators typically require utilities to offer programs; they also set up mechanisms for utilities to recover their costs through rate case proceedings. A recent trend has been for states to establish specific energy savings targets (typically as a percentage of total energy sales) for regulated utilities. Such energy efficiency resource standards (EERS) are in place in a large and rapidly growing number of states.

### grid

#### Efficiency solves grid reliability—top experts agree

**Siemens 2012** (4/17, Sustainable Cities News, “Smart grid technologies supporting energy efficiency, electric grid reliability”, http://www.usa.siemens.com/en/news\_events/sustainable\_cities\_article.php?id=800755050, WEA)

An important U.S. official is continuing to support the adoption of energy efficiency technologies in the nation's electric grid. Jon Wellinghoff, the chairman of the Federal Energy Regulatory Commission (FERC), is one of only a handful of officials tasked with overseeing the nation's sweeping power supply network. FERC often serves as a deciding voice on issues pertaining to the U.S. electric grid, and Wellinghoff has increasingly supported demand response initiatives as a means of improving overall functionality and reliability. Under such an energy efficiency scheme, companies forge agreements with utility ratepayers. Large companies often participate in demand response systems, agreeing to curtail their energy usage during periods of peak demand. Typically, energy demand spikes during the summer months, with residential electricity consumption levels surging in the late afternoon to early evening.<br /><br /> "Utilities are going to have to change or die. Traditionally, their business model has been vertically integrated; they generate, distribute, and sell energy. Now, you're seeing opportunities for utility customers – commercial building owners, the Walmarts and Safeways of the world – to fully participate in energy markets and go head to head with utilities," Wellinghoff told Tech Review.<br /><br /> "Ultimately, you'll have companies helping homeowners install technologies to facilitate their participation. Because of this competition, utilities will have to determine how they are going to continue to make a profit," he added.<br /><br /> As it stands, the nation's electric grid is a largely antiquated system that was constructed decades ago. As a result, power supply disruptions are rather common, and utilities are often limited in their ability to both prevent and patch such outages. According to Wellinghoff, as more consumers and businesses work to improve <a href="http://www.technologyreview.com/business/40020/?p1=BI">energy efficiency</a>, such reliability issues will become less common.<br /><br /> Moreover, Wellinghoff said that the continued adoption and implementation of such smart grid and energy efficiency systems would ultimately help solve more significant energy problems.<br /><br /> "It can get us a long way. Utility commissioners in Massachusetts recently told me they are looking at potentially zero energy-load growth, because they're using smart meters and other devices and have very aggressive energy efficiency programs," Wellinghoff told MIT's Technology Review. "I think we're seeing a dramatic shift in the whole energy dynamic in the country. In the next five to 10 years, we'll have the ability to manage our energy so that we need very few new traditional resources."<br /><br />

#### The economy would be destroyed

**Bryan**, **03 (**Jay, The Gazette (Montreal, Quebec), 8/19, "Power grids vital in information age: "Just a few days could theoretically take economic growth ... right down to zero," lexis

This worsened the already-anemic state of a U.S. economy that had been hammered by a massive stock-market meltdown and a series of confidence-sapping corporate scandals. It hurt Canada, too, weakening OlIf biggest market. So now, just when there are signs of healthy growth in both countries, is the last time you'd want to see a large part of the continent's electric-power network collapse. We can be grateful that the immediate impacts look modest. David Rosenberg, chief North American economist with Merrill Lynch, estimates thatthe U.S. impact could amount to as much as $30 billion for each day of interrupted activity.That's roughly one percentage point of quarterly economic growth, which means that just a few days could theoreticallytake economic growthin the third quarterright down to zero. But this is just the first step in his analysis. In reality, most activity was returning to something close to normal by yesterday. More important, Rosenberg says, any losses in August are likely to be recouped in September, much as economic activity rebounds to wipe out most losses after a severe winter stann. But even if we do look back on the great blackout of'03 as a mere hiccup for the economy, there will be little reason for complacency. As Royal Bank economist John Anania notes, the reliability of the power grid is absolutely indispensable in an information-age economy.

### case

#### Imports keep prices low

**Womack, 3/5/**09 (Jason, “New LNG Imports Could Further Slam US Natural-Gas Prices,” Dow Jones News Service, factiva

Some analysts predict LNG shipments could begin entering the U.S. as early as April - the end of the peak demand period for gas and the beginning of the season when utilities and marketers replenish storage.

Such fresh LNG cargoes could further weigh on domestic producers - like Devon Energy Corp. (DVN) and Chesapeake Energy Corp. (CHK) - that have been forced to idle rigs and ratchet back output in the face of falling commodity prices and bulging storage levels.

The amount of natural gas in U.S. inventories stands at 1.793 trillion cubic feet, 17.7% higher than last year and 13.8% above the five-year average, according to a report released Thursday by the U.S. Energy Information Administration.

David Pursell, an energy analyst with Houston-based Tudor Pickering Holt & Co. Securities, says that U.S. gas supplies are outpacing demand by about 4 bcf a day and a surge in LNG could exacerbate an already oversupplied gas market.

#### Alt cause- infrastructure- natural gas increases won’t help domestic markets

**Hertzog, 10-1** -- Energy Collective consultant

(Christine, "Natural Gas – Is It Stunting Innovative Thinking?" Energy Collective, 10-1-12, theenergycollective.com/christine-hertzog/119036/natural-gas-it-stunting-innovative-thinking)

Let’s admit it, infrastructure is a boring word. There’s nothing sexy about it. It implies disruptions to our lives as we deal with delays and detours for construction and repair projects. Yet it is absolutely necessary, and infrastructure is what needs to be upgraded in our water, gas, and electric grids.

My previous articles discussed investments that are ongoing or needed in the electrical grid to modernize generation, transmission, distribution, and consumption. However, the same issues exist for gas and water too. In some aspects, the needs are even more striking. But how we build our infrastructure and what we build for our infrastructure also says a great deal about how innovative is our thinking. And unfortunately, right now that thinking is “like for like”, and merely replicates existing energy models with known weaknesses in reliability and resiliency instead of building infrastructure based on new models.

Natural gas is seen by some in the energy business as a panacea to all energy concerns. It’s domestic. It’s cleaner than coal. However, it requires significant infrastructure investments. No matter how much innovation you put into the extraction technologies for fossil fuels (which by the way had HUGE federal government assistance), the supply chains still require buildouts of pipelines to transport it to refineries and on to points of consumption. We simply don’t have sufficient pipeline capacity to transport it to all the places that want it in the USA. It’s an infrastructure play that has a number of challenges.

The natural gas that is extracted must be processed, just like oil must be refined, or electricity must be generated. These industrial operations expend lots of energy in processing gas into what is considered pure gas for end use consumption. The transport of processed natural gas in pipelines requires more energy to compress it and move it in pipelines, and compressor stations, like electricity substations, are placed along major transmission corridors to boost pressure. This map shows the interstate natural gas pipelines that transmit highly compressed natural gas. Pipelines have physical constraints – there is only so much space available for gas, and they require electricity to compress the gas in the pipelines. Therefore, when there is a significant electricity outage in a region, it can also impact the transmission and distribution of natural gas.

#### South China Sea conflict stays limited and the US won’t get involved

**Scobel 2001** (Dr. Andrew, Compilation of a conference on Asian Security held by The U.S. Army War College, the Triangle Institute for Security Studies, and the Duke University Program in Asian Security, March 2-3, “The Rise of China: Security Implications,”http://www.pubpol.duke.edu/centers/tiss/pubs/documents/TheRiseofChina.pdf#search=%22%22u nlikely%20to%20escalate%22%20war%22)

The South China Sea presents a very different kind of flashpoint --one quite unlikely to be the location of a major conflict. Most of the disputed islands there are uninhabited and remote, and rival claimants to the area all have very limited power projection capabilities. China, Vietnam, the Philippines, Malaysia, and Brunei are among the states that claim some or all of the reefs, islets, and atolls that dot the area. China has the largest and most insistent claim. Beijing is very concerned with the sea lanes of communication and the natural resources of the region. China is increasingly dependent on Middle East oil that is shipped via the Strait of Malacca and through the South China Sea. Moreover, China is keen on tapping the fisheries and any energy reserves discovered in the area. Other nonmilitary security threats to the area are piracy--some estimates put about half of the world's pirates operating in the region. Environmental issues could exacerbate regional tensions and possibly lead to limited hostilities, but these are unlikely to escalate or directly involve the United States in a war.

#### Manufacturing jobs losses are due to efficiency – reversing the trade deficit doesn’t solve

Charles Roxburgh et al May 2012; Director, McKinsey Global Institute London, with Richard Dobbs Director, McKinsey Global Institute Seoul James Manyika Director, McKinsey Global Institute San Francisco Charles Roxburgh Susan Lund Director of Research, McKinsey Global Institute Washington, DC; The McKinsey Global Institute (MGI), the business and economics research arm of McKinsey & Company, was established in 1990 to develop a deeper understanding of the evolving global economy. Our goal is to provide leaders in the commercial, public, and social sectors with the facts and insights on which to base management and policy decisions. “Trading myths: Addressing misconceptions about trade, jobs, and competitiveness”

MYTH 3: TRADE IS AT THE HEART OF THE LOSS OF MANUFACTURING JOBS Reality: The decline in manufacturing jobs in mature economies—and the shift in jobs among sectors overall—is dominated by changes in the composition of demand and ongoing increases in productivity. The share of manufacturing employment in mature economies is bound to decline further, from 12 percent today to below 10 percent in 2030, according to our analysis. In the case of the United States, the 5.8 million manufacturing job losses from 2000 to 2010 largely reflected ongoing productivity increases coupled with reduced output mostly explained by weak domestic demand after the recession, even when we adjust for widely discussed difficulties in measuring productivity. Historically, rising productivity is accompanied by strong increases in demand and ouput. However, this latest decade was one in which increased productivity coincided with stagnation in domestic demand in real terms as the recession reversed previous increases.4 According to our analysis, around 20 percent of the decline in jobs can be attributed to trade or offshoring. Closing the entire 2010 US current account deficit of 3.2 percent of GDP by improving the manufacturing trade balance would be equivalent to approximately 2.2 million more manufacturing jobs—well short of the job losses of the past decade alone.5

## 1nr

### 2nc a2 russia econ uniqueness

#### Even, if Russian economic growth is stable –

#### --debt is low, the budget is balanced, and domestic politics are subdued

Mark Adomanis, 8-16-2012; analyst for Forbes, Russia's Economy is Still Growing Faster than Every EU Country <http://www.forbes.com/sites/markadomanis/2012/08/16/russias-economy-is-still-growing-faster-than-every-eu-country/>

I’ve been pretty persistent in arguing that Russia’s government, corrupt and authoritarian as it may be, is going to last for awhile. This is not because it is a shining example of efficiency and democratic accountability, but because its overall economic and fiscal outlook is, at the moment, surprisingly robust. It’s aso because the top-level elite are, at least for the moment, united in their desire to stay in power. Midway through 2012, the Russian economy is growing at a reasonable pace, foreign debt is almost non-existent, the budget is, for the moment, roughly in balance, and the opposition is still fragmented and leaderless. This would seem to be a uniquely poor recipe for a successful revolutionary upheaval. Basically, everything hinges on the trajectory of the Russian economy, and it really doesn’t seem to be doing poorly at the moment. This is particularly true when you compare Russia’s decent performance with the consistently awful performance of the EU and the Eurozone, both of which appear to be in outright recession.

#### investment climate improvement

Margarita Bogatova 6-26-2012; writer for Voice of Russia quoting prominent investment executives, O'Neil: Russia should be less dependent on oil prices http://english.ruvr.ru/2012\_06\_26/79409411/

Russia, the world’s ninth economy, has improved its initial growth forecast and may post a 4%-5% year-on-year GDP increase in 2012. Contrary to expectations, the opposition protests of the past few months have not scared investors. Rather, they are perceived as evidence that the Russian democracy is on the right track, says Ivan Rodionov, a professor of the Higher School of Economics. "The protests have not affected the investment climate because no one understands what the opposition wants. But the fact that the opposition does exist is a positive factor perceived as progress in the right direction. Earlier, it was strange that everything was well in Russia, but there was no opposition. Now everything is still well and we also have the opposition. They cannot say what they want and they have no political platform, but that’s actually good."

### AT: Diversification

#### Magnitude of our link outweighs and isn’t about the economy – it would be perceived as an existential threat

Richard **Weitz** (senior fellow at the Hudson Institute and a World Politics Review senior editor) November 2011 “Can We Manage a Declining Russia?”, http://www.aei.org/files/2011/12/08/-can-we-manage-a-declining-russia\_152701899417.pdf)

Europe is an unavoidable partner. The European market consumes 90% of Russia's total gas exports and 60% of its crude oil, which make up only 25 and 15% of Europe's total demand, respectively. Russia presently does not have any viable alternative markets remotely equal in size to Europe. Dependence is a two-Way phenomenon. "40% of Russian public money” comes from the sale of oil and gas to Europe, and at least 75% of Russian export revenues are linked to the EU's energy market in general. Without any extant alternative markets to exploit in the near-term, Moscow requires European gas revenues to preserve its own financial solubility. Energy overshadows other concerns. Paillard believes that while the energy trade has, in the past, been "part of a game of blackmail, lies and fear" between Europe and Russia, its new status as a "question of life or death for Russian revitalization" and its importance to Europe's economic growth mean that neither side can afford to use gas supplies as leverage in other international concerns. In Paillard's estimation, Brussels and Moscow both regard issues such as human rights or the Chechen conflict as not being worth risking the energy trade over. Therefore, Russian and the European Union are inextricably bound to one another by their mutual dependence on the energy trade. Russia cannot absorb the financial consequences of interrupting the EU revenue stream, while the European Union cannot do without Russian gas supplies. Europe has few alternative suppliers, and cannot develop alternative energy sources in the near term. Russia, meanwhile, is unlikely to be able to diversify its economy or target new markets any better than it has in the past.

#### Russia won’t diversify – no strategic advantage

**Protasov, ’10** expert in the energy department of the Institute for Energy and Finance in Moscow (Vitaly Protasov, Fourth Quarter 2010, “EU-Russia Gas Relations: a View From Both Sides,” [www.iaee.org%2Fen%2Fpublications%2Fnewsletterdl.aspx%3Fid%3D115&ei=gco8UODIJ4uo8gTy0YDYCg&usg=AFQjCNFfveAGZiDXYofebwKZumRLyXteNw&sig2=t6A711Qyy8hQC2GF1SzIFQ)//CC](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&cad=rja&ved=0CE4QFjAG&url=http%3A%2F%2Fwww.iaee.org%2Fen%2Fpublications%2Fnewsletterdl.aspx%3Fid%3D115&ei=gco8UODIJ4uo8gTy0YDYCg&usg=AFQjCNFfveAGZiDXYofebwKZumRLyXteNw&sig2=t6A711Qyy8hQC2GF1SzIFQ)//CC)

The Russian potential to diversify its exports of natural gas is low. There¶ are three possibilities: pipeline deliveries to China and South Korea, LNG for¶ the U.S. market and LNG for the Asian market. China asked for a very low¶ gas price (it can be even lower than the internal Russian¶ market) and also contracted for substantial volumes of gas¶ from Turkmenistan and several LNG producers. During¶ the economic crisis trends on LNG markets have changed.¶ Redundant LNG capacities has caused an increase in competition¶ in this market. Moreover, Russia has no strategic¶ advantages in the LNG market but it has higher costs due¶ to natural conditions. The opportunities for exports to the¶ U.S. gas market have been reduced due to the substantial¶ increase of shale gas production. From 2008 to 2009 IEA¶ has lowered its 2030 forecast for net gas imports into North¶ America from 143 to 61 bcm.6 For the U.S., shale gas is¶ more realistic then for EU.

#### Makes up 97 percent of exports

Jack Sharples (Ph.D. Candidate specializing in EU-Russia natural gas relations at the University of Glaslow) 2012 “Russia-EU gas relations: the Russian perspective” http://glasgow.academia.edu/JackSharples/Papers/1596861/Russia-EU\_Gas\_Relations\_The\_Russian\_Perspective

Earlier it was mentioned that the EU accounts for approximately 60 percent of Russia’s gas exports by volume. However, the regional nature of Russia’s gas exports is much more apparently when it is considered that the Energy Community (EU-27 plus Ukraine, Serbia, Croatia, Bosnia-Herzegovina, Montenegro, Macedonia, Albania and Moldova) (Energy Community, 2011) accounted for 80 percent of Russia’s gas exports (175bcm) in 2010, while exports to geographical Europe (EU-27 plus Turkey, Ukraine, Belarus, Switzerland, Serbia, Croatia, Bosnia-Herzegovina, Montenegro, Macedonia and Moldova) totalled accounted for 97 percent (213bcm) of Russia’s exports in 2010 (Gazprom, 2011a, pg. 53-58).

### 2nc a2 nato

#### NATO is strong and resilient

Trueblood 4 (Tad, National Security Analyst and Fmr Military Officer with 20 Years Experience, “Not Your Father’s NATO”, 4-1, http://www.southernutah.com/Articles/World\_Affairs/Document.2004-04-01.2317)

Not your father's NATO Last Updated: 2004-04-01 10:34:15 March 31, 2004 -- A wimpy, eleven-syllable organization with longhaired troops and a Madison Avenue logo has proved more resilient than it seemed. The authoritarian Warsaw Pact crumbled and was swept into history’s dustbin, while the North Atlantic Treaty Organization has expanded its membership and mission. Remember the Warsaw Pact? What a cool name, “pact”. Nobody has pacts anymore. The western world prefers multisyllabic constructs like “coalition” and “organization”. Lots of room for bureaucracy and politics in a multisyllabic outfit. But what could be more solid than a pact? Surely not some wimpy, eleven-syllable organization with longhaired troops and a Madison Avenue logo. Well, turns out those multisyllabic bureaucracies are more resilient than they seem. The authoritarian Warsaw Pact crumbled and was swept into history’s dustbin, while the North Atlantic Treaty Organization (NATO) has expanded its membership and mission. Pact, schmact! Looks like acronyms come out on top. The transformation of NATO didn’t happen overnight, however, and for several years in the 1990s it looked like the alliance had lost its way and was headed towards stodgy irrelevance. There was much debate and consternation over NATO’s post-Cold War role, or if it even had a role. Formed under U.S. leadership in 1949 to counter the looming military threat the Soviet bloc posed to Western Europe, the quintessential free-world alliance didn’t seem so essential after the Soviet Union evaporated. What’s an alliance to do after its adversaries go away? Two things, actually. First, figure out a way to co-opt your old adversaries. Second, find some new adversaries. In that first area, NATO has been amazingly successful. On Monday, NATO announced the accession of 7 new members--all of which used to be communist countries. Bulgaria, Romania and Slovakia were once Warsaw Pact members, while Slovenia was part of Yugoslavia. Estonia, Latvia and Lithuania were actually part of the USSR itself. These new members join Poland, Hungary and the Czech Republic, which became NATO members in 1999. Though largely underappreciated, this is a geopolitical shift of monumental proportions. Since the Soviet Union dissolved in December 1991, NATO has expanded eastward (preceded by free enterprise, economic reform, and democracy) to include all the former Soviet satellites in Eastern Europe and now some former Soviet Republics. In finding new adversaries--by which I really mean finding valid missions--NATO has had mixed success. Of course there were the Serbs and their aggressive aims in the Balkans, which kept NATO busy on peacekeeping and peacemaking missions in Bosnia, then in Kosovo. But containing a tinhorn dictator like Milosevic can’t really provide the raison ‘de etre for a grand, multi-spectral alliance. Working against instability and terrorism in the Middle East, Central Asia and Africa seems to fit the bill. In the old NATO, it was inconceivable to think that military units under NATO command might be deployed out of Europe for actual operations. In the new NATO, it’s becoming the central mission. European governments, and their NATO representatives, realize that the more trouble brews out-of-area, the more likely the trouble will come home to roost. Afghanistan is NATO’s first major out-of-area operation. The NATO-led International Security Assistance Force (how’s that for multisyllabic?), or ISAF, has 6,500 troops from 35 NATO and non-NATO nations. ISAF’s main objective is to promote stability and security in the war-torn country, and mainly leaves the Taliban and al-Qaida hunting to the U.S. forces. However, ISAF troops have been in clashes and suffered casualties there. In fact, German soldiers, who make up the core of the ISAF, have seen their first combat outside Europe since WWII. And it’s likely there will be more NATO operations in strange places. The possibility of NATO taking on large chunks of the security mission in Iraq is being actively discussed--with U.S. support. There have even been suggestions that a NATO presence in Israel might be the only way to enforce a peace plan there. No, it’s sure not your father’s NATO anymore.

#### Afghanistan mission

**Feffer, 9** - co-director of Foreign Policy in Focus at the Institute for Policy Studies (John, “If Afghanistan is its test, NATO is failing,” Asia Times, 10/1,

<http://www.atimes.com/atimes/South_Asia/KJ01Df01.html>)

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The painful truth is that NATO may be suffering from a terminal illness. Its current mission in Afghanistan, the alliance's most significant and far-flung muscle-flexing to date, might be its last. Afghanistan has been the graveyard of many an imperial power from the ancient Macedonians to the Soviets. It now seems to be eyeing its next victim. For NATO, this year should have been a celebration, not a dirge. After suffering a trans-Atlantic rift of epic proportions during the Bush years, the alliance thrilled to the election of Barack Obama and his politics of conciliation. The new American administration swore it would shift troops from Iraq to Afghanistan to give NATO more of what it wanted to fight "the right war". United States Vice President Joe Biden and Secretary of State Hillary Clinton both promised to push the "reset button" on US-Russian relations, potentially removing one of the greatest obstacles to NATO's health and well-being. And in a final flourish for the alliance's diamond jubilee, France agreed to return to the fold, reintegrating into NATO after 43 years of standoffishness. But hold those celebrations. Afghanistan has an uncanny ability to spoil anybody's best-laid plans. At the April 2009 NATO summit in Strasbourg, Obama failed to get the troop reinforcements he wanted from his European allies. The NATO powers, in any case, have attached so many strings and caveats to the troops they are supplying - Germany has kept its soldiers away from the conflict-ridden south, most contingents have complex rules limiting combat operations, Canada will be pulling out in 2011 - that NATO's mission resembles Gulliver tied down by the Lilliputians. The real nail in NATO's coffin, however, has been its stunning lack of success on the ground. The Taliban have, in fact, not only increased their hold over large parts of southern Afghanistan, but spread north as well. Most embarrassingly for NATO, a recent surge of alliance troops seems only to have made the Taliban stronger. Nearly eight years of alternating destruction (air bombardment, over 100,000 troops on the ground) and reconstruction (US$38 billion in economic assistance appropriated by the US Congress since 2001) have all come up desperately short. A new counter-insurgency campaign doesn't look any more promising. What was once billed as the most powerful military alliance in history has been thwarted by an irregular set of militias and guerrilla groups without the backing of a major power in one of the poorest countries on Earth.

#### NATO collapse doesn’t cause war

Conry 95 (Barbara, Foreign Policy Analyst – Cato, Cato Policy Analysis, “The Western European Union as NATO’s Successor”, 9-18, http://www.cato.org/pubs/pas/pa-239.html)

Europe after NATO: Bogus Nightmare Scenarios It is inaccurate to suggest, as NATO partisans often do, that the only alternative to Atlanticism is a return to the dark ages of the interwar era: nationalized European defenses, American isolationism, xenophobia, demagoguery, and the other evils associated with the rise of Hitler and World War II. Former U.S. senator Malcolm Wallop (R-Wyo.) warns that weakening NATO will have dire consequences. "As we have thrice before in this dreadful century, [we will] set in motion an instability that can only lead to war, shed blood, and lost treasure. Pray that we are wiser."(4) Lawrence di Rita of the Heritage Foundation similarly defends NATO as an "insurance policy" against a future world war. "If keeping 65,000 young Americans in Europe will prevent 10 times that many new headstones in Arlington cemetery once the Europeans turn on themselves again--as they have twice this century--then it's a small price to pay."(5) Such alarmism underestimates the significance of 50 years of economic and political cooperation among the West European powers and the role of pan-European institutions such as the Organization for Security and Cooperation in Europe. It also ignores the fact that a viable institutional alternative to NATO--the Western European Union--already exists. With the proper resources and recognition on the part of Washington and the Europeans that an independent European defense is essential in the post-Cold War era, the WEU is a promising alternative to Atlanticism. Far from being a lame second choice to NATO or defense on the cheap, a robust WEU would be superior to NATO in many ways, better suited in the long run to protecting European and, indirectly, American interests.

**NATO is militarily useless—ending US participation is key to a transition to a stable European military power**

**Carpenter, 09**

(Ted Galen Carpenter, Ph.D., is the vice president for defense and foreign policy studies at the Cato Institute, “NATO at 60: A Hollow Alliance,” <http://www.cato.org/pubs/pas/pa635.pdf>)

Although NATO has added numerous new members during the past decade, most of them possess minuscule military capabilities. Some of themalso have murky political systems and contentious relations with neighboring states, including (and most troubling) a nuclear-armed Russia. Thus, NATO’s new members are weak, vulnerable, and provocative—an especially dangerous combination for the United States in its role as NATO’s leader. There are also growing fissures in the alliance about how to deal with Russia. The older, West European powers tend to favor a cautious, conciliatory policy, whereas the Central and East European countries advocate a more confrontational, hard-line approach. TheUnited States is caught in themiddle of that intra-alliance squabble. Perhapsmostworrisome, the defense spending levels and military capabilities of NATO’s principal European members have plunged in recent years. The decay of those military forces has reached the point that American leaders now worry that joint operations with U.S. forces are becoming difficult, if not impossible. The ineffectiveness of the European militaries is apparent in NATO’s stumbling performance in Afghanistan. NATO has outlived whatever usefulness it had. Superficially, it remains an impressive institution, but it has become a hollow shell—farmore a political honor society than a meaningful security organization. Yet, while the alliance exists, it is a vehicle for European countries to free ride on theU.S.military commitment instead of spending adequately on their own defenses and taking responsibility for the security of their own region. American calls for greater burden-sharing are even more futile today than they have been over the past 60 years.Until the United States changes the incentives by withdrawing its troops from Europe and phasing out its NATO commitment, the Europeans will happily continue to evade their responsibilities. Today’s NATO is a bad bargain for the United States. We have security obligations to countries that add little to our own military power. Even worse, some of those countries could easily entangle America in dangerous parochial disputes. It is time to terminate this increasingly dysfunctional alliance.

**NATO saps resources and troops, collapse forces native focus key to growth**

**Carpenter 09** (Ted, Ph.D., is the vice president for defense and foreign policy studies at the Cato Institute, “NATO at 60: A Hollow Alliance,” <http://www.cato.org/pubs/pas/pa635.pdf>)

Some American policy experts insist that only by spending even more than the vast sums it already spends on the military will Washington have enough meaningful influence to get the European countries to increase their paltry efforts. Robert Kagan, a senior associate at the Carnegie Endowment for International Peace, denounces the possibility that the Obama administration might slow the surge in U.S. military spending that has taken place since 9/11. Such a move, he contends, “would make it harder to press allies to do more. The Obama administration rightly plans to encourage European allies to increase defense capabilities so they can more equitably share the burden of global commitments. This will be a tough sell if the United States is cutting its own defense budget.”54 The notion that the European members of NATO are interested in boosting their anemic military budgets—especially to help the United States handle global burdens, most of which would be outside Europe—is naive.55 Moreover, Kagan’s argument is a classic case of the triumph of hope over experience. Washington has been encouraging (indeed, often badgering or even begging) the European allies to engage in greater burden-sharing since NATO’s inception in 1949—without much success.56 That was true even during the height of the Cold War when the United States and the European powers faced a dangerous common adversary, the Soviet Union. Alan Tonelson, a senior fellow at the U.S. Business and Industry Council Education Foundation and a long-time analyst of NATO issues, provides a depressing summary of Washington’s frustrations: America’s Cold War burden-sharing efforts failed for many reasons. But the main explanation is that U.S. leaders never gave the Europeans sufficient incentive to assume greater military responsibilities. The incentive was lacking, in turn, because Washington never believed it could afford to walk away from NATO, or even reduce its role, if the allies stood firm. Worse, U.S. leaders repeatedly telegraphed that message to the Europeans—often in the midst of burden-sharing controversies.57 That historical record suggests that Kagan’s thesis turns the role of incentives on its head. The more likely scenario is that if the United States continues to overspend on the military and implicitly subsidize the security of the European allies, they will be perfectly content to continue that arrangement. Indeed, that is what theyhave done fornearly six decades.The current economic circumstances may actually increase the tendency to free ride.

Given the scope of the European safety nets, domestic political constituencies are likely to pressure their governments to divert even more revenues to welfare programs. There certainly will be few constituencies clamoring to boost military spending—especially when the United States is obligingly taking care of the continent’s security needs, **with American taxpayers footing the bill**. If Washington wants to maximize the prospects that the NATO members will increase their military spending, U.S. officials need to adopt the opposite course: significantly cut spending and implement a phased withdrawal of American troops from Europe. That alters the incentive structure. Especially with Russia beginning to flex its muscles, prudence would dictate that the European powers take security issues more seriously and create at least respectable military capabilities as basic insurance. To do otherwise would be to risk being vulnerable to escalating pressure from Moscow on a variety of issues. Kagan himself implicitly conceded the role of incentives in 2003, noting that the Europeans “could easily spend twice as much as they are currently spending on defense if they believed it was necessary to do so.”58 He viewed with skepticism the European arguments that there are certain “structural realities” in their national budgets, “built-in limitations to any increases in defense spending.” If Europe were about to be invaded, Kagan asked, “would its politicians insist that defense budgets could not be raised because this would violate the terms of the EU’s growth and stability pact? IfGermans truly felt threatened, would they insist nevertheless that their social welfare programs be left untouched?”59 But threat perception is only one component of the incentive picture. Equally important is whether the countries in question can free ride on an outside protector, or whether they must instead rely on their own military resources for protection. It is that calculation that existing U.S. defense policy, to say nothing of the smothering policy that Kagan and other supporters of U.S. hegemony advocate, distorts in an especially corrosive fashion. Washington’s oversized role in NATO short circuits a crucial incentive for the European powers to do more for their own defense.

### 2nc a2 central asia argument

#### No escalation—shared interests

**Collins and Wohlforth 4** (Kathleen, Prof PoliSci–Notre Dame and William, Prof Government–Dartmouth, “Defying ‘Great Game’ Expectations”, Strategic Asia 2003-4: Fragility and Crisis, p. 312-3)

Conclusion The popular great game lens for analyzing Central Asia fails to capture the declared interests of the great powers as well as the best reading of their objective interests in security and economic growth. Perhaps more importantly, it fails to explain their actual behavior on the ground, as well the specific reactions of the Central Asian states themselves. Naturally, there are competitive elements in great power relations. Each country’s policymaking community has slightly different preferences for tackling the challenges presented in the region, and the more influence they have the more able they are to shape events in concordance with those preferences. But these clashing preferences concern the means to serve ends that all the great powers share. To be sure, policy-makers in each capital would prefer that their own national firms or their own government’s budget be the beneficiaries of any economic rents that emerge from the exploitation and transshipment of the region’s natural resources. But the scale of these rents is marginal even for Russia’s oil-fueled budget. And for taxable profits to be created, the projects must make sense economically—something that is determined more by markets and firms than governments. Does it matter? The great game is an arresting metaphor that serves to draw people’s attention to an oft-neglected region. The problem is the great-game lens can distort realities on the ground, and therefore bias analysis and policy. For when great powers are locked in a competitive fight, the issues at hand matter less than their implication for the relative power of contending states. Power itself becomes the issue—one that tends to be nonnegotiable. Viewing an essential positive-sum relationship through zero sum conceptual lenses will result in missed opportunities for cooperation that leaves all players—not least the people who live in the region—poorer and more insecure. While cautious realism must remain the watchword concerning an impoverished and potentially unstable region comprised of fragile and authoritarian states, our analysis yields at least conditional and relative optimism. Given the confluence of their chief strategic interests, the major powers are in a better position to serve as a stabilizing force than analogies to the Great Game or the Cold War would suggest. It is important to stress that the region’s response to the profoundly destabilizing shock of coordinated terror attacks was increased cooperation between local governments and China and Russia, and—multipolar rhetoric notwithstanding—between both of them and the United States. If this trend is nurtured and if the initial signals about potential SCO-CSTO-NATO cooperation are pursued, another destabilizing shock might generate more rather than less cooperation among the major powers. Uzbekistan, Kyrgyzstan, Tajikistan, and Kazakhstan are clearly on a trajectory that portends longer-term cooperation with each of the great powers. As military and economic security interests become more entwined, there are sound reasons to conclude that “great game” politics will not shape Central Asia’s future in the same competitive and destabilizing way as they have controlled its past. To the contrary, mutual interests in Central Asia may reinforce the broader positive developments in the great powers’ relations that have taken place since September 11, as well as reinforce regional and domestic stability in Central Asia.

#### Russian influence key to Central Asian stability – checks US/EU democratizing influence

**Rykhtik, 12** – Nizhny Novgorod State University, Nizhny Novgorod , Russia. (Mikhail, Responding to a Resurgent Russia, ed: Aggarwal and Govella, p. 23)

As a partner in trade and security, as well as a direct neighbor, Russia has a vested interest in promoting stability in Central Asia. Russia pursues two main goals in the region: keeping its allies close and continuing military cooperation within the CIS. These goals necessitate the expansion of Russia’s military presence and influence in the region. Although Russia has sought to preserve its military position in Central Asia since the collapse of the USSR, the last decade has seen the EU and the United States undertake more active policies toward the region as well. Russia turned its attention to the region at the start of Putin’s presidency in 2000, while the area gained significance for the United States and the EU with the beginning of military operations in Afghanistan in 2001. The policies of all key actors in the region, however, are defined by shared concerns about radical Islamic organizations, drug trafficking, and, to varying degrees, natural resources such as gas and oil. Russia is less concerned than NATO members with ideology and democratization, preferring to pay more attention to political stability and predictability. Moscow and the Central Asian capitals see any interference in the domestic affairs of the region as promoting or catalyzing the destabilization and disintegration of its states. For that reason, Central Asian regimes find Moscow a more comfortable partner than the EU or the United States, which are seen as overly focused on democratic transformation and liberalization.

#### Central Asian democracy causes Xinjiang secession

**Andrew, 5** (Martin, MA in Asian Studies and completing Ph.D. on the PLA, “BEIJING'S GROWING SECURITY DILEMMA IN XINJIANG”, Jamestown Foundation China Brief, 6/7,

<http://www.jamestown.org/publications_details.php?volume_id=408&issue_id=3358&article_id=2369849>)

The Shanghai Cooperation Organization (SCO) has been one means of suppressing Muslim fundamentalism in its member states, and China sees it as a useful tool for influencing Central Asian affairs. In the future, this organization could become a double-edged sword for China since the spread of democracy and the increasing desire for transparent governments in Central Asia could have a threatening spill over effect in Xinjiang. Democratically-influenced governments could change their foreign policies when dealing with China, giving tacit support for Uighur independence, or demanding more rights for their Muslim brothers. Such a shift could precipitate another mass migration of Han Chinese into Xinjiang, further marginalizing the Uighur population in the region. This in turn would tend to radicalize Uighur separatists. The Chinese and Kazakh government cannot secure the entire border, so insurgents could establish bases in these remote mountainous areas in much the same way that the Red Army used mountainous areas to create its Soviets in the 1930s. But on the other hand, the Chinese government fears that granting independence to Xinjiang could lead to the break up of the country, similar to the late Soviet Union.

#### A rebellion in Xinjiang causes Sino-India war

**Cohen, 2** (Stephen, Senior fellow at the Brookings Institute. “Nuclear weapons and war in South Asia: an unknowable future”, <http://www.brookings.edu/views/speeches/cohens20020501.pdf>)

A similar argument may be made with respect to China. China is a country that has had its share of upheavals in the past. While there is no expectation today of renewed internal turmoil, it is important to remember that closed authoritarian societies are subject to deep crisis in moments of sudden change. The breakup of the Soviet Union and Yugoslavia, and the turmoil that has ravaged many members of the former communist bloc are examples of what could happen to China. A severe economic crisis, rebellions in Tibet and Xinjiang, a reborn democracy movement and a party torn by factions could be the ingredients of an unstable situation. A vulnerable Chinese leadership determined to bolster its shaky position by an aggressive policy toward India or the United States or both might become involved in a major crisis with India, perhaps engage in nuclear saber-rattling. That would encourage India to adopt a stronger nuclear posture, possibly with American assistance.

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## 1ac

### 1ac

#### After the 1939 discover of nuclear energy applications, scientific research on Uranium was subordinated to military industrial priorities. A byproduct of this was dismissal of thorium as an energy source, which in turn allowed weapons manufacturing and atomic bombing

Puplava, 11 [President, Chief Investment Strategist at PFS Group,” Kirk Sorensen States Thorium a Million Times More Energy Dense than Fossil Fuels“ http://www.financialsense.com/contributors/james-j-puplava/kirk-sorensen-thorium-a-million-times-more-energy-dense-than-fossil-fuels]

Kirk: (2:14) Yeah, I’d be happy to talk about that, and forgive me for maybe getting into a little bit of history, I love history, but it helps tounderstand why these things happened**.** You know, thorium and uranium were both discovered as elements in the late 1800s. And nobody really thought there was anything special out them until Marie Curie discovered that they were radioactive. And again, nobody understood what that meant. But in 1939, as you mentioned, the process of nuclear fission was first discovered by a chemist named Otto Hahn in Germany. And it was a totally new idea that you could actually split an atom release all this energy. And because this was discovered right at the beginning of World War II the obvious question was, can we use this to make an explosive? And that was the origin of the Manhattan project. They looked at uranium and uranium has two isotopes. One of which is uranium 235 and that is naturally fissile, you don’t have to do anything to it to make it fission. So that was the beginning of one kind of effort in the Manhattan project to manufacture a weapon. And then uranium 238, which was much more common, they found that they could bombarded it with neutrons and create a new element, plutonium, that was also fissile, and you could potentially use it for a nuclear explosive. So that was another line that was taken. And then they looked to thorium and said well could we try the same technique with thorium, and found that, yes, you could bombard thorium with a neutron and create uranium 233 and it was also fissile and could potentially form explosives. But there were certain severe drawbacks in the practicality of trying to use uranium 233 as a weapon. And so the attention focused overwhelmingly on separating the uranium isotopes and on converting some of that uranium into plutonium. Those were two directions that were taken during the Manhattan Project. And they resulted in the Hiroshima bomb, which was a uranium 235 bomb and the Nagasaki bomb, which was a plutonium bomb. After the war was over, the overwhelming concern of the US Atomic Energy Commission was to replenish our stockpile of nuclear weapons, which after Nagasaki, was depleted. We didn't have any more weapons, and that was one of the biggest security secrets in the United States at that time. We had to replenish that supply and so all the effort was put into creating materials intended for weapons. And because uranium and plutonium had shown themselves to be more amenable to that type of work than thorium, the work on thorium was neglected. It was only as we moved into the ‘50s that the idea of making electrical power from nuclear energy began to take prominence, and so because the uranium plutonium technologies were more understood, and considered a safer bet, that was where the bulk of the effort in the earlier atomic power program went, was to uranium and plutonium. Although at that time there was a small and beginning effort to investigate thorium, which as in turns out, has some very superior properties when your goal is to make nuclear power rather than to make nuclear weapons.

#### The Uranium mining industry that generates feedstocks for “conventional” nuclear power and weapons alike perpetrates large-scale violence and furthers structural discrimination, including negative health effects disproportionately levied against indigenous groups. The 1ac affirms widespread calls to end Uranium mining

Brook, 98 Ph.D. in Sociology, UC Davis (Daniel, “Environmental Genocide: Native Americans and Toxic Waste,” *American Journal of Economics and Sociology*, Vol. 57, No. 1 (Jan., 1998), pp. 105-113, JSTOR, RBatra)

GENOCIDE AGAINST NATIVE AMERICANS CONTINUES in modern times with modern techniques. In the past, buffalo were slaughtered or corn crops were burned, thereby threatening local native populations; now the Earth itself is being strangled, thereby threatening all life. The government and large corporations have created toxic, lethal threats to human health. Yet, because "Native Americans live at the lowest socioeconomic level in the U.S." (Glass, n.d., 3), they are most at risk for toxic exposure. All poor people and people of color are disadvantaged, although "[flor Indians, these disadvantages are multiplied by dependence on food supplies closely tied to the land and in which [toxic] materials . . . have been shown to accumulate" (ibid.). This essay will discuss the genocide of Native Americans through environmental spoliation and native resistance to it. Although this type of genocide is not (usually) the result of a systematic plan with malicious intent to exterminate Native Americans, it is the consequence of ac-tivities that are often carried out on and near the reservations with reckless disregard for the lives of Native Americans.1

One very significant toxic threat to Native Americans comes from governmental and commercial hazardous waste sitings. Because of the severe poverty and extraordinary vulnerability of Native American tribes, their lands have been targeted by the U.S. government and the large corporations as permanent areas for much of the poisonous industrial by-products of the dominant society. "Hoping to take advantage of the devastating chronic unemployment, pervasive poverty and sovereign status of Indian Nations", according to Bradley Angel, writing for the international environmental organization Greenpeace, "the waste disposal industry and the U.S. government have embarked on an all-out effort to site incinerators, landfills, nuclear waste storage facilities and similar polluting industries on Tribal land "( Angel 1991, 1).

In fact, so enthusiastic is the United States government to dump its most dangerous waste from “the nation’s 110 commercial nuclear power plants” (ibid., 16) on the nation’s “565 federally recognized tribes” (Aug 1993, 9) that it “has solicited every Indian Tribe, offering millions of dollars if the tribe would host a nuclear waste facility” (Angel 1991, 15; emphasis added). Given the fact that Native Americans tend to be so materially poor, the money offered by the government or the corporations for this “toxic trade” is often more akin to bribery or blackmail than to payment for services rendered? In this way, the Mescalero Apache tribe in 1991, for example, became the ﬁrst tribe (or state) to ﬁle an application for a U.S. Energy Department grant “to study the feasibility of building a temporary [sic] stor- age facility for 15,000 metric tons of highly radioactive spent fuel” (Ale- wesasne Notes 1992, 11). Other Indian tribes, including the Sac, Fox, Ya- kima, Choctaw, Lower Brule Sioux, Eastem Shawnee, Ponca, Caddo, and the Skull Valley Band of Goshute, have since applied for the $100,000 exploratory grants as well (Angel 1991, 16-17).

Indeed, since so many reservations are without major sources of outside revenue, it is not surprising that some tribes have considered proposals to host toxic waste repositories on their reservations. Native Americans, like all other victimized ethnic groups, are not passive populations in the face of destruction from imperialism and paternalism. Rather, they are active agents in the making of their own history. Nearly a century and a half ago, the radical philosopher and political economist Karl Marx realized that peo- ple “make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly found, given and transmitted from the past” (Marx 1978, 595). Therefore, “[t]ribal governments considering or planning waste facilities”, asserts Margaret Crow of California Indian Legal Services, “do so for a number of reasons” (Crow 1994, 598). First, lacking exploitable sub- terranean natural resources, some tribal governments have sought to em- ploy the land itself as a resource in an attempt to fetch a ﬁnancial return. Second, since many reservations are rural and remote, other lucrative business opportunities are rarely, if ever, available to them. Third, some res- ervations are sparsely populated and therefore have surplus land for busi- ness activities. And fourth, by establishing waste facilities some tribes would be able to resolve their reservations’ own waste disposal problems while simultaneously raising much-needed revenue.

As a result, “[a] small number of tribes across the country are actively pursuing commercial hazardous and solid waste facilities”; however, “[t]he risk and beneﬁt analysis performed by most tribes has led to decisions not to engage in commercial waste management” (z'bz'a'.). Indeed, Crow reports that by “the end of 1992, there were no commercial waste facilities operating on any Indian reservations” (2'bz'd.), although the example of the Campo Band of Mission Indians provides an interesting and illuminating exception to the trend. The Campo Band undertook a “proactive approach to siting a com- mercial solid waste landﬁll and recycling facility near San Diego, California. The Band infonned and educated the native community, developed an en- vironmental regulatory infrastructure, solicited companies, required that the applicant company pay for the Band’s ﬁnancial advisors, lawyers, and solid waste industry consultants, and ultimately negotiated a favorable contract” (Haner 1994, 106). Even these extraordinary measures, however, are not enough to protect the tribal land and indigenous people from toxic exposure. Unfortunately, it is a sad but true fact that “virtually every landﬁll leaks, and every incinerator emits hundreds of toxic chemicals into the air, land and water” (Angel 1991, 3). The U.S. Environmental Protection Agency concedes that “[e]ven if the . . . protective systems work according to plan, the landﬁlls will eventually leak poisons into the environment” (ibid.). Therefore, even if these toxic waste sites are safe for the present genera- tion—a rather dubious proposition at best—they will pose an increasingly greater health and safety risk for all future generations. Native people (and others) will eventually pay the costs of these toxic pollutants with their lives, “costs to which [corporate] executives are conveniently immune” (Parker 1983, 59). In this way, private corporations are able to extemalize their costs onto the commons, thereby subsidizing their earnings at the expense of health, safety, and the environment.

Sadly, this may not be the worst environmental hazard on tribal lands. Kevin Grover and Jana Walker try “[t]o set the record straight” by claiming that “the bigger problem is not that the waste industry is beating a path to the tribal door [although it is of course doing so]. Rather, it is the unau- thorized and illegal dumping occurring on reservations. For most Indian communities the problem of open dumping on tribal lands -is of much greater concern than the remote prospect that a commercial waste disposal facility may be sited on a reservation” (Haner 1994, 107)?

There are two major categories of people who illegally dump waste on tribal land. They have been called “midnight dumpers” and “native entre- preneurs.” Midnight dumpers are corporations and people who secretly dump their wastes on reservations without the permission of tribal governments. Native entrepreneurs are tribal members who contaminate tribal land, without tribal permission, for private proﬁt or personal convenience. Both midnight dumpers and native entrepreneurs threaten Native American tribes in two signiﬁcant ways: tribal health and safety, and tribal sovereignty. First, toxic waste poses a severe health and safety risk. Some chemical agents cause leukemia and other cancers; others may lead to organ ailments, asthma, and other dysfunctions; and yet others may lead to birth defects such as anencephaly. Toxic waste accomplishes these tragic consequences through direct exposure, through the contamination of the air, land, and water, and through the bioaccumulation of toxins in both plants and animals. And because of what Ben Chavis in 1987 termed “environmental racism,” people of color (and poor people) are disproportionately affected by toxic waste. Native Americans are especially hard hit because of their ethnicity, their class, and their unique political status in the United States.

A second problem that Native Americans must confront when toxic waste is dumped on their lands is the issue of tribal sovereignty, and more speciﬁcally the loss of this sovereignty. “Native American governments re- tain all power not taken away by treaty, federal statute, or the courts. As an extension of this principle, native governments retain authority over members unless divested by the federal government” (Haner 1994, 109- 110). Jennifer Haner, a New York attorney, asserts that illegal dumping threatens tribal sovereignty because it creates the conditions that make federal government intervention on the reservations more likely (ibid., 121). The federal govemment can use the issue of illegally dumped toxic waste as a pretext to revert to past patterns of patemalism and control over Native American affairs on the reservations; Native Americans are viewed as irresponsible, the U.S. government as their savior.

Less abstract examples of threats to sovereignty include the experience of the Kaibab-Paiute Tribe. The Waste Tech Corporation “wanted to restrict the Kaibab-Paiute Tribe from having full access to their own tribal land . . . [and also wanted] the unilateral right to determine where access roads would be built, and the unilateral right to decide to take any additional land they desired” (Angel 1991, 3). Another concrete example is Waste Management, Inc.’s attempt to curtail the powers of the Campo Environ- mental Protection Agency and to dilute other tribal regulations. Amcor of- ficials at the Pine Ridge Reservation in South Dakota, as a further example, sought exemption from any environmental laws mandated for tribal lands after the contract was signed. All of these acts are threats to the sovereignty of Native American tribes and contribute to the genocidal project.

Tribal lands are detrimentally affected through other extemal and un- wanted environmental inﬂuences, as well. Indeed, “[olff-site pollution is [also] a major problem for Native Americans” (Lewis 1994, 189). There are many examples, and each one is a very signiﬁcant tragedy:

When tankers like the Exxon Valdez spill their cargoes of crude oil, they pollute thousands of miles of coastline . . . Pollutants from mining and processing plants migrate into reservation air and water. Cyanide heap-leach mining in Montana is pol- luting water on the Fort Belknap reservation. Radioactive pollution and toxic waste from the Hanford nuclear weapons plant threaten all tribes who depend on the Co- lumbia River . . . The Mdewakanton Sioux of Prairie Island, Minnesota, fear the health impacts of a nuclear power plant built on the edge of their small reservation, while the Western Shoshones protest the use of their land as a nuclear test site. Industrial waste dumps surround the St. Regis Indian Reservation, fouling the St. Lawrence River. Poorly treated urban waste and agricultural efﬂuent threatens nearby reservation en- vironments (z'bid.).

Deadly environmental threats also emanate from uranium and coal mining, U.S. military target practice and war games, spent ammunition shells, dis- cardedbatteries, and asbestos. Sadly, this is only a partial list. In fact, a survey of only 25 Indian reservations revealed “that 1200 hazardous waste generators or other hazardous waste activity sites were located on or near . . . [those] reservations selected for the survey” (Williams 1992, 282). The issue is serious, the scope is wide, and the results are disastrous.Native Americans have always altered their environment, as well as hav- ing it altered by others. The environment, like culture, is inherently dy- namic and dialectical. Native Americans “used song and ritual speech to modify their world, while physically transforming that landscape with ﬁre and water, brawn and brain. They did not passively adapt, but responded in diverse ways to adjust environments to meet their cultural as well as material desires” (Lewis 1994, 188). However, the introduction of toxic waste and other environmental hazards, such as military-related degrada- tion, have catastrophically affected the present and future health and cul- ture of Native Americans.

Yet, Native Americans and other people of color, along with poor peo- ple, women, and environmentalists, have been organizing against toxic waste and ﬁghting back against the government and the corporations. In- deed, “the intersection of race discrimination and exposure to toxic haz- ards”, according to Andrew Szasz, Professor of Sociology at the University of Califomia, Santa Cruz, “is one of the core themes of the lanti—ltoxics movement” (Szasz 1994, 151).“ In spite of the often desperate poverty of Indian tribes, “a wave of resistance has erupted among Indian people in dozens of Indian Nations in response to the onslaught of the waste industry” (Angel 1991, 5). Sporadic resistance has also developed into organized and sustained opposition. Facing the threat of a toxic waste facility on their land in Dilkon, Arizona, in 1989, the Navajo formed a group called Citizens Against Ruining our Environment, also known as CARE. CARE fought the proposed siting by educating and organizing their community, and their success inspired other similarly situated Native Americans. (CARE later merged with other Navajo groups ﬁghting for the community and the en- vironment, to create a new organization, called Dine CARE). The following year, in June 1990, CARE hosted a conference in Dilkon called “Protecting Mother Earth: The Toxic Threat to Indian Land”, which brought together “over 200 Indian delegates from 25 tribes throughout North America” (ibid.).

The following year’s conference in South Dakota included “[o]ver 500 Indigenous delegates from 57 tribes” (z'bz'd., 6). It was at this second annual conference that the delegates created the Indigenous Environmental Net- work. The IEN states that it is “an alliance of grass roots peoples whose mission is to strengthen, maintain, protect and respect the traditional teach-ings, lifestyles and spiritual interdependence to the sacredness of Mother Earth and the natural laws” (Aug 1993, 7). This is wholly in concert with “the most enduring characteristic of American Indians throughout the his- tory of the continent: the ability to incorporate technological, natural, and social changes while maintaining cultural continuity” (Crow 1994, 593). Therein lies the natural afﬁnity between Indian opposition to toxic waste and the broader environmental justice movement. “Environmental justice,” according to the journal of the Citizens’ Clearinghouse for Hazardous Waste, Everyoneis Backyard, “is a people-oriented way of addressing ‘en- vironmentalism’ that adds a vital social, economic and political element . . . When we ﬁght for environmental justice, we ﬁght for our homes and families and struggle to end economic, social and political domination by the strong and greedy” (Szasz 1994, 152-153).

Fighting for environmental justice is a form of self-defense for Native Americans. As the Report of Women of All Red Nations declared, “To con- taminate Indian water is an act of war more subtle than military aggression, yet no less deadly . . . Water is life” (February 1980, in Collins Bay Action Group 1985, 4). Toxic pollution—coupled with the facts of environmental racism, pervasive poverty, and the unique status of Native Americans in the United States—“really is a matter of GENOCIDE. The Indigenous peo- ple were colonized and forced onto reservations . . . [Native Americans are] poisoned on the job. Or poisoned in the home . . . Or forced to re- locate so that the land rip—offs can proceed without hitch. Water is life but the corporations are killing it. It's a genocide of all the environment and all species of creatures” (Bend 1985, 25; emphasis in original). In effect, toxic pollution is a genocide through geocide, that is, a killing of the people through a killing of the Earth.

Environmental threats are, unfortunately, not new. In the mid-1800s, Chief Seattle of the Suquamish tribe reportedly stated that “[t]he Earth does not belong to [human beings]; [hurnansl belong to the Earth. This we know. All things are connected like the blood which unites one family. All things are connected. Whatever befalls the Earth befalls the [children] of the Earth. [Human beings] did not weave the web of life; [they are] merely a strand in it. Whatever [they do] to the web, [they do to themselvesl” (Chief Seattle 1987, 7). In this vein, genocide is ultimately also suicide.

Five hundred years after the commencement of colonialism and geno- cide, “the exploitation and assault on Indigenous people and their land continues. Instead of conquistadors armed with weapons of destruction and war, the new assault is disguised as ‘economic development’ promoted by entrepreneurs pushing poisonous technologies. The modem-day invad- ers from the waste disposal industry promise huge amounts of money, make vague promises about jobs, and make exaggerated and often false claims about the alleged safety of their dangerous proposals” (Angel 1991, 1). Yet, also 500 years later, Native Americans are still resisting the on- slaught and are still (re)creating themselves and their cultures. And increas- ingly, Native Americans are better organized and more united than ever in their struggle against environmental racism and for environmental justice.

#### And, nuclear reactors are an important both locally and in terms of potential responses. The anti-nuclear movement in large part has been fueled by attempts to rectify identifiable injustices. Our position within this both in terms of speaking from several unique perspectives influenced by privilege and our interest in change to the situation is preferable to fatalism

Ogley-Oliver, 12 [8-7-2012, “Development of Activism: The Elders of the Antinuclear¶ Movement” Emma JF, GSU Psychology Dissertation, http://digitalarchive.gsu.edu/cgi/viewcontent.cgi?article=1104&context=psych\_diss]

Social and Environmental Injustices According to the NRC (2010), the vast majority of¶ new reactors are proposed for the southeastern U.S. Many of these locales (like Waynesboro,¶ Georgia) tend to be poor communities of color that are economically dependent upon the nuclear¶ industry and already disproportionately burdened with radioactive and other toxic wastes¶ (Alldred & Schrader-Frechette, 2009; Bullard, 1990; Culley & Angelique, 2011). Environmental¶ injustices associated with the nuclear industry are pervasive, particularly related to the¶ contamination of Native American lands due to uranium mining, processing, and waste disposal¶ (Churchill & LaDuke, 1983; Pasternak, 2010).¶ Alldred and Shrader-Frechette (2009) highlighted historical injustices related to the¶ nuclear industry stating the public health risks largely affecting indigenous peoples and poor¶ communities of color. For example, public health information about uranium was not widely¶ disseminated among Navajo uranium miners (Dawson, 1992; Pasternak, 2010) and thus Navajo¶ people only organized in protest after 1973, once miners and others living near mining and¶ enrichment sites developed cancer (Brugge & Goble, 2002). It appears that uranium mining and¶ related processes had a negative affect primarily on indigenous people in the U.S., due to lack of¶ alternative employment (Brugge & Goble, 2002) and the fact that the majority (70%) of uranium¶ is located on native lands (World Information Service on Energy (WISE), 2006). Furthermore,¶ since existing nuclear reactors are predominantly located in poor communities, this can lead to¶ radiation exposures above daily permissible levels outlined by federal environmental and public¶ health officials (Alldred & Schrader-Frechette, 2009). Taken together, these examples document¶ 6¶ on-going social and environmental injustices associated with the nuclear industry (Alldred &¶ Schrader-Frechette, 2009; Bullard & Johnson, 2000; Culley & Angelique, 2011; Ogley-Oliver,¶ Zorland, & Culley, 2007; Pasternak, 2010). These social and environmental injustices are further¶ delineated when the entire scope of social costs of the nuclear industry is considered.¶ Social Costs of the Nuclear Industry Since the inception of the nuclear industry, scholars¶ have documented numerous social costs that have driven the anti-nuclear movement. Social costs¶ include those related to human health such as cancer (Aamodt, 1984; Boice, Cohen, Mumma,¶ Chadda, & Blot, 2008; Gilliland, Hunt, Pardilla, & Key, 2000; Wing, Richardson, Armstrong, &¶ Crawford-Brown, 1997), leukemia (Spix, Schmiedel, Kaatsch, Schulze-Rath, & Blettner, 2008),¶ birth defects (Johnson & Rouleau, 1991), and psychological stress (Fleming, Baum, Gisriel,¶ Gatchel, 1982; Cleary & Houts, 1984; Culley, 1998; Culley & Angelique, 2003; Prince-Embury¶ & Rooney, 1987a; Prince-Embury & Rooney, 1987b). Environmental costs include air, water,¶ and soil pollution (Georgia Department of Environmental Protection Division, 2004). Additional¶ social costs include a history of economic problems in part due to construction cost overruns,¶ reliance on public funding, and the lack of private insurance for the nuclear industry, which is¶ wholly funded by taxpayers as outlined in the Price Anderson Limited Liability Act (Culley &¶ Angelique, 2011; Culley & Angelique, 2010). The magnitude of negative outcomes associated¶ with the nuclear industry has fueled the anti-nuclear movement for over 70 years.¶ Past and current work of the anti-nuclear movement reflects efforts conducted by other¶ social movements seeking to rectify social and environmental injustices. Individual activists¶ make up the core of social movements (Stern, Dietz, Abel, Guagnano, & Kalof, 1999) as those¶ who ultimately strive to promote democracy (Giddens, 1985) and gain control over political authorities (Tilly, 1985) via collective social action.

#### And, voting aff increases the priority of addressing consequences of Uranium production—we take a stance that at minimum brings to light that some of that ongoing violence and identifies it as more important than WMD themselves

Indian Country Today 06—reviewing a book, “The Navajo People and Uranium Mining,” edited by Doug Brugge, Timothy Benally and Esther Yazzie-Lewis (11/29/2006, Navajo Nation battles yellow ‘monster’, http://indiancountrytodaymedianetwork.com/ictarchives/2006/11/29/navajo-nation-battles-yellow-%E2%80%98monster%E2%80%99-129124, RBatra)

These days we speak of weapons of mass destruction without truly considering the historical weight of those words. The phrase is bandied about by talking heads without an ounce of emotion or regret. That the United States is trying to halt the proliferation of nuclear programs for the sake of preventing mass casualties by terrorist attack, while maneuvering constantly to maintain its status as a world superpower, is ironic. The earthly material used to transform the United States into the world’s most powerful political and military force, uranium, has proven just as massively destructive as the nuclear weapons it spawned.

A new book, “The Navajo People and Uranium Mining,” edited by Doug Brugge, Timothy Benally and Esther Yazzie-Lewis, is the documented history of the forgotten victims of America’s Cold War, according to Navajo Nation President Joe Shirley Jr. Generations of indigenous people living and breathing on Navajo land have suffered the deadly effects of uranium mining, without compassion or just compensation from the federal government. Shirley described the uranium mining era as genocide. “There is no other word for what happened to Navajo uranium miners,” he said.

Leetso, “yellow dirt” in Dine’, is found throughout Navajoland. A map of mining areas shows a dozen mines in Navajo alone, and a few others in the vast outlying territory. As in countless stories of the exploitation of indigenous resources, the Navajo and Hopi people were the last to know the true effects of their mining efforts.

The Dine’ are people with the utmost respect for the ground on which they live. The world’s largest deep uranium mine is at the foot of Tsoodzil, the Navajo sacred mountain of the south. Imagine the spiritual loss for a people whose ancient ways tell them it is disrespectful to dig into the Earth with steel tools or machinery. The miners themselves suffered often fatal radiation-related diseases and dangerous threats to their way of life as Dine’. These are the primary handlers of the uranium; countless secondary victims live today in communities wasted by invisible radiation exposure that runs deadly through families, hogans and playgrounds. Even the wind itself blows radioactive dust throughout the land. The result, lamented Shirley, has “cost the Navajo Nation the accumulated wisdom, knowledge, stories, songs and ceremonies of hundreds of our people.”

Victims of radiation poisoning and their descendants have received very little federal compensation. The 1990 Radiation Exposure Compensation Act was initially drafted to address concerns of non-Native miners. They received some 80 percent of $300 million. Native miners and their families received 12 percent, or roughly $4 million. A quick look at the RECA compensation guidelines gives one the scope of the physical effects of radiation exposure. Eligible claimants can be compensated for leukemia, lymphomas and chronic renal disease, as well as a host of “primary” cancers affecting the brain, thyroid, lung, colon and ovary, among many others. The guidelines provide for “compassionate” compensation, to exact dollar amounts, for eligible claimants.

Many Navajo claims were denied, deemed ineligible for failure to produce a birth date or birth certificate. According to Navajo Nation communications, Shirley acknowledged this bureaucratic challenge at an update in September. He told the elderly miners, “Many of you were born at home in a hogan and didn’t receive a piece of paper with this information on it. Our mothers gave birth to us holding on to a sash belt and we remember a specific season, not a date and time.”

Again, we find Indian people faced with somewhat irrelevant questions of citizenship and worthiness in their search for justice and restitution. Whatever compensation is provided by RECA, it will never amend the destruction caused to the fabric of Navajo lifeways. Death and disease can be documented; social collapse over the course of generations is more difficult to record. The discovery and mining of uranium produced more than atomic energy for the power-hungry United States. Boomtowns rose out of sacred lands, creating an entirely new socioeconomic dynamic that was alien to the traditional Navajo way of life. The mining industry has polluted bodies and minds, water and soil. There has been no just compensation for Indian peoples affected by leetso.

These issues became a priority when the Navajo Nation Council passed the Dine’ Natural Resources Protection Act of 2005. This law prohibits uranium mining and processing throughout Navajo country. However, there is a looming threat to Navajo sovereignty, as the market price for uranium has taken a sharp upward turn in the last two years amid widespread talk of alternative energy production. Already speculators are seeking state and federal permission to reopen mines that, although government-controlled, are situated on Navajo territory.

Avoiding “a repeat of one of the most sorrowful periods in the Navajo Nation’s history” will be the focus of its Indigenous World Uranium Summit. The nation expects international guests, other Indian tribes and federal legislators at the gathering, which begins Nov. 30 in Window Rock, Ariz. Speaking in holistic terms about their effort to prevent future uranium mining, the Navajo have on their agenda a range of topics from the legacy of mining, community health studies and traditional cultural teachings, to market forces affecting the new uranium boom and sustainable development of alternative energy sources.

The Navajo grass-roots campaign to stop uranium mining has reached the height of a world summit. Exploitation of indigenous resources and the destruction of people and communities can no longer be considered collateral damage by those seeking enriching economic opportunities. We commend the Navajo Nation for telling its story so effectively, and for its resolve in keeping its future generations safe from harm.

#### Alternatives are important—thorium is a useful one

**Clark, 09** [Thorium nuclear power Switching from uranium to thorium as our primarily nuclear fuel could lead to cheaper, safer and more sustainable nuclear power, The Guardian, <http://www.guardian.co.uk/environment/2009/jul/13/manchester-report-nuclear>]

The uranium that makes conventional nuclear power possible has a number of significant disadvantages. For one thing, uranium reactors generate large quantities of waste. Much of this remains dangerous for thousands of years, and a proportion of it can be used to produce weapons-grade plutonium. A second issue is that uranium is a comparatively scarce material, which exists in significant quantities in only a small number of countries. The theoretical risk of giant explosions caused by uranium reactors is a further concern. For all of these reasons, a growing number of scientists and energy experts believe that the world should switch from uranium to thorium as its primary nuclear fuel. Compared to uranium, thorium is far more abundant as well as much more energy-dense. In addition, the waste products generated by thorium are virtually impossible to turn into plutonium – and they remain dangerous for hundred of years rather than thousands. There are a number of different ways to use thorium to produce electricity. In Manchester, Kirk Sorensen made the case for liquid-fluoride reactors. This technology was developed by the US military in the 1950s and 1960s and was shown to have many benefits. For example, reactors of this type can be smaller than conventional uranium reactors, partly thanks to their low-pressure operation. Despite its early promise, research into liquid-fluoride thorium reactors was abandoned – the most likely reason being that the technology offered no potential for producing nuclear weapons. Sorensen estimates that between 5,000-6,000 tonnes of thorium could produce as much energy as the world currently consumes each year.

#### This is especially true in terms of mining

Barton, ‘9 [Charles, retired counselor, writes for Energy From Thorium, “The Liquid Fluoride Thorium Paradigm,” http://www.theoildrum.com/node/4971/]

LFTR(s) are 100-300 times more fuel efficient than LWRs. In addition to solving the nuclear waste problem, they can operate for several centuries using only uranium and thorium that has already been mined. Thus they eliminate the criticism that mining for nuclear fuel will use fossil fuels and add to the greenhouse effect.

#### And, eliminating nuclear power doesn’t solve – only thorium deals with existing uranium and stockpiles

Rhodes, 12 [February, Professor Chris Rhodes is a writer and researcher. He studied chemistry at Sussex University, earning both a B.Sc and a Doctoral degree (D.Phil.); rising to become the youngest professor of physical chemistry in the U.K. at the age of 34. A prolific author, Chris has published more than 400 research and popular science articles (some in national newspapers: The Independent and The Daily Telegraph) He has recently published his first novel, "University Shambles" was published in April 2009 (Melrose Books), “Hopes Build for Thorium Nuclear Energy”, <http://oilprice.com/Alternative-Energy/Nuclear-Power/Hopes-Build-for-Thorium-Nuclear-Energy.html>]

There is much written to the effect that thorium might prove a more viable nuclear fuel, and an energy industry based upon it, than the current uranium-based process which serves to provide both energy and weapons - including "depleted uranium" for armaments and missiles. There are different ways in which energy might be extracted from thorium, one of which is the accelerator-driven system (ADS). Such accelerators need massive amounts of electricity to run them, as all particle accelerators do, but these are required to produce a beam of protons of such intensity that until 10 years ago the prevailing technology meant that it could not have been done. As noted below, an alternative means to use thorium as a fuel is in a liquid fluoride reactor (LFR), also termed a molten salt reactor, which avoids the use of solid oxide nuclear fuels. Indeed, China has made the decision to develop an LFR-based thorium-power programme, to be active by 2020.¶ Rather like nuclear fusion, the working ADS technology is some way off, and may never happen, although Professor Egil Lillestol of Bergen University in Norway is pushing that the world should use thorium in such ADS reactors. Using thorium as a nuclear fuel is a laudable idea, as is amply demonstrated in the blog "Energy from Thorium" (http://thoriumenergy.blogspot.com/). However, the European Union has pulled the plug on funding for the thorium ADS programme, which was directed by Professor Carlo Rubbia, the Nobel Prize winner, who has now abandoned his efforts to press forward the programme, and instead concentrated on solar energy, which was another of his activities. Rubbia had appointed Lillestol as leader of the CERN physics division over two decades ago, in 1989, who believes that the cause is not lost.¶ Thorium has many advantages, not the least being its greater abundance than uranium. It is often quoted that there is three times as much thorium as there is uranium. Uranium is around 2 - 3 parts per million in abundance in most soils, and this proportion rises especially where phosphate rocks are present, to anywhere between 50 and 1000 ppm. This is still only in the range 0.005% - 0.1% and so even the best soils are not obvious places to look for uranium. However, somewhere around 6 ppm as an average for thorium in the Earth's crust is a reasonable estimate. There are thorium mineral deposits that contain up to 12% of the element, located at the following tonnages in Turkey (380,000), Australia (300,000), India (290,000), Canada and the US combined (260,000)... and Norway (170,000), perhaps explaining part of Lillestol's enthusiasm for thorium based nuclear power. Indeed, Norway is very well endowed with natural fuel resources, including gas, oil, coal, and it would appear, thorium.¶ An alternative technology to the ADS is the "Liquid Fluoride Reactor" (LFR), which is described and discussed in considerable detail on the http://thoriumenergy.blogspot.com/ blog, and reading this has convinced me that the LFR may provide the best means to achieve our future nuclear energy programme. Thorium exists naturally as thorium-232, which is not of itself a viable nuclear fuel. However, by absorption of relatively low energy "slow" neutrons, it is converted to protactinium 233, which must be removed from the reactor (otherwise it absorbs another neutron and becomes protactinium 234) and allowed to decay over about 28 days to uranium 233, which is fissile, and can be returned to the reactor as a fuel, and to breed more uranium 233 from thorium. The "breeding" cycle can be kicked-off using plutonium say, to provide the initial supply of neutrons, and indeed the LFR would be a useful way of disposing of weapons grade plutonium and uranium from the world's stockpiles while converting it into useful energy.¶ The LFR makes in-situ reprocessing possible, much more easily than is the case for solid-fuel based reactors. I believe there have been two working LFR's to date, and if implemented, the technology would avoid using uranium-plutonium fast breeder reactors, which need high energy "fast" neutrons to convert uranium 238 which is not fissile to plutonium 239 which is. The LFR is inherently safer and does not require liquid sodium as a coolant, while it also avoids the risk of plutonium getting into the hands of terrorists. It is worth noting that while uranium 235 and plutonium 239 could be shielded to avoid detection as a "bomb in a suitcase", uranium 233 could not, because it is always contaminated with uranium 232, which is a strong gamma-ray emitter, and is far less easily concealed.¶ It has been claimed that thorium produces "250 times more energy per unit of weight" than uranium. Now this isn't simply a "logs versus coal on the fire" kind of argument, but presumably refers to the fact that while essentially all the thorium can be used as a fuel, the uranium must be enriched in uranium 235, the rest being "thrown away" and hence wasted as "depleted" uranium 238 (unless it is bred into plutonium). If both the thorium and uranium were used to breed uranium 233 or plutonium 239, then presumably their relative "heat output" weight for weight should be about the same as final fission fuels? If this is wrong, will someone please explain this to me as I should be interested to know?¶ However, allowing that the LFR in-situ reprocessing is a far easier and less dangerous procedure, the simple sums are that contained in 248 million tonnes of natural uranium, available as a reserve, are 1.79 million tonnes of uranium 235 + 246.2 million tonnes of uranium 238. Hence by enrichment 35 million tonnes (Mt) of uranium containing 3.2% uranium 235 (from the original 0.71%) are obtained. This "enriched fraction" would contain 1.12 Mt of (235) + 33.88 Mt of (238), leaving in the other "depleted" fraction 248 - 35 Mt = 213 Mt of the original 248 Mt, and containing 0.67 Mt (235) + 212.3 Mt (238). Thus we have accessed 1.79 - 0.67 = 1.12 Mt of (235) = 1.12/224 = 4.52 x 10\*-3 or 0.452% of the original total uranium. Thus on a relative basis thorium (assuming 100% of it can be used) is 100/0.452 = 221 times as good weight for weight, which is close to the figure claimed, and a small variation in enrichment to a slightly higher level as is sometimes done probably would get us to an advantage factor of 250!¶ Plutonium is a by-product of normal operation of a uranium-fuelled fission reactor. 95 to 97% of the fuel in the reactor is uranium 238. Some of this uranium is converted to plutonium 239 and plutonium 241 - usually about 1000 kg forms after a year of operation. At the end of the cycle (a year to 2 years, typically), very little uranium 235 is left and about 30% of the power produced by the reactor actually comes from plutonium. Hence a degree of "breeding" happens intrinsically and so the practical advantage of uranium raises its head from 1/250 (accepting that figure) to 1/192, which still weighs enormously in favour of thorium!¶ As a rough estimate, 1.4 million tonnes of thorium (about one third the world uranium claimed, which is enough to last another 50 years as a fission fuel) would keep us going for about 200/3 x 50 = 3,333 years. Even if we were to produce all the world's electricity from nuclear that is currently produced using fossil fuels (which would certainly cut our CO2 emissions), we would be O.K. for 3,333/4 = 833 years. More thorium would doubtless be found if it were looked for, and so the basic raw material is not at issue. Being more abundant in most deposits than uranium, its extraction would place less pressure on other fossil fuel resources used for mining and extracting it. Indeed, thorium-electricity could be piped in for that purpose.¶ It all sounds great: however, the infrastructure would be huge to switch over entirely to thorium, as it would to switch to anything else including hydrogen and biofuels. It is this that is the huge mountain of resistance there will be to all kinds of new technology. My belief is that through cuts in energy use following post peak oil (and peak gas), we may be able to produce liquid fuels from coal, possibly using electricity produced from thorium, Thorium produces less of a nuclear waste problem finally, since fewer actinides result from the thorium fuel cycle than that from uranium. Renewables should be implemented wherever possible too, in the final energy mix that will be the fulcrum on which the survival of human civilization is poised.

#### This response includes the following: The United States Federal Government should require retrofitting for liquid fluoride thorium reactor production.

#### Laws are on the books now that ensure the preservation of status quo technology –Thorium is the best way to replace that

MIT, 10 [Massachusetts Institute of Technology, “Nuclear Energy Research and Development Roadmap: Report to Congress”, April 2010, http://ocw.mit.edu/courses/nuclear-engineering/22-033-nuclear-systems-design-project-fall-2011/readings/MIT22\_033F11\_read\_core\_doe.pdf]

In the United States, it is the responsibility of industry to design, construct, and operate commercial nuclear power plants. However, DOE has statutory authority under the Atomic Energy Act to promote and support nuclear energy technologies for commercial applications. In general, appropriate government roles include researching high-potential technologies beyond the investment horizon of industry and also reducing the technical risks of new technologies. In the case of new commercial reactor designs, potential areas of NE involvement could include: Enabling new technologies to be inserted into emerging and future designs by providing access to unique laboratory resources for new technology development and, where appropriate, demonstration. • Working through the laboratories and universities to provide unique expertise and facilities to industry for R&D in the areas of: o Innovative concepts and advanced technologies. o Fundamental phenomena and performance data. o Advanced modeling and simulation capabilities. APRIL 2010 22 34 NUCLEAR ENERGY RESEARCH AND DEVELOPMENT ROADMAP o New technology testing and, if appropriate, demonstration. o Advanced manufacturing methods. Representative R&D activities that support each of the roles stated above are presented below. The level of DOE investment relative to industry investment will vary across the spectrum of these activities, with a generally increasing trend in DOE investment for longer-term activities. Finally, there is potential to leverage and amplify effective U.S. R&D through collaborations with other nations through multilateral and bilateral agreements including the Generation IV International Forum, which is investigating multiple advanced reactor concepts. DOE is also a participant in OECD/NEA and IAEA initiatives that bear directly on the development and deployment of new reactor systems.

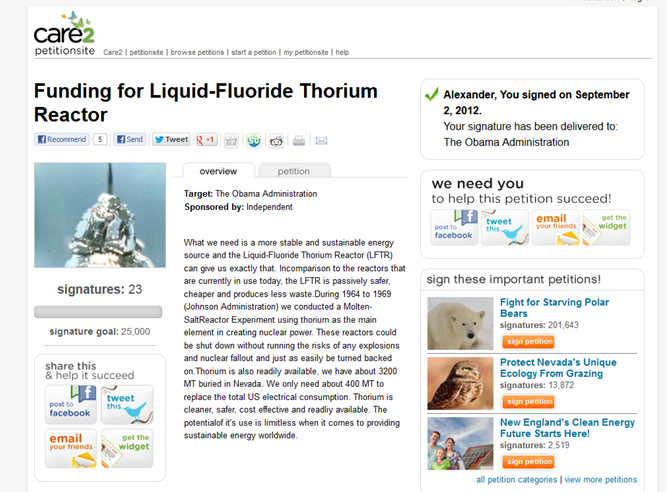
#### Increased understanding of Thorium is useful as a response to narratives that mischaracterize it as useless or comparatively dangerous

Barzowski, 12 [April, Samantha, University of Pittsburgh Department of Mechanical Engineering “THORIUM REACTORS AS AN ALTERNATIVE ENERGY SOURCE”, http://136.142.82.187/eng12/history/spring2012/pdf/2145.pdf]

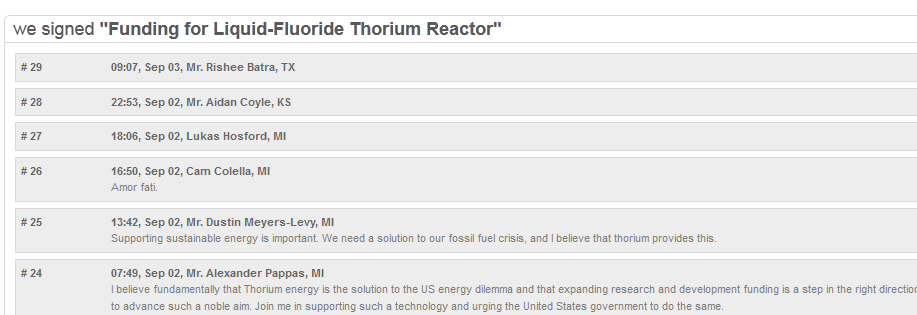
The United States government and the public need to be educated about thorium energy, especially the fact that thorium reactors are much safer than the existing nuclear reactors. The biggest fear the public has about nuclear energy is a nuclear meltdown. As discussed in the sections above, thorium reactors have a self-shutdown system, and have a considerably lesser chance of meltdown than uranium reactors. The waste from liquid fluoride thorium reactors is less likely to be turned into bombs, is less in quantity and takes a shorter period of time to decompose. Also, by realizing that uranium reactors pose a threat to the surrounding civilians and environment in the event of a nuclear meltdown, and that LFTRs are meltdown proof, then the United States government may consider that option of building reactors that run on thorium.

#### And, we believe that we can use our voices as college students to let others know about the change we would like to see in our government – we will insert into the debate a record of our signature of a petition directly to the President

<http://www.thepetitionsite.com/2/Green-Energy/>



And, here is another screen shot



#### And, we aren’t naïve enough to think that signing a single petition will radically alter politics, but it does have a profound and transformational effect on how Pappas and I view the debate space

Coventry, 12 [John, Director of Communications, Change.org, A Branson Pickle - Can Online Petitions Shape Democracy?, http://www.huffingtonpost.co.uk/john-coventry/a-branson-pickle-can-onli\_b\_1842181.html]

As of today, around 165,000 people have signed it. A very quick search throws up over 2,000 bits of media coverage about it. One of the great social injustices of our time? Nope. Richard Branson's lost the franchise for the West Coast Main Line rail service. Despite the huge outpouring of public devotion to Virgin Trains, it looks rather like the Government will press on with plans to give First Group the contract. So this must prove, once and for all, that online petitions don't work right? Wrong. Ask Richard Branson. He didn't set up the petition on Government's own e-petition site but he's certainly scored hundreds of thousands of pounds worth of free media coverage with passengers telling the world how brilliant his company is. The pressure's on the Government here, and not least because they tell the punters that if 100,000 people sign a petition, this 'triggers' a debate in parliament. This isn't strictly speaking the case - but more on that in a bit. [On Radio Five Live on Tuesday night](http://www.bbc.co.uk/i/b01m6cm2/), (about 40 mins in) they had a discussion about online petitions. The debate went thus: Politicians don't listen, there's no intellectual rigour to it, and back in my day we stood out in the pouring rain and got signatures on a clipboard. THAT WAS PROPER CAMPAIGNING MY LAD - WHEN MEN WERE MEN AND... you get the picture. Then comes the usual but baffling line: "people just click sign and never think of it again." This perceived disengagement from the issue at hand is known by the cynical as 'clicktivism'. It does make me think though - when people used to sign petitions on a clipboard, in the pouring rain, when men where men etc - did anyone call that 'pen-tivsm' and bemoan the fact that people weren't using quills any more? People engage with issues on different levels. Some man the barricades, some click 'like' on Facebook. But to say that something's less valuable because it's on the internet - the world's most powerful communication tool - is nonsense. To say there's no intellectual debate or discussion about them is just plain wrong - have you read twitter? Seen comment threads on Facebook? Blogs online news sites? Debate is everywhere, more than it ever has been. So do they work? Jayne Linney thinks they do. After weeks of frustration that villain-du-jour ATOS wouldn't record her disability assessment she started a campaign on Change.org to get them to change their mind. It got just over 1,000 signatures - then MPs got involved and a bona fide campaign broke out. She won it. Ask Derek Macabrey. Flabbergasted at plans by Newtownabbey council to build a huge cemetery opposite a childrens hospice, he launched a petition on Change.org. More than 6,000 people backed it. [The council is now looking for an alternative site](http://www.huffingtonpost.co.uk/john-coventry/The%20council%20is%20now%20looking%20for%20an%20alternative%20site). There are hundreds if not thousands of these kinds of victories all over the world. Do politicians listen? Well they listened to the half a million people who signed the 38 Degrees petition for a u-turn on forest privatisation last year. This campaign is a show-stopping example of the power of the petition to inspire debate, offline political engagement and well rounded campaigns that now mean our forests wont be provided in partnership with McDonalds. As for the Government's site - if they don't have a commons debate on the West Coast Mainline issue people might, understandably, ask what the point of it is. The debate 'trigger' is the big selling point of the Government's site and while it's a great thing to have such an accessible tool for citizens to engage with government if it doesn't do what it says it claims to do then that's a problem. Thousands who may have never engaged in an issue in this way are looking to see whether the Government is actually listening to them. Signing a petition is not a silver bullet for challenging those in power. But building movements of people is certainly a huge part of it. And what's even more important at a time when people are almost entirely sceptical of politics and politicians, is that it's putting power in the hands of the people - and that's what real change is all about.

#### And, we fully acknowledge that the government has hardly been a just actor, while researching our aff we came across a proposal that demonstrates some of the flaws of the current political process – Senator Orrin hatch of Utah has simultaneously supported uranium mining and Thorium expansion – we think that he epitomizes what happens when politics goes wrong. When people are no longer vigilant and we accept every tenant of the conventional political process then progressive change can’t happen – conventional politics shouldn’t be the barometer by which you make a determination about the plans effect – don’t tie us to a wholesale defense of the establishment, but ask yourself could the establishment do some good in this case? We think the answer to that question is undoubtedly yes. Disingenuous politics can and do exist, but voting aff is the first step in changing that process the question of what the federal government should do is important – we cannot reduce decision making to utilitarian exercises – the process of deliberating about what might be possible makes the process more intelligent and creates the possibility for us to actively engage with external venues for action

**Hanghoj, 08** [Thorkild Hanghøj, Copenhagen, 2008 , PhD project, University of Aarhus, an assistant professor., http://static.sdu.dk/mediafiles/Files/Information\_til/Studerende\_ved\_SDU/Din\_uddannelse/phd\_hum/afhandlinger/2009/ThorkilHanghoej.pdf]

Joas’ re-interpretation of Dewey’s pragmatism as a “theory of situated creativity” raises a critique of humans as purely rational agents that navigate instrumentally through meansendsschemes (Joas, 1996: 133f). This critique is particularly important when trying to understand how games are enacted and validated within the realm of educational institutions that *by definition* are inscribed in the great modernistic narrative of “progress” where nation states, teachers and parents expect students to acquire specific skills and competencies (Popkewitz, 1998; cf. chapter 3). However, as Dewey argues, the actual *doings* of educational gaming cannot be reduced to rational means-ends schemes. Instead, the situated interaction between teachers, students, and learning resources are played out as contingent re-distributions of means, ends and ends in view, which often make classroom contexts seem “messy” from an outsider’s perspective (Barab & Squire, 2004). 4.2.3. Dramatic rehearsalThe two preceding sections discussed how Dewey views play as an imaginative activity of educational value, and how his assumptions on creativity and playful actions represent a critique of rational means-end schemes. For now, I will turn to Dewey’s concept of *dramatic rehearsal*, which assumes that social actors deliberate by projecting and choosing between various scenarios for future action. Dewey uses the concept dramatic rehearsal several times in his work but presents the most extensive elaboration in *Human Nature and Conduct*: Deliberation is a dramatic rehearsal (**in imagination**) of various competing possible lines of action… [It] is an experiment in finding out what the various lines of possible action are really like (...) Thought runs ahead and foresees outcomes, and thereby avoids having to await the instruction of actual failure and disaster. An act overtly tried out is irrevocable, its consequences cannot be blotted out. An act tried out in imagination is not final or fatal. It is retrievable (Dewey, 1922: 132-3). 86 This excerpt illustrates how Dewey views the process of decision making (deliberation) through the lens of an imaginative *drama* metaphor. Thus, decisions are made through the imaginative projection of outcomes, where the “possible competing lines of action” are resolved through a thought experiment. Moreover, Dewey’s compelling use of the drama metaphor also implies that decisions cannot be reduced to utilitarian, rational or mechanical exercises, but that they have emotional, creative and personal qualities as well. Interestingly, there are relatively few discussions within the vast research literature on Dewey of his concept of dramatic rehearsal. A notable exception is the phenomenologist Alfred Schütz, who praises Dewey’s concept as a “fortunate image” for understanding everyday rationality (Schütz, 1943: 140). Other attempts are primarily related to overall discussions on moral or ethical deliberation (Caspary, 1991, 2000, 2006; Fesmire, 1995, 2003; Rönssön, 2003; McVea, 2006). As Fesmire points out, dramatic rehearsal is intended to describe an important *phase* of deliberation that does not characterise the whole process of making moral decisions, which includes “duties and contractual obligations, short and long-term consequences, traits of character to be affected, and rights” (Fesmire, 2003: 70). Instead, dramatic rehearsal should be seen as the *process* of “crystallizing possibilities and transforming them into directive hypotheses” (Fesmire, 2003: 70). Thus, deliberation can in no way guarantee that the response of a “thought experiment” will be successful. But what it can do is make the process of choosing **more intelligent** than would be the case with “blind” trial-and-error (Biesta, 2006: 8). The notion of dramatic rehearsal provides a valuable perspective for understanding educational gaming as a simultaneously *real* and *imagined* inquiry into domain-specific scenarios. Dewey defines dramatic rehearsal as the capacity to stage and evaluate “acts”, which implies an “irrevocable” difference between acts that are “tried out in imagination” and acts that are “overtly tried out” with real-life consequences (Dewey, 1922: 132-3). This description shares obvious similarities with games as they require participants to inquire into and **resolve scenario-specific problems** (cf. chapter 2). On the other hand, there is also a striking difference between moral deliberation and educational game activities in terms of the actual *consequences* that follow particular actions. Thus, when it comes to educational games, acts are both imagined and tried out, but *without* all the real-life consequences of the practices, knowledge forms and outcomes that are being simulated in the game world. Simply put, there is a difference in *realism* between the dramatic rehearsals of everyday life and in games, which only “play at” or simulate the stakes and 87 risks that characterise the “serious” nature of moral deliberation, i.e. a real-life politician trying to win a parliamentary election experiences more personal and emotional risk than students trying to win the election scenario of *The Power Game*. At the same time, the lack of real-life consequences in educational games makes it possible to design a relatively safe learning environment, where teachers can *stage* particular game scenarios to be enacted and validated for *educational purposes*. In this sense, educational games are able to provide a safe but meaningful way of letting teachers and students make mistakes (e.g. by giving a poor political presentation) and dramatically rehearse particular “competing possible lines of action” that are *relevant* to particular educational goals (Dewey, 1922: 132). Seen from this pragmatist perspective, the educational value of games is not so much a question of learning facts or giving the “right” answers, but more a question of exploring the contingent outcomes and domain-specific processes of problem-based scenarios.

#### And, voting neg is a vote to keep harmful laws on the books – when faced with the choice of keeping crack cocaine sentencing laws, the Jim Crowe laws, Plessy v. Ferguson, the 3/5ths clause and a host of other harmful policies we should stand resolved against them –refusing to participate in governmental action is worse for everyone -- the way that revolutions and insurrections are successful is by having actions come after them.

APA, 04 [American Democracy in an Age of Rising Inequality, American Political Science Association, http://www.apsanet.org/imgtest/taskforcereport.pdf]

What government does not do is just as important as what it does.35 What our government does these days is especially responsive to the values and interests of the most privileged Americans. Harder to pin down is the effect of disparities of influence on what government fails to do. Through much of U.S. history, our government has responded to the life circumstances of ordinary Americans by enacting major policies to spread opportunities and provide security to millions of individuals and families. Public education, Social Security and Medicare, the G.I. Bill, home-mortgage programs, certain farm programs, and many other efforts have **enhanced the quality of life for millions** of regular Americans.

What is particularly relevant for understanding political inequality in America today is that many these broadly inclusive government programs also encouraged ordinary citizens to become more active participants in our democracy — they helped equalize the voice of citizens in the halls of government. The United States pioneered schooling for all, spending about as much or more than many advanced industrialized countries. Promotion of education has helped to open the door to opportunity for students who work hard, to propel the country’s economy, and to lower economic disparities. It has also boosted participation in volunteer organizations and democratic life. In higher education, the G.I. Bill extended generous assistance to attend universities, community colleges, and vocational schools for millions of veterans of World War II and the Korean War.36 Since the 1970s, federal programs like the Pell Grants and state initiatives have allowed millions of lower- and middle-income students to pursue post-secondary schooling.

Similarly, Social Security, which provides protection against low income in retirement to employees who contribute to the system, has helped to foster an extraordinary level of participation by the elderly in the electoral process and civic life. Social Security has encouraged participation by low- and moderate-income seniors, which means that the elderly are less subject to the skew in favor of the affluent and better educated that generally characterizes political participation in the United States.37

#### Thorium-fuel reduces radiotoxicity substantially -- solves nuclear waste.

#### Zerbisias, ‘11

[Antonia, Feature Writer -- The Week, 3-25, “Thorium touted as The Answer to our energy needs,” http://www.thestar.com/news/insight/article/960564--thorium-touted-as-the-answer-to-our-energy-needs]

They say that, among other things, a well-designed thorium-fuelled plant beats the uranium-based system on all fronts. For one thing, there’s enough easily mined thorium in the ground to power the world for a thousand years. According to the U.S. Geological Survey, the United States has an estimated 440,000 tonnes, Australia and India about 300,000 tonnes each, and Canada about 100,000 tonnes. It’s supposedly safer and produces much less waste. The waste it does produce loses its radiotoxicity in about 300 years, as opposed to tens or hundreds of thousands for conventional uranium waste. Plus, get this, it actually feeds on radioactive plutonium waste, one of the nastiest substances on earth, as part of its power-generating process. That’s important because the disposal of plutonium is probably the nuclear industry’s most vexing problem.

## 2ac

### 2ac case

#### We are not passive onlookers we can directly shape the world around us – that is the pivot point of politics

**Bleiker ‘3** Roland, Professor of International Relations, University of Queensland “Discourse and Human Agency” Contemporary Political Theory. Avenel: Mar 2003.Vol. 2, Iss. 1;  pg. 25

For de Certeau, **the search for human agency in everyday life starts by refuting the widespread assumption that common people are passive onlookers, guided by the disciplinary force of established rules.** For him, **they are not simply faceless consumers, but active producers, 'poets of their own affairs, pathfinders in jungles of functionalist rationality'** (de Certeau, 1990, 57). De Certeau does, however, remain anchored in the Nietzschean tradition. He makes use of Foucault's research by turning it upside down. He opposes Foucault's notion of a panoptical discourse, one that sees and controls everything. He considers unwisely spending one's entire energy analysing the multitude of minuscule techniques that discipline the subject and paralyse her/him in a web of microlevel power relations. Such an approach, de Certeau argues, unduly privileges the productive apparatus. Instead, he suggests that **if the grid of 'discipline' is becoming increasingly extensive, it is all the more important to search for reasons why a society is not totally subordinated to this form of suffocation and concealment. One must pay attention to popular procedures -- equally minuscule and quotidien -- that manipulate and evade the mechanism of discipline** (de Certeau, 1990, xxxix-xxxxl). **These various procedures are the practices by which people can reappropriate the space controlled through the existing discursive order.** The question now is how to locate, theorize and explore these 'networks of anti-discipline,' as de Certeau (1990, xi) calls them. De Certeau focuses primarily on the uses of space in Western consumer societies, on how **everyday practices like walking, shopping, dwelling or cooking become arts of manipulation that intervene with the prevalent discursive order.** Other authors locate daily practices of subversion in different spheres of life. James Scott has dealt in detail with everyday forms of peasant resistance. For him too, the big events are not peasant rebellions or revolutions. They occur rarely anyway. What deserves our attention, he argues, is the constant everyday struggle between the peasantry and those who seek to extract labour, taxes, rents and the like from them (Scott, 1985, xv-xvi). Through extensive, detailed and highly compelling research, Scott demonstrates the prevalence of low-profile forms of resistance. These are the critiques spoken behind the back of power. Although such utterances are very rarely expressed openly, they are nevertheless in the open. Indeed, this form of critique is almost omnipresent in folk culture, disguised in such practices as rumours, gossip, jokes, tales or songs. They are the vehicles of the powerless by which they 'insinuate a critique of power while hiding behind anonymity or behind innocuous understandings of their conduct' (Scott, 1990, xiii, 19, 136-182). We find a perfect example of such a practice in Margaret Atwood's fictional but all too real authoritarian word (1985, 234):"**There is something powerful in the whispering of obscenities about those in power. There's something delightful about it, something naughty, secretive, forbidden, thrilling. It's like a spell, of sorts. It deflates them, reduces them to the common denominator where they can be dealt with.** In the paint of the washroom cubicle someone unknown had scratched: Aunt Lydia sucks . It was like a flag waved from a hilltop in rebellion." The scene of an obscenity anonymously scribbled on a bathroom wall is enough to evoke the subversive aspects of this act. Anonymity provided the security necessary to scream out what cannot even be whispered in the face of the oppressors. There is a clear target, but no visible author, no agitator who could be prosecuted. The audience is potentially limitless. Scott insists that such a politics of hidden dissent, of disguise and anonymity, is neither empty posturing nor a substitute for real resistance. It is resistance of the most effective kind, for **these subversive gestures eventually insinuate themselves, in disguised form, into the public discourse. They lead to a slow transformation of values, they nurture and give meaning to subsequent, more overt forms of resistance or rebellion.** They may bring upon an explosive political situation during which the cordon sanitare between the hidden and public transcripts is torn apart (Scott, 1990, 19-20, 183-227). The range of possible everyday forms of resistance is, of course, endless. **One could find them in all epoques, places and aspects of life.** Michael Bakhtin has shown how the 16th century French writer Francois Rabelais successfully interfered with discursive practices at the time. His five books about the adventures of Gargantua and his son Pantagruel are episodes of carnival, laughter, mockery and fantastical imagination. They include, for example, a chapter on how his father realized 'Gargantua's marvellous intelligence by his invention of an Arse-wipe' (Rabelais, 1966, 66-69). Laughter opened up, at least for a short moment, a glimpse at utopian freedom, a life beyond the heavy Christian mythology of death and eternal punishment in the form of Hell after death. Laughter, Bakhtin argues, purified from dogmatism and pedantry, from fear and intimidation. It shattered the belief that life has a single meaning (Bakhtin, 1968, 123). In this sense, laughter, in both practice and writing, created mobile subjectivities and situated knowledges. Carnival becomes a revolutionary act, one that slowly transformed values and norms, one that entered political spheres. Rabelais satire, blessed with immediate popular success and equally swift condemnation from the leading clergy, rendered support for an emerging humanist movement and contributed to the eventual death of God, the gradual decay of an unchallenged theocentric weltanschauung. Discursive dissent happens even in those circumstances where domination seems all but total. Docker (1994), for instance, discovered resistance in the seemingly homogenizing forces of popular culture, such as television, where he detects, much like Rabelais did half a millennium before, carnevalesque challenges to the narrow and single representation of reason in the public sphere. The historian Kotkin found signs of resistance in a very different suffocating context. He analysed in great detail aspects of everyday life in the Soviet industrial city of Magnitogorsk during the 1930s. Although life during this period almost perfectly epitomized the despotic character of Stalinism, Kotkin demonstrates how ordinary citizens constantly reshaped the environment in which they lived. 'New categories of thinking suddenly appeared, old ones were modified; nothing stood still' (Kotkin, 1995, 356). Challenges to authority occurred through seemingly insignificant acts, such as the process of naming and explaining new phenomena people encountered in the market place or their living quarters. **Kotkin (1995, 21), relying on a Foucaultean approach, documents how individuals were often able to circumvent existing rules by engaging in 'resourceful, albeit localise, resistance to the terms of daily life** that developed within the crusade of building socialism.'

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#### The normative debate over resolving these problems is a vital form of education that debate should seek to foster – their form of education renders us passive spectators, which prevents us from honoring our ethical obligation others

Ruiz and Minguez ‘1 Prof. Dr Pedro Ortega Ruiz, Facultad de Educacio´ n, Campus de Espinardo, Universidad de Murcia, “Global Inequality and the Need for Compassion: issues in moral and political education” *Journal of Moral Education, Vol. 30, No. 2, 2001*

In addition to the reality of the dominant presence of instrumental reason in modern society, another closely linked phenomenon is shaping life at the level of the individual and society, individuals and peoples. **We refer to the phenomenon of the increasing globalisation of ways of life in our complex societies which derive as much from the new forms of production as from the influence of science and technology upon life and social organisation (Waters, 1995). This explains the problems we find in guaranteeing a base of social solidarity in a general sense and the provision of forms of identity sufficiently strong for the social agents.** It is difficult to represent the society in which we live in a unified manner. As individuals we belong to diverse communities, at times mutually contradictory. It is difficult to escape the need of having to choose between diverse forms of identity and belonging (Bafircena, 1997). **The phenomenon of globalisation has invalidated the autistic, localist-focused procedures for highlighting and resolving problems because the great part of our social life is determined by global processes; that is to say, in those processes in which the influence of cultures, political economies, media and national frontiers are all weakened. The emergence of globalisation has made it possible to overcome the concept of nation states, giving way to another, wider reality: humanity, world citizenship or human family to foster the birth of new areas of identity beyond that of the nation state** (Luhmann, 1997). During the last few decades it could be thought that the relationships and obligations of the citizen started and finished in their local community, in their *polis*, or at most in their national community. Now, on the other hand, we are concerned by problems occurring far from our frontiers or the conventional established limits. **We have become aware that we are immersed in problems of such magnitude (environmental pollution, poverty and marginalisation of a large part of the world’s population, ethnic–cultural conflicts, etc.) that we seriously question localist attempts and have thrown to the winds the recipes so long applied to solve our problems. A new concept of citizenship and the citizen has been imposed on us. Our *polis* has become too small. The diversity of cultures and national frontiers are no longer barriers to the recognition of our inter-dependency and implication in problems which we now must share. These features (primacy of instrumental reason and globalisation) cannot go unnoticed in our pedagogy. Youth cannot be educated according to out-dated localist schemes already undermined by the real situation; nor offer educational models which place the learners in the position of open-mouthed spectators at what happens around them, distanced from the social reality which is supposedly impossible to change, governed by the implacable laws of market forces.** **To educate**, as we understand it, **is above all a praxis orientated towards enabling the learners to “read” and interpret reality and furthermore to take responsibility in the face of this reality. It is to help them grow in responsibility, to honour our obligations toward others.**

#### Rejecting the possibility of progressive change is totalizing, it is error replication of the radical left and magnifies racism

**Jones, 99** – professor of politics at Cardiff University (Richard, “Security, Strategy, and Critical Theory”

<http://www.ciaonet.org/book/wynjones/wynjones02.html>)

An even more troubling feature of Adorno and Horkheimer’s analysis is the downplaying of individual responsibility that is implicit in their argument. If Auschwitz is the inevitable outcome of enlightenment, and if instrumental rationality is too powerful to resist, then can we expect an individual Nazi to act in a different fashion? In the hermetic society the individual is a mere cipher, and if this is the case, can any individual really be blamed for his or her behavior? These questions highlight an ethical lacuna at the heart of Dialectic of Enlightenment. Despite the obvious intentions of the authors, their analysis generates a logic that renders them unable to differentiate meaningfully between different actions in the political realm. If “nothing complicitous with this world can have any truth,” then surely everything that exists in the real world must be judged equally untrue or false. But if this is so, how are we to evaluate efforts at securing change in contemporary society?

Let us consider the ending of apartheid in South Africa. Although the citizens of that country cannot be adjudged to be free after the overthrow of the apartheid system, surely they are freer. Although the establishment of liberal democracy there offers no panacea, it is a better system than the totalitarian one that it has replaced. But although Adorno and Horkheimer as individuals would almost certainly have rejoiced in the downfall of the apartheid system, as theoreticians they seem to be unable to provide us with any grounds for favoring one particular set of social institutions over another. Here we have a bizarre inversion of the relativism to which contemporary poststructuralist approaches are prone. By arguing that there are no grounds to choose between different accounts of reality, poststructuralists are inevitably forced to accept that all accounts of a given reality are true. They can make no judgment on these claims that is not arbitrary (Norris 1992; Hunter and Wyn Jones 1995). Similarly, by arguing that everything in the world is equally false, Adorno and Horkheimer can make no judgment as to why we might prefer some forms of behavior and some set of practices over others.

Here the impasse into which the analysis of Dialectic of Enlightenment leads its authors stands in bold relief. The determinism and reductionism of their argument is ultimately paralyzing. It was, of course, Antonio Gramsci who popularized the injunction that all those intent on changing society should attempt to face the world with a combination of “pessimism of the intellect” and “optimism of the will.” This position has much to commend it given the propensity of radicals to view society with rose–tinted glasses. However, the limitations of this position are nowhere better illustrated than in Dialectic of Enlightenment, in which the pessimism is so thoroughgoing that it becomes absolutely debilitating. Any attempt to challenge the status quo already stands condemned as futile. The logical outcome of this attitude is resignation and passivity.

Adorno attempted to make a virtue of the detached attitude that he and Horkheimer adopted toward the political struggles of their own age by claiming: “If one is concerned to achieve what might be possible with human beings, it is extremely difficult to remain friendly towards real people.” However, considering that it is only “real people” who can bring about a better society, Adorno’s “complex form of misanthropy” ultimately leads only to quiescence (Wiggershaus 1994: 268). Thus, despite the clear similarities in the influences and interests of the founding fathers of critical theory and Gramsci, the resignatory passivity of the authors of Dialectic of Enlightenment led them to a position on political practice far more akin to that of Oswald Spengler or Arthur Schopenhauer than to that adopted by the Sardinian Marxist Gramsci, even as he languished in a fascist prison.

In view of the traditional Marxist emphasis on the unity of theory and practice, it is hardly surprising that Adorno and Horkheimer’s rejection of any attempt to orient their work toward political activity led to bitter criticism from other radical intellectuals. Perhaps the most famous such condemnation was that of Lukács, who acidly commented that the members of the Frankfurt School had taken up residence in the “Grand Hotel Abyss.” The inhabitants of this institution enjoyed all the comforts of the bourgeois lifestyle while fatalistically surveying the wreckage of life beyond its doors. Whereas Lukács’s own apologias for Stalinism point to the dangers of subordinating theoretical activity to the exigencies of day–to–day practical politics, Adorno and Horkheimer sunder theory and political practice completely, impoverishing the theoretical activity itself. Their stance leads to an aridity and scholasticism ill suited to any social theory that aspires to real–world relevance.

Furthermore, the critical theorist’s position on political practice is based on an underestimation of the potential for progressive change that exists even in the most administered societies. It is instructive to contrast the attitude of Adorno and Horkheimer with that of Raymond Williams, who delivers the following broadside against “high culture Marxists” such as the members of the Frankfurt School:

When the Marxists say that we live in a dying culture, and that the masses are ignorant, I have to ask them... where on earth they have lived. A dying culture, and ignorant masses, are not what I have known and see. (R. Williams 1989: 8)

As I will discuss in Chapter 6, the evidence suggests that Williams is closer to the truth. People acting both individually and collectively, through social movements and state institutions, can actually influence the world around them in a progressive direction. Adorno and Horkheimer’s pessimism is unwarranted.

#### Even if they win the state is irredeemably racist in its current form, it overlooks what the state could become – reconstructive liberalism can be a force for change

**Ward, 99** – professor of law at William and Mary (Cynthia, “Introduction: Reconstructing Liberalism”

<http://scholarship.law.wm.edu/cgi/viewcontent.cgi?article=1554&context=wmlr>)

However bruised by the continuous attacks of its radical critics, "liberal legalism" has so far survived the critical onslaught. But like all battles between powerful opponents the fight has produced casualties on both sides. Liberal theorists have responded to radical attacks by re-examining certain facile assumptions about the priority of individual autonomy, the nature of rationality, and the possibility of state neutrality, and replacing them with a rich and provocative literature that affirmatively defends liberal values and celebrates liberal legal institutions as the best-perhaps the only-way of respecting and encouraging human "difference" while also maximizing freedom and equality.

On the other side, the work of radical critics of liberalism has begun to reflect the idea that liberal values-appropriately modified-are worth examining in a reconstructive light. Without losing sight of the injustices that have been inflicted on vulnerable groups under the liberal American Constitution, at least some radical theorists seem willing to concede that something precious, perhaps even irreplaceable, would be lost were liberal rights and institutions, with their vision of respect for individual dignity and their desire to maximize individual freedom, to be rejected wholesale along with the scourges of racism and sexism that have always shadowed them.

It is tempting to oversimplify. One should take seriously the declared motivations and concerns of one's opponents, and be careful not to discover casually that they have been on one's side all along, although somehow without realizing it. Let me therefore emphasize that I think there are important and irreconcilable differences, at many levels, between liberal visions of the person, of politics, and of the law, and the visions articulated by liberalism's communitarian, critical race, feminist, and postmodern critics. What I find most fascinating in recent legal theory, though, is the increasingly apparent intuition that amid such basic differences there is also a growing area of common ground. Ironically, it may be that the reconstruction of liberal legalism, in some recognizable form, will become the single most dramatic result of radical legal theory.

**There is no value in their nihilist project -- vote aff to affirm the joy of becoming in Black Studies**

**Moten '7** Fred, Professor of English and African American Studies, Duke University "black optimism/black operation", Chicago -- working text for "Black Op" Source: [PMLA](http://www.mlajournals.org/loi/pmla), Volume 123, Number 5, October 2008, pp. 1743–1747 (5)

http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&ved=0CDQQFjAC&url=http%3A%2F%2Flucian.uchicago.edu%2Fblogs%2Fpoliticalfeeling%2Ffiles%2F2007%2F12%2Fmoten-black-optimism.doc&ei=1fE2UO65KuG8yAHpiIHYCg&usg=AFQjCNE8N66fQjQ7TP0PkJ0eYZDI6cNLvA&sig2=BUrcwC5Cfz5Ero2I14PBsg

My field is black studies. In that field, I’m trying to hoe the hard row of beautiful things. I try to study them and I also try to make them. Elizabeth Alexander says “look for color everywhere.” For me, **color + beauty = blackness which is not but nothing other than who, and deeper still, where I am.** **This shell, this inhabitation, this space, this garment—that I carry with me on the various stages of my flight from the conditions of its making—is a zone of chromatic saturation troubling any ascription of impoverishment** of any kind however much it is of, which is to say in emergence from, poverty (which is, in turn, to say in emergence from or as an aesthetics or a poetics of poverty). The highly cultivated nature of this situated volatility, this emergent poetics of the emergency, is the open secret that has been the preoccupation of black studies. But it must be said now—and I’ll do so by way of a cool kind of accident that has been afforded us by the danger and saving power that is power point—that **there is a strain of black studies that strains against black studies and its object, the critique of western civilization, precisely insofar as it disavows its aim (blackness or the thinking of blackness, which must be understood in what some not so strange combination of Nahum Chandler and Martin Heidegger might call its paraontological distinction from black people).** There was a moment in Rebecca’s presentation when the image of a black saxophonist (I think, but am not sure, that it was the great Chicago musician Fred Anderson) is given to us as a representative, or better yet a denizen (as opposed to citizen), of the “space of the imagination.” What’s cool here, and what is also precisely the kind of thing that makes practitioners of what might be called the new ~~black~~ studies really mad, is this racialization of the imagination which only comes fully into its own when it is seen in opposition, say, to that set of faces or folks who constituted what I know is just a part of Lauren’s tradition of Marxist historiographical critique. That racialization has a long history and begins to get codified in a certain Kantian discourse, one in which the imagination is understood to “produce nothing but nonsense,” a condition that requires that “its wings be severely clipped by the imagination.” What I’m interested in, but which I can only give a bare outline of, is a two-fold black operation—one in which Kant moves toward something like a thinking of the imagination as blackness that fully recognizes the irreducible desire for this formative and deformative, necessarily supplemental necessity; one in which black studies ends up being unable to avoid a certain sense of itself as a Kantian, which is to say anti-Kantian and ante-Kantian, endeavor. The new black studies, or to be more precise, the old-new black studies, since every iteration has had this ambivalence at its heart, can’t help but get pissed at the terrible irony of its irreducible Kantianness precisely because it works so justifiably hard at critiquing that racialization of the imagination and the racialized opposition of imagination (in its lawless, nonsense producing freedom) and critique that turns out to be the condition of possibility of the critical philosophical project. **There is a voraciously instrumental anti-essentialism, powered in an intense and terrible way by good intentions**

**, that is the intellectual platform from which black studies’ disavowal of its object and aim is launched, even when that disavowal comes in something which also thinks itself to be moving in the direction of that object and aim. I’m trying to move by way of a kind of resistance to that anti-essentialism, one that requires a paleonymic relation to blackness; I’m trying to own a certain dispossession, the underprivilege of being-sentenced to this gift of constantly escaping** and to standing in for the fugitivity (to echo Natahaniel Mackey, Daphne Brooks and Michel Foucault) (of the imagination) that is an irreducible property of life, persisting in and against every disciplinary technique while constituting and instantiating not just the thought but that actuality of the outside that is what/where blackness is—as space or spacing of the imagination, as condition of possibility and constant troubling of critique. **It’s annoying to perform what you oppose, but I just want you to know that I ain’t mad. I loved these presentations, partly because I think they loved me or at least my space, but mostly because they were beautiful. I love Kant, too, by the way, though he doesn’t love me, because I think he’s beautiful too and, as you know, a thing of beauty is a joy forever**. But even though I’m not mad, I’m not disavowing that strain of black studies that strains against the weight or burden, the refrain, the strain of being-imaginative and not-being-critical that is called blackness and that black people have had to carry. Black Studies strains against a burden that, even when it is thought musically, is inseparable from constraint. But my optimism, **black optimism, is bound up with what it is to claim blackness and the appositional, runaway black operations that have been thrust upon it. The burden, the constraint, is the aim, the paradoxically aleatory goal that animates escape in and the possibility of escape from. Here is one such black op—a specific, a capella instantiation of strain, of resistance to constraint and instrumentalization, of the propelling and constraining force of the refrain, that will allow me to get to a little something concerning the temporal paradox of, and the irruption of ecstatic temporality in, optimism, which is to say black optimism, which is to say blackness**. I play this in appreciation for being in Chicago, which is everybody’s sweet home, everybody’s land of California, as Robert Johnson puts it. This is music from a Head Start program in Mississippi in the mid-sixties and as you all know Chicago is a city in Mississippi, Mississippi a (fugue) state of mind in Chicago. “Da Da Da Da,” The Child Development Group of Mississippi, Smithsonian Folkways Records, FW02690 1967 **The temporal paradox of optimism—that it is, on the one hand, necessarily futurial so that optimism is an attitude we take towards that which is to come; but that it is, on the other hand, in its proper Leibnizian formulation, an assertion not only of the necessity but also of the rightness and the essential timelessness of the always already existing, resonates in this recording. It is infused with that same impetus that drives a certain movement, in Monadology, from the immutability of monads to that enveloping of the moral world in the natural world that Leibniz calls, in Augustinian echo/revision, “the City of God.”** With respect to C. L. R. James and José (Muñoz), and a little respectful disrespect to Lee Edelman, these children are the voices of the future in the past, the voices of the future in our present. In this recording, **this remainder, their fugitivity, remains, for me, in the intensity of their refrain, of their straining against constraint, cause for the optimism they perform. That optimism always lives, which is to say escapes, in the assertion of a right to refuse**, which is, as Gayatri Spivak says, **the first right: an instantiation of a collective negative tendency to differ, to resist the regulative powers that resistance, that differing, call into being. To think resistance as originary is to say, in a sense, that we have what we need, that we can get there from here, that there’s nothing wrong with us or even, in this regard, with here, even as it requires us still to think about why it is that difference calls the same, that resistance calls regulative power, into existence, thereby securing the vast, empty brutality that characterizes here and now.** Nevertheless, however much I keep trouble in mind, and therefore, in the interest of making as much trouble as possible, I remain hopeful insofar as I will have been in this very collective negative tendency, this little school within and beneath school that we gather together to be. For a bunch of little whiles, this is our field (i.e., black studies), our commons or undercommons or underground or outskirts and it will remain so as long as it claims **its fugitive proximity to blackness**, which I will claim, with ridiculousness boldness, **is the condition of possibility of politics.**

**-- their framing is not productive for any sort of emancipatory politics, which means if they win that Blackness is terminally screwed, any risk that escape is possible means you vote negative -- this is the only path towards abolition\*\***

**Moten '7** Fred, Professor of English and African American Studies, Duke University "black optimism/black operation", Chicago -- working text for "Black Op" Source: [PMLA](http://www.mlajournals.org/loi/pmla), Volume 123, Number 5, October 2008, pp. 1743–1747 (5)

http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&ved=0CDQQFjAC&url=http%3A%2F%2Flucian.uchicago.edu%2Fblogs%2Fpoliticalfeeling%2Ffiles%2F2007%2F12%2Fmoten-black-optimism.doc&ei=1fE2UO65KuG8yAHpiIHYCg&usg=AFQjCNE8N66fQjQ7TP0PkJ0eYZDI6cNLvA&sig2=BUrcwC5Cfz5Ero2I14PBsg

I am gonna do something called "Black Ops." In addition to the notion of a black operation **I am also interested in something I would like to call black optimism, something that will illuminate the convergence of the condition of possibility and the end of politics** (something james would think as "the future in the present," **something King would discuss under the rubric of the "fierce urgency of now" where fierce urgency denotes not only pain but also pleasure**--I'm talking about an exigency that, above all, inheres in and radiates from, The Music). Eventually, and it's too much to go into here, this will open up some ways to link up some questions emerging out of Leibniz and extended by Russell and Deleuze and my old teacher Ann Banfield that will allow me to consider some interplay between blackness and the baroque and will, therefore, link up to the essay on Glenn Gould, Beethoven and filmic practice. Ultimately, there are some things I want to say about Gould and Cecil Taylor that will, I hope, allow an articulation of something, in relation each to the other, regarding the political history of the present. Obviously, what I'm contemplating will either be one hundred pages or ten very dense and poetic ones. Some aphorisms, some variations or, perhaps more precisely, some rhythmic figures, some heads invoking arrangement, as it were, or anarrangement. Black ops. Back Sites. What is it that now one has to forge a paleonymic (r)elation to black, to **blackness? The word persists, now, under erasure or eclipse, ceded to the state of law/exception. The word is begrudged, grungy, dingy, encased in a low tinge, always understood as being in need of a highlight it already has or that chromatic saturation that it already is. Resistance and (the auto-poetics of) organization (flight + inhabitation). optimism/monad/baroque/blackness Nomad and monad.** N gets a letter from M. **What’s the relationship between saying, “utopia is submerged in or in the interstices or on the outskirts of the present” and saying, “this is the best of all possible worlds” (a Leibnizian optimism) and saying, “the history of abolitionism is not the history of a set of wholly rhetorical exhortations, whether rational or ecstatic, but is, rather, the history of an infinite set or line of quotidian “escape acts”** (as Daphne Brooks might say) which operate at the level of rhetoric as well as the aesthetic and which, therefore, might include but need not be reduced to this or that particular instance of abolitionist rhetoric?” Laid back, spread out, stretched out, laid out. **Part of what’s necessary is the realization of an analytic that moves through the opposition of voluntary secrecy and forced exposure. What’s needed is some way to understand how the underground operates out in the open and, perhaps deeper still, as the open in something like the ways Agamben/Rilke/Santner have tried to approach. What’s the relation between the border/limit and the open? Between blackness and the limit/edge? Between a quite specific and materially redoubled finitude or being-limited and the open? What a certain discourse on the relation between blackness and death seems to try to get to—in the best (which is to say least tragically neurotic) instances of that discourse—lies, at least, in vicinity of this question.** Leibniz/Russell/Deleuze/Banfield: The monad and the thing. The blues as black op (undercover, off the books, in the service of resistance or rearguard, assassination or non-violent refusal while at the same time being not just violently commodified but, more precisely and viciously, of the commodity or, at least, of her trace): In honor of Chicago and of a vast range of sweet homes: between Robert Johnson and Leo Smith, Leland Mississippi, right between Greenville and Indianola, right on 61 Highway (the monad is nomadic, at least in her head). On the relation between blackness and the baroque, an irregular pearl, following from Deleuze’s thought regarding the relation between baroque and minimalism. Seeking out the state is all bound up with frowning on things. **Seeking out the state is not the same thing as looking after what does not escape. The fugitive escapes but she does not escape. Escape is not accomplished but is a thing(liness) we love. Seeking out the state is a kind of piety.** I worked in prisons. So did I. I talk with the spirits. I seek out the state. Puritanism hurtles towards secularism. An all too verifiable past, lives crowded with incident, smothered by precedent. One has a choice to face up to not having a choice. There is no unheard appeal. Poetry will have never been obscene having been a haven. Holding fast is not the opposite of running away, is not in between. The dismal swamp is a jam, an open waterway. Why seek out the state? Comfort under the state’s protection, which is a kind of brutality. **We appeal to the future we imagine. We imagine what we are. Blackness as appeal, as escape. We are always also walking in another world. My archive is a dehiscence at the heart of the archive and on its edge—a disorder, an appeal. My political desire scratches discontent**. On the very idea of the passage—what do Deleuze and Krauss mean by it? Where does it come from? From a long time ago, via Uncle Toliver and Equiano, working out the notion of ensemble, I try to speak of an “improvisatory whole” in relation to the barest beginnings of a more critically aware understanding of “passage”: what is the relation between passage in this context and those passages of sculpture of which Krauss and Deleuze speak? Deleuze invokes Tony Smith; Krauss is more inclined towards David Smith. Deleuze is specific in his invocation of T. Smith as a kind of precursor to his own extension of the monadology. He invokes those same passages in Smith that Fried derides. The improvisatory whole, the monad, the icon, the thing. Jazz, oratorio and baroque. Blackness and the baroque. What is exposure? What is an aesthetics of exposure? The bright side is the dark side, the black hand side, the west side, the south side, where they be talking about in the evening when the sun go down as if it has not nothing but something else, something other, to do with the *Abendland*. To look with love at things, to look as if you so broke, so baroque, that you can’t pay attention.

#### Root cause is ineffective and incorrect – it is more important to focus on material instances of oppression

Harman, 09 Graham, professor of philosophy American University of Cairo, “Prince of Networks: Bruno Latour and Metaphysics” p. 22

Even *power*, that favourite occult quality of radical political critics, is a result rather than a substance (PF, p. 191). The supposed ‘panopticon’ of modern society stands at the mercy of the technicians and bureaucrats who must install and maintain it, and who may go on strike or do a sloppy job because of bad moods. The police are outwitted by seven-year-olds in the slums. The mighty CIA, with its budget of billions, loses track of *mujahideen* riding donkeys and exchanging notes in milk bottles. A lovely Chinese double agent corrodes the moral fiber of Scotland Yard true believers. Actants must constantly be kept in line; none are servile puppets who do our bidding, whether human or nonhuman. The world resists our efforts even as it welcomes them. Even a system of metaphysics is the lengthy result of negotiations with the world, not a triumphant deductive overlord who tramples the details of the world to dust. The labour of fitting one concept to another obsesses a Kant or Husserl for decades, and even then the polished final product will be riddled with errors detectible by a novice. The same is true for our prisons, our gas and water infrastructure, the sale of potato chips, international law, nuclear test bans, and enrollment in universities. Systems are assembled at great pains, one actant at a time, and loopholes always remain. We are not the pawns of sleek power-machines grinding us beneath their heels like pathetic *Nibelungen*. We may be fragile, but so are the powerful.

## 1ar

Taggart, 12 [8/4/12, Adam, “Kirk Sorensen: A Detailed Exploration of Thorium's Potential as an Energy Source” http://www.peakprosperity.com/podcast/79398/kirk-sorensen-detailed-exploration-thoriums-potential-energy-source]

Compared to Uranium-238-based nuclear reactors currently in use today, a liquid fluoride thorium reactor (LTFR) would be: Much safer - No risk of environmental radiation contamination or plant explosion (e.g., Chernobyl, Fukushima, Three Mile Island) Much more efficient at producing energy - Over 90% of the input fuel would be tapped for energy, vs. <1% in today's reactors Less waste-generating - Most of the radioactive by-products would take days/weeks to degrade to safe levels, vs decades/centuries Much cheaper - Reactor footprints and infrastructure would be much smaller and could be constructed in modular fashion More plentiful - LFTR reactors do not need to be located next to large water supplies, as current plants do Less controversial - The byproducts of the thorium reaction are pretty useless for weaponization Longer-lived - Thorium is much more plentiful than uranium and is treated as valueless today. There is virtually no danger of running out of it given LFTR plant efficiency Most of the know-how and technology to build and maintain LFTR reactors exists today. If made a priority, the US could have its first fully-operational LFTR plant running at commercial scale in under a decade. But no such LFTR plants are in development. In fact, the US shut down its work on thorium-based energy production decades ago and has not invested materially in related research since tehn. Staring at the looming energy cliff ahead, created by Peak Oil, LFTR begs the question -- why not? As best Kirk can tell, we are not pursuing thorium's potential today because we are choosing not to. We are too wedded to the U-238 path we've been investing in for decades. Indeed, the grants that funded the government's thorium research in the 50s and 60s were primarily focused on weapons development; not new energy sources. Once our attention turned to nuclear energy, we simply applied the uranium-based know-how that we developed from our atomic bomb program rather than asking is there a better way?

#### , the plan causes tech exports

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Export LFTR nuclear power plants. Simply generating inexpensive, nonpolluting LFTR power within the US is not enough to solve the global energy and environmental crises. The US should encourage exporting these small nuclear power plants because they can help the developing world end energy poverty, cut CO2 emissions globally, and become a $70 billion export industry to help the US economy. Russia, China, South Korea, and India all plan nuclear power plant exports. Lead! Who will lead? A transnational organization such as the United Nations? One nation such as the United States? Multiple state or provincial governments? Corporations? Leadership individuals? The United Nations can not solve our energy/climate crises. Dozens of IPCC-sponsored meetings only end in promises to agree and contention between rich and poor nations. Few nations will sacrifice national energy sovereignty for global good. The United States can lead in developing LFTR and thorium energy cheaper than coal. The US has the DOE national labs, the best university nuclear engineering programs, and the government/university/business tradition of entrepreneurism and commercialization. Political leadership is lacking. At the executive, congressional, and state levels elected officials fail to grasp the realities of economics, energy, environmental pollution, and global resource contention. Instead these politicians capitalize on the crowd-sourced fears of all things nuclear, and they attract feel good voters by promoting natural wind and solar energy sources, hiding the true social costs in grants, subsidies, and tax preferences that only benefit select, savvy businessmen. Yet there is an immense political opportunity for a leader to satisfy liberals and environmentalists by checking global warming and ending energy poverty, and also satisfy conservatives and businesses by avoiding carbon taxes, decreasing energy costs, and creating a new Boeing-size export industry. Governments have an opportunity to incentivize corporations to undertake LFTR research and development. Once power-plant- scale LFTRs are successfully demonstrated, and once the legal system permits, corporations can then lead in mass production of LFTRs. We can then rely on economic self-interest of corporations to produce and install LFTRs as fast as Boeing sells airplanes. The corporations will succeed because they can rely on the economic self-interest of 7 billion people in 250 nations to choose the cheapest source of clean, safe energy. This will end C02-emitting energy from coal and reduce demand for energy from other fossil fuels.

#### Sexton mischaracterizes the social relations that they use for their impact claims

**Spickard 9** - UC, Santa Barbara (Paul Amalgamation Schemes: Antiblackness and the Critique of Multiracialism (review) American Studies - Volume 50, Number 1/2, Spring/Summer 2009, pp. 125-127 ajones)

One of the major developments in ethnic studies over the past two decades has been the idea (and sometimes the advocacy) of multiraciality. From a theoretical perspective, this has stemmed from a post-structuralist attempt to deconstruct the categories created by the European Enlightenment and its colonial enterprise around the world. From a personal perspective, it has been driven by the life experiences in the last half-century of a growing number of people who have and acknowledge mixed parentage. The leading figures in this scholarly movement are probably Maria Root and G. Reginald Daniel, but the writers are many and include figures as eminent as Gary Nash and Randall Kennedy. A small but dedicated group of writers has resisted this trend: chiefly Rainier Spencer, Jon Michael Spencer, and Lewis Gordon. They have raised no controversy, perhaps [End Page 125] because their books are not well written, and perhaps because their arguments do not make a great deal of sense. It is not that there is nothing wrong with the literature and the people movement surrounding multiraciality. Some writers and social activists do tend to wax rhapsodic about the glories of intermarriage and multiracial identity as social panacea. A couple of not-very-thoughtful activists (Charles Byrd and Susan Graham) have been coopted by the Gingrichian right (to be fair, one must point out that most multiracialists are on the left). And, most importantly, there is a tension between some Black intellectuals and the multiracial idea over the lingering fear that, for some people, adopting a multiracial identity is a dodge to avoid being Black. If so, that might tend to sap the strength of a monoracially-defined movement for Black community empowerment. With Amalgamation Schemes, Jared Sexton is trying to stir up some controversy. He presents a facile, sophisticated, and theoretically informed intelligence, and he picks a fight from the start. His title suggests that the study of multiraciality is some kind of plot, or at the very least an illegitimate enterprise. His tone is angry and accusatory on every page. It is difficult to get to the grounds of his argument, because the cloud of invective is so thick, and because his writing is abstract, referential, and at key points vague. For Sexton (as for the Spencers and Gordon) race is about Blackness, in the United States and around the world. That is silly, for there are other racialized relationships. In the U.S., native peoples were racialized by European intruders in all the ways that Africans were, and more: they were nearly extinguished. To take just one example from many around the world, Han Chinese have racialized Tibetans historically in all the ways (including slavery) that Whites have racialized Blacks and Indians in the United States. So there is a problem with Sexton's concept of race as Blackness. There is also a problem with his insistence on monoraciality. For Sexton and the others, one cannot be mixed or multiple; one must choose ever and only to be Black. I don't have a problem with that as a political choice, but to insist that it is the only possibility flies in the face of a great deal of human experience, and it ignores the history of how modern racial ideas emerged. Sexton does point out, as do many writers, the flawed tendencies in multiracial advocacy mentioned in the second paragraph above. But he imputes them to the whole movement and to the subject of study, and that is not a fair assessment. The main problem is that Sexton argues from conclusion to evidence, rather than the other way around. That is, he begins with the conclusion that the multiracial idea is bad, retrograde, and must be resisted. And then he cherry-picks his evidence to fit his conclusion. He spends much of his time on weaker writers such as Gregory Stephens and Stephen Talty who have been tangential to the multiracial literature. When he addresses stronger figures like Daniel, Root, Nash, and Kennedy, he carefully selects his quotes to fit his argument, and misrepresents their positions by doing so. Sexton also makes some pretty outrageous claims. He takes the fact that people who study multiracial identities are often studying aspects of family life (such as the shaping of a child's identity), and twists that to charge them with homophobia and nuclear family-ism. That is simply not accurate for any of the main writers in the field. The same is true for his argument by innuendo that scholars of multiraciality somehow advocate mail-order bride services. And sometimes Sexton simply resorts to ad hominem attacks on the motives and personal lives of the writers themselves. It is a pretty tawdry exercise. That is unfortunate, because Sexton appears bright and might have written a much better book detailing his hesitations about some tendencies in the multiracial movement. He might even have opened up a new direction for productive study of racial commitment amid complexity. Sexton does make several observations that are worth thinking about, [End Page 126] and surely this intellectual movement, like any other, needs to think critically about itself. Sadly, this is not that book.

#### Identifying ethics as separate from alternative actions is exactly what we impact turn—the idea that this comes before responses at the margin. They conceded coalitions key

**Isaac 2002** – political science professor at Indiana University (Jeffrey, Dissent, Spring, “Ends, means, and politics”, http://www.dissentmagazine.org/article/?article=601, WEA)

What is striking about much of the political discussion on the left today is its failure to engage this earlier tradition of argument. The left, particularly the campus left—by which I mean “progressive” faculty and student groups, often centered around labor solidarity organizations and campus Green affiliates—has become moralistic rather than politically serious. Some of its moralizing—about Chiapas, Palestine, and Iraq—continues the third worldism that plagued the New Left in its waning years. Some of it—about globalization and sweatshops— is new and in some ways promising (see my “Thinking About the Antisweatshop Movement,” Dissent, Fall 2001). But what characterizes much campus left discourse is a substitution of moral rhetoric about evil policies or institutions for a sober consideration of what might improve or replace them, how the improvement might be achieved, and what the likely costs, as well as the benefits, are of any reasonable strategy. One consequence of this tendency is a failure to worry about methods of securing political support through democratic means or to recognize the distinctive value of democracy itself. It is not that conspiratorial or antidemocratic means are promoted. On the contrary, the means employed tend to be preeminently democratic—petitions, demonstrations, marches, boycotts, corporate campaigns, vigorous public criticism. And it is not that political democracy is derided. Projects such as the Green Party engage with electoral politics, locally and nationally, in order to win public office and achieve political objectives. But what is absent is a sober reckoning with the preoccupations and opinions of the vast majority of Americans, who are not drawn to vocal denunciations of the International Monetary Fund and World Trade Organization and who do not believe that the discourse of “anti-imperialism” speaks to their lives. Equally absent is critical thinking about why citizens of liberal democratic states—including most workers and the poor—value liberal democracy and subscribe to what Jürgen Habermas has called “constitutional patriotism”: a patriotic identification with the democratic state because of the civil, political, and social rights it defends. Vicarious identifications with Subcommandante Marcos or starving Iraqi children allow left activists to express a genuine solidarity with the oppressed elsewhere that is surely legitimate in a globalizing age. But these symbolic avowals are not an effective way of contending for political influence or power in the society in which these activists live. The ease with which the campus left responded to September 11 by rehearsing an all too-familiar narrative of American militarism and imperialism is not simply disturbing. It is a sign of this left’s alienation from the society in which it operates (the worst examples of this are statements of the Student Peace Action Coalition Network, which declare that “the United States Government is the world’s greatest terror organization,” and suggest that “homicidal psychopaths of the United States Government” engineered the World Trade Center attacks as a pretext for imperialist aggression. See http://www.gospan.org). Many left activists seem more able to identify with (idealized versions of) Iraqi or Afghan civilians than with American citizens, whether these are the people who perished in the Twin Towers or the rest of us who legitimately fear that we might be next. This is not because of any “disloyalty.” Charges like that lack intellectual or political merit. It is because of a debilitating moralism; because it is easier to denounce wrong than to take real responsibility for correcting it, easier to locate and to oppose a remote evil than to address a proximate difficulty. The campus left says what it thinks. But it exhibits little interest in how and why so many Americans think differently. The “peace” demonstrations organized across the country within a few days of the September 11 attacks—in which local Green Party activists often played a crucial role—were, whatever else they were, a sign of their organizers’ lack of judgment and common sense. Although they often expressed genuine horror about the terrorism, they focused their energy not on the legitimate fear and outrage of American citizens but rather on the evils of the American government and its widely supported response to the terror. Hardly anyone was paying attention, but they alienated anyone who was. This was utterly predictable. And that is my point. The predictable consequences did not matter. What mattered was simply the expression of righteous indignation about what is wrong with the United States, as if September 11 hadn’t really happened. Whatever one thinks about America’s deficiencies, it must be acknowledged that a political praxis preoccupation with this is foolish and self-defeating. The other, more serious consequence of this moralizing tendency is the failure to think seriously about global politics. The campus left is rightly interested in the ills of global capitalism. But politically it seems limited to two options: expressions of “solidarity” with certain oppressed groups—Palestinians but not Syrians, Afghan civilians (though not those who welcome liberation from the Taliban), but not Bosnians or Kosovars or Rwandans—and automatic opposition to American foreign policy in the name of anti-imperialism. The economic discourse of the campus left is a universalist discourse of human needs and workers rights; but it is accompanied by a refusal to think in political terms about the realities of states, international institutions, violence, and power. This refusal is linked to a peculiar strain of pacifism, according to which any use of military force by the United States is viewed as aggression or militarism. case in point is a petition circulated on the campus of Indiana University within days of September 11. Drafted by the Bloomington Peace Coalition, it opposed what was then an imminent war in Afghanistan against al-Qaeda, and called for peace. It declared: “Retaliation will not lead to healing; rather it will harm innocent people and further the cycle of violence. Rather than engage in military aggression, those in authority should apprehend and charge those individuals believed to be directly responsible for the attacks and try them in a court of law in accordance with due process of international law.” This declaration was hardly unique. Similar statements were issued on college campuses across the country, by local student or faculty coalitions, the national Campus Greens, 9- 11peace.org, and the National Youth and Student Peace Coalition. As Global Exchange declared in its antiwar statement of September 11: “vengeance offers no relief. . . retaliation can never guarantee healing. . . and to meet violence with violence breeds more rage and more senseless deaths. Only love leads to peace with justice, while hate takes us toward war and injustice.” On this view military action of any kind is figured as “aggression” or “vengeance”; harm to innocents, whether substantial or marginal, intended or unintended, is absolutely proscribed; legality is treated as having its own force, independent of any means of enforcement; and, most revealingly, “healing” is treated as the principal goal of any legitimate response. None of these points withstands serious scrutiny. A military response to terrorist aggression is not in any obvious sense an act of aggression, unless any military response—or at least any U.S. military response—is simply defined as aggression. While any justifiable military response should certainly be governed by just-war principles, the criterion of absolute harm avoidance would rule out the possibility of any military response. It is virtually impossible either to “apprehend” and prosecute terrorists or to put an end to terrorist networks without the use of military force, for the “criminals” in question are not law-abiding citizens but mass murderers, and there are no police to “arrest” them. And, finally, while “healing” is surely a legitimate moral goal, it is not clear that it is a political goal. Justice, however, most assuredly is a political goal. The most notable thing about the Bloomington statement is its avoidance of political justice. Like many antiwar texts, it calls for “social justice abroad.” It supports redistributing wealth. But criminal and retributive justice, protection against terrorist violence, or the political enforcement of the minimal conditions of global civility—these are unmentioned. They are unmentioned because to broach them is to enter a terrain that the campus left is unwilling to enter—the terrain of violence, a realm of complex choices and dirty hands. This aversion to violence is understandable and in some ways laudable. America’s use of violence has caused much harm in the world, from Southeast Asia to Central and Latin America to Africa. The so-called “Vietnam Syndrome” was the product of a real learning experience that should not be forgotten. In addition, the destructive capacities of modern warfare— which jeopardize the civilian/combatant distinction, and introduce the possibility of enormous ecological devastation—make war under any circumstances something to be feared. No civilized person should approach the topic of war with anything other than great trepidation. And yet the left’s reflexive hostility toward violence in the international domain is strange. It is inconsistent with avowals of “materialism” and evocations of “struggle,” especially on the part of those many who are not pacifists; it is in tension with a commitment to human emancipation (is there no cause for which it is justifiable to fight?); and it is oblivious to the tradition of left thinking about ends and means. To compare the debates within the left about the two world wars or the Spanish Civil War with the predictable “anti-militarism” of today’s campus left is to compare a discourse that was serious about political power with a discourse that is not. This unpragmatic approach has become a hallmark of post–cold war left commentary, from the Gulf War protests of 1991, to the denunciation of the 1999 U.S.-led NATO intervention in Kosovo, to the current post–September 11 antiwar movement. In each case protesters have raised serious questions about U.S. policy and its likely consequences, but in a strikingly ineffective way. They sound a few key themes: the broader context of grievances that supposedly explains why Saddam Hussein, or Slobodan Milosevic, or Osama bin Laden have done what they have done; the hypocrisy of official U.S. rhetoric, which denounces terrorism even though the U.S. government has often supported terrorism; the harm that will come to ordinary Iraqi or Serbian or Afghan citizens as a result of intervention; and the cycle of violence that is likely to ensue. These are important issues. But they typically are raised by left critics not to promote real debate about practical alternatives, but to avoid such a debate or to trump it. As a result, the most important political questions are simply not asked. It is assumed that U.S. military intervention is an act of “aggression,” but no consideration is given to the aggression to which intervention is a response. The status quo ante in Afghanistan is not, as peace activists would have it, peace, but rather terrorist violence abetted by a regime—the Taliban—that rose to power through brutality and repression. This requires us to ask a question that most “peace” activists would prefer not to ask: What should be done to respond to the violence of a Saddam Hussein, or a Milosevic, or a Taliban regime? What means are likely to stop violence and bring criminals to justice? Calls for diplomacy and international law are well intended and important; they implicate a decent and civilized ethic of global order. But they are also vague and empty, because they are not accompanied by any account of how diplomacy or international law can work effectively to address the problem at hand. The campus left offers no such account. To do so would require it to contemplate tragic choices in which moral goodness is of limited utility. Here what matters is not purity of intention but the intelligent exercise of power. Power is not a dirty word or an unfortunate feature of the world. It is the core of politics. Power is the ability to effect outcomes in the world. Politics, in large part, involves contests over the distribution and use of power. To accomplish anything in the political world, one must attend to the means that are necessary to bring it about. And to develop such means is to develop, and to exercise, power. To say this is not to say that power is beyond morality. It is to say that power is not reducible to morality. As writers such as Niccolo Machiavelli, Max Weber, Reinhold Niebuhr, and Hannah Arendt have taught, an unyielding concern with moral goodness undercuts political responsibility. The concern may be morally laudable, reflecting a kind of personal integrity, but it suffers from three fatal flaws: (1) It fails to see that the purity of one’s intention does not ensure the achievement of what one intends. Abjuring violence or refusing to make common cause with morally compromised parties may seem like the right thing; but if such tactics entail impotence, then it is hard to view them as serving any moral good beyond the clean conscience of their supporters; (2) it fails to see that in a world of real violence and injustice, moral purity is not simply a form of powerlessness; it is often a form of complicity in injustice. This is why, from the standpoint of politics—as opposed to religion—pacifism is always a potentially immoral stand. In categorically repudiating violence, it refuses in principle to oppose certain violent injustices with any effect; and (3) it fails to see that politics is as much about unintended consequences as it is about intentions; it is the effects of action, rather than the motives of action, that is most significant. Just as the alignment with “good” may engender impotence, it is often the pursuit of “good” that generates evil. This is the lesson of communism in the twentieth century: it is not enough that one’s goals be sincere or idealistic; it is equally important, always, to ask about the effects of pursuing these goals and to judge these effects in pragmatic and historically contextualized ways. Moral absolutism inhibits this judgment. It alienates those who are not true believers. It promotes arrogance. And it undermines political effectiveness.

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#### Fiscal cliff will dominate the lame duck and barely pass now

Bruce Krasting (writer or Business Insider) 10/1, 2012 “The BEST Case Scenario For The Fiscal Cliff Is Still Ugly” http://www.businessinsider.com/war-headlines-after-the-november-election-will-prevent-cutbacks-in-military-spending-2012-10

Absent some earth shaking event between now and November, Obama is going to win, the House will remain in the hands of the Republicans and the Senate will continue to be equally divided. The war between Reds and Blues will be just as bad as it was a year ago. The day after the election, the fight over the fiscal cliff will commence. I expect it will be ugly. -I think there is zero probability that all of **the issues now on the cliff will be pushed off t**o some future period. (Ultimate-can-kicking) Some of the cutbacks/tax increases that are now scheduled, will happen. -I put the odds on falling off the cliff without any compromises at 40%. This scenario comes about if the Reps and Dems can’t agree on anything. If that is the case, we fall very hard on January 2. (No-can-kicking) -Therefore, I see a 60% chance of a compromise that softens the consequences of the fiscal cliff, but does not eliminate it entirely. (Semi-can-kicking, but still kicking ourselves in the face) If there is to be a compromise, it will be interesting to see who gets what, and who gives up what. It might play out with the following results: I) The 2% reduction in FICA taxes is history. As of 1/1/13 every worker is getting hit with a 2% tax increase. This is a very regressive tax increase. II) The Bush tax cuts for those making more than $250k are gone. This is a very Progressive tax increase. III) The Bush tax cuts for those making less than $250k will be retained. This “centrist” compromises is the result of the “give” on #s I and II. Both sides will be able to claim that they did their best for “Middle Class Workers”. IV) The Alternative Minimum Tax will be adjusted for inflation and will be fully phased in over a period of three years. This tax will hit 40m taxpayers (up from only 4m today). This is most definitely a middle class tax increase. V) The capital gains tax rate is going to go up to at least 25%. The result of I – V is that everyone who works, or has investment income is going to be paying more. No one will escape higher taxes. Then there is the spending side of the ledger. The so-called, “sequestered” amounts. Here is where the real horse-trading will happen. Keep in mind that the timing of this critical argument debate will be in November and December. What else will be happening in those months that will influence the budget compromises? Talk of War.

#### Plan drains capital and causes an immediate fight

Szondy, ‘12

[David, freelance writer -- Gizmag, 2-16, “Feature: Small modular nuclear reactors - the future of energy?” http://www.gizmag.com/small-modular-nuclear-reactors/20860/]

The problem is that nuclear energy is the proverbial political hot potato - even in early days when the new energy source exploded onto the world scene. The tremendous amount of energy locked in the atom held the promise of a future like something out of a technological Arabian Nights. It would be a world where electricity was too cheap to meter, deserts would bloom, ships would circle the Earth on a lump of fuel the size of a baseball, planes would fly for months without landing, the sick would be healed and even cars would be atom powered. But though nuclear power did bring about incredible changes in our world, in its primary role, generating electricity for homes and industry, it ended up as less of a miracle and more of a very complicated way of boiling water.¶ Not only complicated, but expensive and potentially dangerous. Though hundreds of reactors were built all over the world and some countries, such as France, generate most of their electricity from it, nuclear power has faced continuing questions over cost, safety, waste disposal and proliferation. One hundred and four nuclear plants provide the United States with 20 percent of the nation's power, but a building permit hadn't been issued since 1978 with no new reactors coming on line since 1996 and after the uproar from the environmental movement after nuclear accidents at Three Mile Island, Chernobyl and Fukushima, it seemed unlikely that any more would ever be approved - until now. This fierce domestic opposition to nuclear power has caused many governments to take an almost schizophrenic stance regarding the atom.

#### Obama’s political capital will give him leverage in the ‘fiscal cliff’ negotiations now – brokers a deal

Andrew Sprung (he is the CEO of Sprung PR and hold a PhD from the University of Rochestor) 9/21, 2012 “Ezra Klein's unconvincing theory that Obama misunderstands (or misrepresents) "change," http://xpostfactoid.blogspot.com/2012/09/ezra-kleins-unconvincing-theory-that.html)

In my view, Klein is viewing this question too narrowly. **Obama is well aware of the limitations of the bully pulpit**, and he's got to know better than any person on the planet that presidential advocacy polarizes, entrenching the opposing party in implacable opposition to whatever the president proposes. Yet, in presenting a revamped theory of how the presidency works, he's not just feeding us a line of BS. And if Obama wins reelection, I believe that we will look back five or ten or twenty years from now and recognize that yes, Obama did change the way Washington works. Or at the very least, he kept the US on a sane policy course in a time of extreme polarization and thus gave (will have given...) the system space to self-correct, as it has in the past. Let's start with Klein's objection to Obama's characterization of how healthcare reform got done: The health-care process, which I reported on extensively, was a firmly “inside game” strategy. There were backroom deals with most every major interest group and every swing legislator.... By the time the law passed, many more Americans viewed it unfavorably than viewed it favorably — exactly the opposite of what you’d expect if health care had passed through an “outside game” strategy in which, as Obama put it, “the American people … put pressure on Congress to move these things forward.” And yet, health care passed. The inside game worked. All true, laddie. And yet, in claiming that the impetus for healthcare reform came from the outside, I don't think Obama is attempting to whitewash this long and messy process -- or is even referring to it. He is alluding to the marshaling or channeling of popular will that got him elected. The essence of Obama's primary election argument against Hillary Clinton was that he was better equipped to marshal the popular will for fundamental change -- with healthcare reform as the centerpiece -- than she was. I well remember the moment when that argument first impressed itself on me. It was in a debate in the immediate aftermath of the Iowa caucuses, on Jan. 5, 2008: Look, I think it's easier to be cynical and just say, "You know what, it can't be done because Washington's designed to resist change." But in fact there have been periods of time in our history where a president inspired the American people to do better, and I think we're in one of those moments right now. I think the American people are hungry for something different and can be mobilized around big changes -- not incremental changes, not small changes. I actually give Bill Clinton enormous credit for having balanced those budgets during those years. It did take political courage for him to do that. But we never built the majority and coalesced the American people around being able to get the other stuff done. And, you know, so the truth is actually words do inspire. Words do help people get involved. Words do help members of Congress get into power so that they can be part of a coalition to deliver health care reform, to deliver a bold energy policy. Don't discount that power, because when the American people are determined that something is going to happen, then it happens. And if they are disaffected and cynical and fearful and told that it can't be done, then it doesn't. I'm running for president because I want to tell them, yes, we can. And that's why I think they're responding in such large numbers. Cue the political science eye-roll. The American people were not "determined" that healthcare reform per se had to occur. You can't read the results of the 2008 wave election as a "mandate" for a specific policy. In the aftermath, the electoral tide went back out with a vengeance. But it's also true that in two years of campaigning Obama's words did inspire people, that the American people were hungry for change after Bush, that Obama made a broad and conceptually coherent case for moving the center of American politics back to the left with a renewed commitment to shared prosperity and investment in the common good, and that healthcare reform was at the center of that case. True too that the results of that election gave him enough of a majority to persist, even when relentless Republican misinformation and bad-faith negotiation and delay eroded public support. Obama also used the bully pulpit at crucial points, if not to rally public opinion, at least to re-commit wavering Democrats -- and also to convince the public, as he enduringly has, that he was more of a good faith negotiator, more willing to compromise, than the Republicans. Those pressure points were the September 2009 speech he gave to a joint session of Congress, and the remarkable eight-hour symposium he staged with the leadership of both parties in late February 2010 to showcase the extent to which the ACA incorporated past Republican proposals and met goals allegedly shared by both parties, as well as his own bend-over-backwards willingness to incorporate any Republican ideas that could reasonably be cast as advancing those goals. In a series of posts about Ronald Reagan, Brendhan Nyhan has demonstrated that presidential rhetoric generally does not sway public opinion. Savvy politicians channel public opinion; transformative ones seize an opportunity when their basic narrative of where the country needs to go aligns with a shift in public opinion, usually in response to recent setbacks or turmoil. Obama, like Reagan, effected major change in his first two years because he caught such a wave -- he amassed the political capital, and he spent it, and we got what he paid for. The force from outside -- a wave election -- empowered Obama to work change from inside in a system that reached a new peak of dysfunctionality. Klein's also objects to Obama's pitch for how to effect change going forward. In 2011, he notes, Obama highlighted the substantial change won from the messy inside game of legislating, touting the long list of legislative accomplishments of the 111th Congress. In election season, he has reverted to a keynote of his 2008 campaign: change comes from you, the electorate; it happens when ”the American people … put pressure on Congress to move these things forward.” Klein regards this as election season hooey: But while this theory of change might play better, it’s the precise theory of change that the last few years have shattered. Whatever you want to say about the inside game, it worked. Legislation passed. But after the midterm elections, it stopped working. And so the White House moved towards an outside game strategy, where ”the American people … put pressure on Congress to move these things forward.” Perhaps the most public example was Obama’s July 2011 speech, in which he said: I’m asking you all to make your voice heard. If you want a balanced approach to reducing the deficit, let your member of Congress know. If you believe we can solve this problem through compromise, send that message. So many Americans responded that Congress’s Web site crashed. But Obama didn’t get his “balanced approach,” which meant a deal including taxes. Klein goes on to recount that throughout the past year of confrontation with the GOP, pushing a jobs package that had broad popular support, Obama won only one minor victory, extension of the payroll tax cut. He then reverts to two political science tenets: presidential advocacy entrenches the opposition, and it can't move popular opinion. But I think he misreads Obama's pitch, strategy and record on several counts. First, he understates Obama's (and the Democrats') successes in the year of confrontation that has followed the debt ceiling debacle. He writes off the payroll tax cut and unemployment benefit extension as small beer. But this was actually a near-total victory in two stages against entrenched opposition, and it won Obama some vital back-door stimulus for the second year running in the wake of the GOP House takeover. It was followed by a similar GOP cave-in on maintaining low student loan interest rates -- and then again, by the collapse of the House GOP effort to renege on the Budget Control Act and impose still more spending cuts. Presidential rhetoric may not change the public mind. But when it's in sync with voter's propensities, it can deploy public opinion to bring pressure to bear on the opposition. Second, it's true that under threat of GOP debt ceiling extortion, Obama successfully marshaled public opinion in favor of his "balanced" approach to deficit reduction but wasn't able to use that pressure to move the GOP off their no-new-taxes intransigence. But that battle ain't over yet, and popular support for Obama's position is political capital that's still in the bank. In the upcoming fiscal cliff negotiations, Obama, if he wins reelection, **will have the** whip **hand**, given the expiration of the Bush tax cuts and Republican teeth-gnashing over the defense cuts in the sequester. Speaking of which, Obama's refusal to intervene in the supercommittee negotiations as Republicans stonewalled once again over any tax hikes banked him further capital in this upcoming fight. Republicans are screaming much louder than Democrats about the sequester, disastrous though the cuts may be on the domestic side. Third, it's rational for Obama to recast his bid for change in election season, because of course he's seeking further "change" from the outside, i.e., more Democrats elected to Congress. He's not going to win a mandate as in 2008, or, most likely, majorities in both houses of Congress. But he has to make the pitch for being granted renewed tools to advance his agenda. Finally, a key part of Obama's "you are the change" pitch in his convention speech was a frank call to play defense -- to protect the changes wrought in his first term and fend off the further capture of the electoral process and the nation's resources by the oligarchy the GOP represents: If you turn away now – if you buy into the cynicism that the change we fought for isn’t possible … well, change will not happen. If you give up on the idea that your voice can make a difference, then other voices will fill the void: lobbyists and special interests; the people with the $10 million checks who are trying to buy this election and those who are making it harder for you to vote; Washington politicians who want to decide who you can marry, or control health-care choices that women should make for themselves.

#### Impact is global econ collapse

Harold Mandel (writer for the Examiner) 9/27, 2012 “Fitch says fiscal cliff could set off global recession (Video)” http://www.examiner.com/article/fitch-says-fiscal-cliff-could-set-off-global-recession

The ratings agency stated, "The U.S. **fiscal cliff represents the single biggest near-term threat to a global economic recovery**." Fitch has gone on to warn, “A U.S. fiscal shock would be exported to the rest of the world via a sharply weaker U.S. dollar and asset prices, lower U.S. price and wage inflation and heightened risk of deflation, and the impact on commodity prices.” In the meantime leading U.S. executives have less confidence in the business outlook now than at any time in the past three years, with a primary reason being fear of gridlock in Washington over the fiscal deficit and tax policy. And so unless the fiscal cliff is confronted and avoided this could be bad news for everyone.

**The impact is global conflict and instability**

**Tilford 2008** – PhD in history from George Washington University, served for 32 years as a military officer and analyst with the Air Force and Army (Earl, “Critical mass: economic leadership or dictatorship”, Cedartown Standard, lexis)

Could it happen again? Bourgeois democracy requires a vibrant capitalist system. Without it, the role of the individual shrinks as government expands. At the very least, the dimensions of the U.S. government economic intervention will foster a growth in bureaucracy to administer the multi-faceted programs necessary for implementation. Bureaucracies, once established, inevitably become self-serving and self-perpetuating. Will this lead to “socialism” as some conservative economic prognosticators suggest? Perhaps. But so is the possibility of dictatorship. If the American economy collapses, especially in wartime, there remains that possibility. And if that happens the American democratic era may be over. If the world economies collapse, totalitarianism will almost certainly return to Russia, which already is well along that path in any event. Fragile democracies in South America and Eastern Europe could crumble. A global economic collapse will also increase the chance of global conflict. As economic systems shut down, so will the distribution systems for resources like petroleum and food. It is certainly within the realm of possibility that nations perceiving themselves in peril will, if they have the military capability, use force, just as Japan and Nazi Germany did in the mid-to-late 1930s. Every nation in the world needs access to food and water. Industrial nations—the world powers of North America, Europe, and Asia—need access to energy. When the world economy runs smoothly, reciprocal trade meets these needs. If the world economy collapses, the use of military force becomes a more likely alternative. And given the increasingly rapid rate at which world affairs move; the world could devolve to that point very quickly.

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#### Obama is winning but its close and reversible – the average of recent polls puts Obama ahead

**Cook, 10/4**/12 – editor and publisher of the Cook Political Report for National Journal (Charlie, “Mitt Romney Breaks His Losing Streak” <http://www.nationaljournal.com/columns/cook-report/the-cook-report-romney-breaks-his-losing-streak-20121004?mrefid=mostViewed>)

Too many political observers see politics in an entirely binary way: Everything has to be either a “0” or a “1”; a race is either tied or it’s over; every election is either won or stolen. Some people never want to admit that their side lost. And some people think that a poll either tells them what they want to hear or is methodologically flawed—or crooked. It’s like an obnoxious sports fan (often found in Philadelphia) who views a ruling by a referee or umpire as either favorable or a bad call. Denial and simplicity reign.

The presidential election is neither tied nor over. Of the 16 most recent national polls using live telephone interviewers calling both respondents with landlines and those with cell phones (between 30 and 40 percent of voters do not have landlines and cannot legally be called by robo-pollsters), one has the race even, two have Obama with a narrow 2-point edge, five have 3-point Obama margins, two have 5-point Obama advantages, another pair have 6-point Obama leads, two have 7-point leads, and one has an 8-point Obama lead. This would strongly suggest that the Obama lead is between 3 and 6 percentage points; such brand-name polls as those by CNN, Fox News, and NBC News/Wall Street Journal are among those in that 3- to 6-point range.

Conversations with Democratic and Republican pollsters and strategists suggest that Colorado, Florida, North Carolina, and Virginia are the most competitive swing states. Some high-quality private polling shows Romney with very narrow leads in both North Carolina and Virginia, but a few other equally sophisticated surveys show Obama with narrow advantages in those two states. At least one private survey shows Florida even, but most show the Sunshine State and Colorado with narrow Obama leads, in the small- to mid-single-digit range. Just a hair or two better for Obama but still quite close are Nevada and Wisconsin, followed by Iowa. Things really get ugly for Romney in Ohio and Michigan, and, finally, in Pennsylvania, which is no longer competitive. Ohio shows a 5- to 8-point lead for Obama in private polling. In Michigan, Obama’s lead is slightly wider, and in Pennsylvania, Romney faces close to a 10-point deficit. It is mathematically possible for Romney to reach 270 electoral votes without Michigan, Ohio, or Pennsylvania, but it is in reality exceedingly unlikely.

It would take a very consequential event to change the trajectory of this race. Time will tell whether Romney’s strong debate performance on Wednesday night was the event that he needed—particularly in swing states such as Ohio. But at least he energized his supporters and sent a clear message that the race is not over.

#### Small shifts matter – approval ratings key

**Silver, 12** (Nate, 5/15, chief pollster for New York Times’ 538 election polling center Regarded as top-level pollster based on distinct mathematical methods, http://fivethirtyeight.blogs.nytimes.com/2012/05/15/a-30000-foot-view-on-the-presidential-race/)

The last thing to remember is that when an election is quite close, it does not take very much to shift the race from one candidate being a 60/40 favorite to it being about even.

At the betting market Intrade, Mr. Obama’s odds of re-election have consistently been around 60 percent. While, on the one hand, it is good not to overreact to new data at this early stage of the race, it is also worth remembering that even a one-point shift in a president’s approval ratings, or a modest change in the economic forecasts, can move a president’s re-election odds at the margin.

#### The plan is wildly unpopular

**Ramana, 11 -** Princeton University Program on Science and Global Security Physicist

(M.V. August 3, “Nuclear power and the public,” http://www.thebulletin.org/web-edition/features/nuclear-power-and-the-public, d/a 7-20-12

Japan is by no means alone. Around the world, nuclear energy has declined in popularity. In the United States, for example, a Washington Post-ABC poll conducted in April 2011 found that 64 percent of Americans opposed the construction of new reactors. Another poll, conducted by CBS News in March 2011, soon after the Fukushima crisis began, found that only 43 percent of those polled would approve of building new reactors, down from a 57 percent approval rating in 2008. Support for nuclear power was similar or lower in countries as varied as Chile (12 percent), Thailand (16.6 percent), Australia (34 percent), and the United Kingdom (35 percent). Even in France, which relies on nuclear power for about three-quarters of its electricity, one poll found that a majority (57 percent) were in favor of abandoning nuclear energy. These approval ratings are not strictly comparable because the polls were conducted by different agencies, asking different questions and providing different kinds of information prior to asking the questions. Nevertheless, there is little doubt among those who study public opinion on nuclear power that, by and large, it does not command much support. Nuclear power wasn't always so unpopular. For example, in the United States in 1977, when CBS News conducted its first poll on nuclear power, 69 percent of those surveyed expressed support for building more nuclear plants. Just two years later, after the Three Mile Island accident, public support had plummeted to 46 percent, and it dropped further to 34 percent after the 1986 Chernobyl accident. Since the 1980s, a majority of the US population has consistently opposed the construction of new nuclear reactors. Not coincidentally, there has been practically no nuclear construction in the United States since Three Mile Island. The public perceives nuclear power as a very risky technology. In some cases, association with nuclear facilities is even subject to stigma**.** The nuclear industry has tried a variety of strategies to break down public resistance to nuclear power, **but they** haven't worked well. With growing public concern about global warming, the industry is experimenting with a new strategy -- playing up the climate mitigation potential of nuclear power. While this has increased the benefit side of the equation for nuclear power, it hasn't decreased the risk perception associated with the technology, and nuclear power remains a reluctant choice at best. Renewable energy technologies offer the same benefits, making it unlikely that a large-scale "nuclear renaissance" will materialize.

#### Romney election causes Middle East instability and escalatory war

Brooklyn Dame 8-1-2012; Mitt Romney: A Foreign Policy of Incoherence

http://www.zimbio.com/Governor+W.+Mitt+Romney/articles/6GkfmpjrRzU/Mitt+Romney+Foreign+Policy+Incoherence

If his views are to be taken seriously (and some doubt if they should) Romney politics in the Middle East line up pretty strongly with the Israeli Likud party. From this we know three things: Romney would allow Israel relative free ride on its policies, right or wrong, that the former Massachusetts Governor would take a **hawkish approach to Iran** (risking war and instability in the Middle East), and that a President Romney would not be very friendly towards the new regimes of Egypt or Tunisia. Part of me thinks Romney is too smart to actually believe this tripe. While Bush was a “think-with-your-gut,” “shoot-first-ask-questions-later” kind of guy, with nary a bone of pragmatism in his body, Romney appears at least removed in his behavior, and he appears to consider the pros and cons of every action (which explains his “flip-flopping” behavior in politics). So, again, part of me leans towards believing that as president, Romney would merely be a high-defense-spending, moderate, realist in the mold of Ronald Reagan or George H.W. Bush. It’s hard to realistically picture him as one truly in the camp of Paul Wolfowitz or Bill Kristol whose panacea for foreign policy comes down to “bomb! bomb! invade! invade!” That being said, we must take the candidates at their word. To dismiss their words would be folly. And Romney’s words in foreign policy arena **border on disastrous**. We cannot risk electing someone who — in a time of democratization and revolution in the Middle East, a trend that can easily be reversed or hijacked by illiberal forces — would turn a blind eye to pernicious Israeli policies in the region, encourage military action against Iran, and spurn the newly emergent regimes of Egypt and Tunisia for their exaggerated Islamist nature. Furthermore, as can be seen in Iraq, Syria, Lebanon, and Bahrain, the cold war between Sunni Saudi Arabia and Shia Iran is at threat of **heating up across the region** if not properly mediated by the international community. Why would Romney want to risk derailing the progress of the Arab Spring through unintentionally encouraging an escalation of Sunni-Shia tensions across the region with the added wild card of an unrestrained, frenetic Israel in the mix?

#### Nuclear war

Russell2009 – Editor of Strategic Insights, Senior Lecturer Department of National Security Affairs (James, Spring, “Strategic Stability Reconsidered: Prospects for Escalation and Nuclear War in the Middle East” Security Studies Center Proliferation Papers, http://www.ifri.org/downloads/PP26\_Russell\_2009.pdf)

Strategic stability in the region is thus undermined by various factors: (1) asymmetric interests in the bargaining framework that can introduce unpredictable behavior from actors; (2) the presence of non-state actors that introduce unpredictability into relationships between the antagonists; (3) incompatible assumptions about the structure of the deterrent relationship that makes the bargaining framework strategically unstable; (4) perceptions by Israel and the United States that its window of opportunity for military action is closing, which could prompt a preventive attack; (5) the prospect that Iran’s response to pre-emptive attacks could involve unconventional weapons, which could prompt escalation by Israel and/or the United States; (6) the lack of a communications framework to build trust and cooperation among framework participants.

These systemic weaknesses in the coercive bargaining framework all suggest that escalation by any the parties could happen either on purpose or as a result of miscalculation or the pressures of wartime circumstance. Given these factors, it is disturbingly easy to imagine scenarios under which a conflict could quickly escalate in which the regional antagonists would consider the use of chemical, biological, or nuclear weapons.

It would be a mistake to **believe the** nuclear **taboo** can somehow magically keep nuclear weapons from being used in the context of an unstable strategic framework. Systemic asymmetries between actors in fact suggest a certain increase in the probability of war – a war in which escalation could happen quickly and from a variety of participants. Once such a war starts, events would likely develop a momentum all their own and decision-making would consequently be shaped in unpredictable ways. The international community must take this possibility seriously, and muster every tool at its disposal to prevent such an outcome, which would be an unprecedented disaster for the peoples of the region, with substantial risk for the entire world.

### 1nc cp

#### Congress should establish a government-wide Quadrennial Energy Review in which the Secretary of Energy provides a recommendation that the united states should provide seed money for initial commercial Integral Fast Reactors in the United States.

#### Only doing the counterplan now establishes a comprehensive, streamlined energy policy process that provides certainty and is politically popular – individual policies cause rollback and turn innovation

**Moniz 12** – Cecil and Ida Green Professor of Physics and Engineering Systems and Director of the Energy Initiative at the Massachusetts Institute of Technology, serves on the President’s Council of Advisors on Science and Technology

(Ernest, “Stimulating Energy Technology Innovation”, Daedalus 141.2 (2012): 81–93, dml)

While there are many promising new approaches to **filling the energy-tech**nology **innovation** pipeline at the invention and translation stages, acceleration in the adoption and diffusion stages continues to be more challenging, especially with respect to the government role. The public-private model discussed above can be an important contributor, especially at the adoption stage, but the prospect of implementing an energy innovation surcharge in the near future is bleak. A recent congressional initiative to introduce a “line charge” on coal-generated electricity–the proceeds of which would have established carbon capture and sequestration to enable continued coal use–did not get very far, even though the measure had a fair degree of support in the industry.

The most obvious and conceptually simple approach to accelerate low-carbon deployment at scale is the imposition of a substantial economy-wide price on carbon dioxide emissions. Alternatively, a regulatory cap on emissions that tightens over time could be put in place. In either approach, a high degree of confidence that the policy will stay in place over a considerable period of time–rather than be subject to dramatic shifts in Congress and the administration–will be important for generating private investments at scale in a timely fashion. Similar mechanisms could address the externality of energy security and oil dependence. The prospects for carbon pricing continue to be inauspicious. At best, a continuation of **proxy policies** such as renewable portfolio standards and tax credits, often at the state level, can be anticipated. These policies tend to be inefficient for the overarching purpose of stringent carbon dioxide emissions reductions and, by observation, have too often been subject to starts and stops. Such policy realities highlight the importance of clean-energy technology cost reduction as a more assured path to deployment and, then, to appropriate policy by lowering implementation costs. Furthermore, it is not clear that pricing externalities would accelerate innovation at the needed pace without additional energy-technology policy steps.

It should come as no surprise that I do not have the answers for how the government should intersect the latter stages of the innovation process in a general sense. However, PCAST recommended a pragmatic approach to an integrated federal energy policy that would employ all the tools available to the government in a coherent way. Termed the Quadrennial Energy Review (QER), the process is necessarily complex, but history suggests that anything short of a full multiagency effort is unlikely to provide a robust plan that accounts for the many threads of an energy policy. Furthermore, a degree of analysis is required that **has not been present** in previous efforts.

Energy policy is derivative of many policies: environment, technology and competitiveness, diplomacy and security, natural resources, and land and food, among many others. Indeed, multiple agencies that are not labeled “energy” have major equities and long-held perspectives on key elements of energy policy. Often, the preferred policies for different agencies’ agendas conflict. Further, states and local governments play a strong role, for example with building codes, and their approaches can vary dramatically in different parts of the country; certainly, California’s energy policies have influenced the national market. The **tools** available to support innovation **are** also **diverse, ranging from direct support** of RD&D **to a variety of** economic **incentives, regulation, standards, and** federal procurement, among **other instruments**. Congress is equally fragmented: in the House of Representatives and Senate, many committees beyond those tasked with energy policy have equities that mirror those of the different executive agencies. To **overcome this fragmentation** of responsibilities and perspectives, and especially if the goal is a plan that has staying power in advancing adoption and diffusion, PCAST recommended a QER process to provide a multiyear roadmap that:

• lays out an integrated view of short-, intermediate-, and long-term objectives for Federal energy policy in the context of economic, environmental, and security priorities;

• **outlines** legislative **proposals to Congress**;

• puts forward anticipated Executive actions (programmatic, regulatory, fiscal, and so on) coordinated across multiple agencies;

• identifies resource requirements for the RD&D programs and for innovation incentive programs; and, most important,

• provides a strong analytical base.14

This is a tall order intellectually and organizationally. Several process elements are essential to fostering a chance for success. First, the Executive Office of the President (EOP) must use its convening power to ensure effective cooperation among the myriad relevant agencies. However, the capacity to carry out such an exercise and to sustain it does not (and should not) reside in the EOP. The DOE **is the logical home** for a substantial Executive Secretariat supporting the EOP interagency process that would present decision recommendations to the president. However, the scope of the analytical capability needed does not currently reside at the DOE or any other agency. The DOE needs to build this capability, presumably supplemented by contractor support to gather data, develop and run models, and carry out analysis, such as independent energy-system engineering and economic analysis. Market trends and prices would be part of the analysis, including international markets and robust analyses of uncertainty. The Energy Information Administration can help with some data gathering and models, but its independence from the policy function needs to be preserved. The national laboratories also lack this range of functions, and tasking them with providing the analytical support to the policy process would be regarded as a conflict of interest; their focus is best directed at research, invention, and technology transfer. Building this analysis capacity is a large job that will take time.

For the QER to succeed, the government must seek substantial input from many quarters in a transparent way; certainly, **ongoing dialogue with Congress and the energy industry are** essential. The good news is that **members of Congress have** supported **the development of the QER**15 as a way **to present a coherent** starting point for **congressional** action across many committees. A hope is that **Congress could then use the QER as a basis for** a four- or five-year authorization **that would provide the private sector** with the increased confidence needed to make sound clean energy investment decisions.

Given the magnitude of the task, PCAST recommended in 2011 that the DOE carry out a Quadrennial Technology Review (QTR)–a first step centered in a single department and focused on technology. The QTR resulted in a rebalancing of the R&D portfolio toward the oil dependence challenge through advanced vehicle development, particularly transportation electrification. The key now will be to extend the processes developed for the QTR to the multiagency QER, involving the EOP in a leadership role. Taking the next steps in 2012 **will** maintain momentum and **establish the capabilities** needed for the QER by early 2015, the time frame recommended by PCAST.

While some may view 2015 as a frustratingly long time away, the alternative is to **rely on wishes rather than analysis** while failing to gain multiple perspectives in a fair and open manner. **Rushing the process will result in** a poorly done job that will not accomplish any of the key QER goals. Certainly, **it will not bring together succeeding administrations** and Congresses around a reasonably shared vision and set of objectives **that can accelerate innovation** in service of national competitiveness and environmental and security goals. Continuing with fragmented and economically inefficient policies, technologies “du jour,” and frequent shifts will complicate private-sector decisions rather than facilitate innovation. The government unavoidably plays a strong role in the innovation process, even when this is unacknowledged in policy and political debates. The issue now is to present both a set of principles and fact-based analyses supporting coordinated government wide actions that earn decent buy in from major stakeholders.

### 1nc cp

#### The Department of Defense should obtain, through alternative financing, electricity from space solar power for military bases in the United States.

#### Counterplan leads to rapid commercial development

**NSSO 7** (National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf)

FINDING:The SBSP Study Group found that industry has stated that the #1 driver and requirement for generating industry interest and investment in developing the initial operational SBSP systems is acquiring an anchor tenant customer, or customers, that are willing to sign contracts for high‐value SBSP services. Industry is particularly interested in the possibility that the DoD might be willing to pay for SBSP services delivered to the warfighter in forward bases in amounts of 5‐50 MWe continuous, at a price of $1 or more per kilowatt‐hour.  o Recommendation:  The SBSP Study Group recommends that the DoD should immediately conduct a requirements analysis of underlying long‐term DoD demand for secure, reliable, and mobile energy delivery to the war‐fighter, what the DoD might be willing to pay for a SBSP service delivered to the warfighter and under what terms and conditions, and evaluate the appropriateness and effectiveness of various approaches to signing up as an anchor tenant customer of a commercially‐delivered service, such as the NextView acquisition approach pioneered by the National GeoSpatial‐imaging Agency. FINDING: The SBSP Study Group found that even with the DoD as an anchor tenant customer at a price of $1‐2 per kilowatt hour for 5‐50 megawatts continuous power for the warfighter, when considering the risks of implementing a new unproven space technology and other major business risks, the business case for SBSP still does not appear to close in 2007 with current capabilities (primarily launch costs). This study did not have the resources to adequately assess the economic viability of SBSP given current or projected capabilities, and this must be part of any future agenda to further develop this concept. Past investigations of the SBSP concept have indicated that the costs are dominated by costs of installation, which depend on the cost of launch (dollars per kilogram) and assembly and on how light the components can be made (kilograms per kilowatt). Existing launch infrastructure cannot close the business case, and any assessment made based upon new launch vehicles and formats are speculative. Greater clarity and resolution is required to set proper targets for technology development and private capital engagement. Ideally SBSP would want to be cost‐competitive with other baseload suppliers in developing markets which cannot afford to spend a huge portion of their GDP on energy (4c/kWh), and these requirements are extremely stringent, but other niche export markets may provide more relaxed criteria (35c/kWh), and some customers, such as DoD, appear to be spending more than $1/kWh in forward deployed locations. It would be helpful to develop a series of curves which examine technology targets for various markets, in addition to the sensitivities and opportunities for development. Some work by the European Space Agency (ESA) has suggested that in an “apples‐to‐apples” comparison, SBSP may already be competitive with large‐scale  terrestrial solar baseload power. A great range of opinions were expressed during the study regarding the near‐term profitability.  It is instructive to note that that there are American companies that have or are actively marketed SBSP at home and abroad, while another group feels the technology is sufficiently mature to create a dedicated public‐private partnership based upon the COMSAT model and has authored draft legislation to that effect. • The business case is much more likely to close in the near future if the U.S. Government agrees to: o Sign up as an anchor tenant customer, and o Make appropriate technology investment and risk‐reduction efforts by the U.S. Government, and o Provide appropriate financial incentives to the SBSP industry that are similar to the significant incentives that Federal and State Governments are providing for private industry investments in other clean and renewable power sources. • The business case may close in the near future with appropriate technology investment and risk‐reduction efforts by the U.S. Government, and with appropriate financial incentives to industry. Federal and State Governments are providing significant financial incentives for private industry investments in other clean and renewable power sources. o Recommendation: The SBSP Study Group recommends that in order to reduce risk and to promote development of SBSP, the U.S. Government should increase and acceler

ate its investments in the development and demonstration of key component, subsystem, and system level technologies that will be required for the creation of operational and scalable SBSP systems. Finding: The SBSP Study Group found that a small amount of entry capital by the US Government is likely to catalyze substantially more investment by the private sector. This opinion was expressed many times over from energy and aerospace companies alike. Indeed, there is anecdotal evidence that even the activity of this intermim study has already provoked significant by at least three major aerospace companies. Should the United States put some dollars in for a study or demonstration, it is likely to catalyze significant amounts of internal research and development. Study leaders likewise heard that the DoD could have a catalytic role by sponsoring prizes or signaling its willingness to become the anchor customer for the product.

**SSP solves global warming**

**Mankins, 8** - president of the Space Power Association, and former Manager, Advanced Concepts Studies, Office of Space Flight at NASA (John, Ad Astra, “Inexhaustible Energy from Orbit” Spring 2008, pg. 20, http://www.nss.org/adastra/AdAstra-SBSP-2008.pdf)

In an era when new energy options are urgently needed, space solar power is an inexhaustible solution—and the technologies now exist to make it a reality. The world cannot wait much longer. While the past century has been one of the most remarkable periods in human history, it has also been dominated by the use of fossil fuels. Yet, the accelerating global consumption of affordable and available energy sources will soon present fundamental challenges.

In less time than has passed since the founding of Jamestown, today’s coal reserves will be forever gone. Also, most scientists agree that the use of fossil fuels is profoundly altering both local environments and the climate of the world itself. Capturing solar power from space-based platforms can solve this crisis. This is energy that is essentially carbon-free, endless and can be dispatched to best meet the dynamically changing requirements of populations separated by thousands of miles.

**Space solar power is vital to U.S. competitiveness**

**Snead, 07 -** Aerospaceengineer and consultant focusing on Near-future space infrastructure development (Mike, “America Needs to Become Spacefaring,” http://mikesnead.net/resources/spacefaring/white\_paper\_america\_needs\_to\_become\_spacefaring.pdf)

The value of building infrastructure to encourage economic development is well understood by cities and states. New businesses rely on local and state governments to build the roads, waterlines, telecommunications, etc., that are needed before the businesses can begin operation. And, as any business student understands, in most economic ventures, the first to reach the market with new goods and services captures new customers, establishes product loyalty, creates significant technological leadership in terms of patents and intellectual expertise, opens the door to additional services, and best positions itself for continued growth. Space services and products will be no different. By virtue of being the first to create an integrated space infrastructure, American businesses and entrepreneurs will have the advantage in establishing successful new space enterprises. One particularly important example could be the building of Space Solar Power satellites to beam environmentally- benign electrical power to the surface in lieu of building new coal, oil, and nuclear power plants to meet the world’s growing demand for electrical energy. American companies could become a world-leading supplier of space electricity in a market valued in hundreds of billions of dollars annually. Not only could this help, should it prove technologically feasible, to counter the impact of burning fossil fuels—a significant world science and political concern—but it would also significantly increase American exports, helping to balance America’s large trade deficit while creating sustainable new industries with products in demand by the rest of the world.

### 1nc leadership

#### The competitiveness thesis is empirically false

**Morris, 12** – Deputy Director of the Climate and Energy Economics Project at Brookings (Adele, CLEAN ENERGY: REVISITING THE CHALLENGES OF INDUSTRIAL POLICY, 6/4, <http://www.brookings.edu/~/media/research/files/papers/2012/6/04%20clean%20energy%20morris%20nivola%20schultze/04_clean_energy_morris_nivola_schultze.pdf>)

Let us first consider the supposed imperative of matching the Chinese, Germans or others in their quest to be “Number One” in clean energy technologies. In a 1994 essay, Paul Krugman wrote, “The idea that a country's economic fortunes are largely determined by its success on world markets is a hypothesis, not a necessary truth; and as a practical, empirical matter, that hypothesis is flatly wrong.” 21 He makes the empirical case that improvements in U.S. living standards derive from the growth rate of domestic productivity -- not market share relative to competitors. ¶ Krugman notes that, while the term “competitiveness” is meaningful when applied to individual firms, it makes little sense when applied to the economic relationships among countries. CocaCola and Pepsi struggle for market share, and one succeeds only to the disadvantage of the other. By contrast, international trade consists of transactions that are, by definition, mutually advantageous to the trading partners. Over the long haul, American living standards improve, rather than deteriorate, through freer trade. Growth of productivity and real incomes in countries with whom we trade redounds to our benefit, even if some individual domestic firms and workers may suffer in the short or intermediate term. ¶ Advocates for taxpayers’ investments to promote U.S. competitiveness often appear to ¶ misunderstand how trade affects U.S. output and employment. In periods of sustainable noninflationary prosperity and high employment, supported by a competent and flexible monetary ¶ policy, losses of employment in sectors that are losing business to cheaper imports will tend to ¶ be offset by gains in other sectors through an appropriate adjustment in monetary policy. In a ¶ normal year the U.S. experiences about 14 million hires from new entrants to the labor force ¶ and people changing jobs, and a little under 13 million job separations, from retirements, quits, ¶ layoffs, and other causes (the difference is the growth in the labor force). In the churning there ¶ are losses and gains for individual workers. But overall, international trade tends to reallocate ¶ rather than add or subtract overall jobs in the economy. And if another country expands its ¶ exports by keeping its exchange rate with the U.S. dollar artificially low, that will increase the ¶ pace of job reallocation in this country, with the accompanying adjustment costs. But with ¶ appropriate monetary and fiscal policy it will not, except temporarily, worsen unemployment. ¶ Likewise, temporary subsidies to exporting firms won’t improve the long run growth of ¶ exports.

#### The plan increases leverage to negotiate 123 agreements

Domenici and Miller, 12 [September,” Maintaining U.S. Leadership in Global Nuclear Energy Market” Senator Pete V. Domenici Former U.S. Senator and Bipartisan Policy Center Senior Fellow ENERGY PROJECT STAFF Lourdes Long Senior Policy Analyst Warren F. “Pete” Miller, Ph.D. Former Department of Energy Assistant Secretary for Nuclear Energy, <http://bipartisanpolicy.org/sites/default/files/Nuclear%20Report.PDF>]

COMPETITIVE COMMERCIAL NUCLEAR EXPORTS As an active participant in commercial markets, the United States has considerable leverage internationally through the 123 Agreements (in reference to Section 123 of the Atomic Energy Act) and Consent Rights on nuclear technologies exported by the U.S. nuclear industry. These mechanisms provide a direct and effective source of leverage over other countries’ fuel-cycle decisions. U.S. diplomatic influence is also important, but absentan active role in commercial markets, it may not be sufficient to project U.S. influence and interests with respect to nuclear nonproliferation around the world. At an October 2011 Nuclear Initiative workshop on “Effective Approaches for U.S. Participation in a More Secure Global Nuclear Market,” Deputy Secretary of Energy Daniel B. Poneman framed commerce and security not as competing objectives but as “inextricably intertwined.”34 He also highlighted several ways in which a robust domestic nuclear energy industry can further our country’s nonproliferation goals. Deputy Secretary Poneman emphasized the importance of U.S. leadership not only in the commercial marketplace but in international nonproliferation organizations like the International Atomic Energy Agency (IAEA) as well. In addition, BPC’s Nuclear Initiative recognizes that a nuclear accident is a low-probability event that would have high consequences regionally or globally. Many countries that have expressed interest in, or the intention to, develop domestic nuclear power lack important infrastructure, education, and regulatory institutions. We believe that, if these programs move forward, the United States has a critical commercial and advisory role to play. However, domestic exporters of U.S. nuclear technology, fuels, and services face a truly global and highly competitive market. Commercial nuclear technology is now available from a variety of suppliers, and there are many more companies, several of which have the direct backing of their country’s government, competing with U.S. firms. Industry and other stakeholders believe that U.S. nuclear technology companies are at a competitive disadvantage in international markets due to complex and overlapping federal regulations. Several presenters at the BPC Nuclear Initiative event noted that multiple federal agencies, including the Department of Commerce, DOE, and the Department of State have jurisdiction over commercial nuclear trade, global safety and security, and nonproliferation. In an attempt to ameliorate current competitive disadvantages, the Obama administration recently created a new position within the National Security Council to coordinate civilian nuclear policy. We support the creation of this new position to improve coordination of executive branch policy for nuclear energy policy and international affairs. We believe continued efforts to improve coordination between government and industry stakeholders and to more efficiently apply federal export regulations will allow U.S. companies to compete more effectively in the global nuclear marketplace. LEADERSHIP ON INTERNATIONAL ISSUES RELATED TO THE NUCLEAR FUEL CYCLE Leadership in technological and policy developments related to the management of the nuclear fuel cycle is another important component of U.S. leadership on nuclear issues more broadly. As discussed above, several countries have expressed interest in, or the intent to become, new entrants in the use of commercial nuclear power. The spread of nuclear technologies and knowledge presents inherent proliferation risks, and technologies and expertise related to fuel enrichment and reprocessing are especially sensitive. We believe that existing domestic and international policies to discourage the spread of fuel-cycle technologies are sound and we support efforts to maintain and expand these policies. We also believe that international fuel assurances and spent fuel take-back capabilities would give new-entrant countries a powerful incentive to forgo their own enrichment and reprocessing activities. This is particularly true given the fact that most current and proposed national nuclear energy programs are too small to justify indigenous fuel-cycle programs, at least in economic terms.35 For many years, the United States and other countries and organizations, including the IAEA, have explored options for providing an assured nuclear fuel supply to countries that choose not to develop their own enrichment capacities. We strongly support continued U.S. leadership to establish multinational fuel-cycle facilities that would allow newentrant countries to reliably develop domestic nuclear industries without increasing proliferation risks. In addition, the ability to offer full fuel-cycle services would enhance the competitiveness of U.S.-based nuclear energy firms as new entrants look for more comprehensive service packages beyond reactor design and construction. In particular, the ability to take advantage of spent fuel take-back services may provide a strong incentive for countries to participate in multinational fuel arrangements and could allow for more secure, long-term stewardship of spent fuel. Of course, to offer this service, the United States and its partners would have to develop effective spent fuel management and disposal capabilities of their own. Strategic Goal: Historically, the United States has been a leader in nuclear technology research and commercialization. To extend this tradition and assure further innovation, the United States must continue to support research and development efforts within the nuclear industry, the national labs, and U.S. universities. We believe that progress currently underway in a few technical areas will be especially helpful in allowing the United States to maintain its leadership role in nuclear technology and operations. In particular, we believe that SMRs represent an exciting frontier for nuclear technology and a promising opportunity to demonstrate U.S.-based scientific capability and manufacturing potential.36 As part of our event series, the Nuclear Initiative convened a diverse group of expert stakeholders to discuss the technical potential and commercial risks associated with SMRs. Assistant Secretary for Nuclear Energy Lyons discussed the SMR Licensing Technical Support Program, a five-year industry cost-sharing effort to achieve design certification for two SMR designs and to support early stages of deployment.37 DOE’s projected budget for this program, which has received considerable bipartisan support in Congress, is $452 million over five years. These funds will be leveraged to raise additional contributions from industry.38 We believe the SMR program offers the best opportunity, building on the successful Nuclear Power 2010 program, to commercialize innovative nuclear technologies, and we strongly encourage continued support for it and related research, development, and deployment (RD&D) programs. Currently, the United States is also a leader in the development and deployment of Generation III+ advanced passive reactor designs. Beginning in 2002, DOE actively supported the development of advanced passive reactors through the Nuclear Power 2010 program, a government and industry cost-sharing effort that focused on overcoming major technical and regulatory barriers to the deployment of new nuclear power plants. The program supported design certification and first-of-a-kind engineering for two Generation III+ reactor designs (the AP1000 and the Economic Simplified Boiling-Water Reactor), as well as three early site permits and two COLs. In December 2011, the NRC unanimously certified the first Generation III+ reactor design, the Westinghouse AP1000. This approval and the subsequent decision to build two new reactors using the AP1000 design at Southern Company’s Vogtle site sets an important precedent for additional nuclear plant construction in the United States and internationally. Four AP1000 reactors are currently under construction in China and several U.S. utilities are pursuing licenses to build more reactors of this type. Besides the Westinghouse AP1000 reactor, three additional passive reactor designs are under review by the NRC: GE Hitachi’s Economic Simplified Boiling-Water Reactor, AREVA Nuclear Power’s U.S. Evolutionary Power Reactor, and Mitsubishi Heavy Industries’ U.S. Advanced Pressurized-Water Reactor.39 Demand for advanced passive designs may grow further in light of the Fukushima accident. Countries that are planning to build new reactors, including China, may choose to build additional advanced passive reactors rather than conventional Generation II or III reactors. Continued leadership in the development of advanced nuclear technologies presents an important export opportunity for the U.S. nuclear industry and for our nation’s economy. The Commerce Department estimates that the international market for nuclear equipment and services will grow to $500–$740 billion over the next ten years.40 Perhaps more importantly, as previously discussed, U.S. commercial strength in this area provides substantial cobenefits in terms of national security. Beyond the near-term opportunities described above, we believe it is critical to sustain federal support for advanced nuclear RD&D at our national laboratories and universities. The international status of the United States in nuclear technology development remains strong and is built on a foundation of research conducted at such institutions. Most federal resources invested in advanced research at national laboratories, most notably at the lead nuclear energy laboratory, Idaho National Laboratory, as well as at a number of universities. Given the strategic importance of U.S. leadership in nuclear technology, we believe that nuclear energy must remain a priority area for federal energy research and development investment. Several prominent recent studies, including the BRC report discussed previously and the Massachusetts Institute of Technology’s “Future of Nuclear Power” report, have also emphasized the critical role of nuclear energy RD&D.41 We agree with the BRC’s recommendations that federal RD&D funding should be balanced between opportunities for near-term and long-term technology improvements and that the NRC should continue efforts to develop a regulatory framework to accommodate the licensing of advanced nuclear energy systems.42 We also believe that our national labs must develop more streamlined and cost-effective ways to maintain and improve existing infrastructure so that ongoing research investments are as productive as possible. As previously emphasized, fees currently being collected from nuclear utilities for the express purpose of managing and disposing of spent fuel must be made available for this intended function so that rising costs for spent fuel management are not taken from a stagnant overall nuclear energy allocation. Finally, the federal government should continue to provide support for graduate students in nuclear energy research programs as an investment in the human capital and technical expertise needed to sustain a leadership role in the future. Over the course of the last year, BPC’s Nuclear Initiative event series has sparked many productive public conversations regarding nuclear energy in the United States. These discussions have reaffirmed the strategic importance of nuclear energy for our domestic energy sector and our national security interests, but they have also highlighted the many challenges facing the nuclear energy industry in the United States. Our hope is that a clear-eyed understanding of these opportunities and challenges will help policy makers identify and pursue effective actions to support continued U.S. leadership in nuclear energy. As a starting point, policy makers and the public must understand the important role that nuclear energy currently plays in our electric power sector as well as the significant and perhaps vital option value it holds as part of a reliable, affordable, clean, and low-carbon energy future. For nuclear power to play this role, the industry and key regulatory agencies like the NRC must continue to improve nuclear plant safety and security and work to incorporate lessons learned—both from daily operations and from extreme events like Fukushima. Similarly, demonstrable progress must be made toward implementing an effective strategy for managing and disposing of spent nuclear fuel and high-level waste. In addition, policy makers and the public must understand the clear linkages that exist between a strong domestic industry and competitive U.S. nuclear suppliers on the one hand and U.S. leadership in international nuclear markets and nonproliferation issues on the other hand. America’s history of global leadership in this technology area was built on many different factors, including the domestic industry’s extensive operating experience, the influence of the highly-respected NRC, technology advances achieved through domestic research and development programs, and a sustained commitment to nonproliferation principles. Maintaining excellence in each of these areas is the only way to assure continued U.S. Leadership—both technologically and diplomatically—on nuclear issues of vital interest to our long-term energy and national security.

#### The US wants no enrichment and reprocessing pledges in upcoming 123 agreements but will only push for binding restrictions with stronger nuclear leadership

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\*ENR = uranium enrichment and spent fuel reprocessing

The United States is currently negotiating bilateral agreements for peaceful nuclear cooperation under Section 123 of the U.S. Atomic Energy Act—so-called 123 agreements—with Jordan, Saudi Arabia, South Korea, and Vietnam. At some point—thus far no decision has been taken when—the United States will begin a fifth such negotiation, with Taiwan.

The negotiations with South Korea and Taiwan are to renew agreements set to expire in 2014, while the others are new. All five states want to deploy nuclear power reactors for electricity generation in the coming years and they seek benefits that would accrue from a formal legal framework for conducting its nuclear trade and diplomacy with the United States.

Although the Atomic Energy Act establishes criteria that 123 agreements must meet in order to conform to U.S. law without special Congressional consideration, for all of these negotiations to succeed the language and terms written into the five agreements will have to differ quite significantly. Why? Because the interest calculus and leverage balance of the two parties in each case won’t be the same.

Progress in negotiating these agreements has been held up because of a contentious two-year interagency debate in the United States over how to proceed in trying to limit the spread of uranium enrichment and spent fuel reprocessing (so-called ENR) capabilities worldwide. In 2009, the United Arab Emirates (UAE) concluded a 123 agreement that said it would not “engage in activities within its territory” for ENR. The UAE agreement also indicated that the no-ENR provision was to be included in future 123 agreements for countries in the Middle East.

Some administration officials, supported by lawmakers, sought to universalize the UAE no-ENR provision as a “gold standard” for all future agreements, but others preferred instead to apply it on a limited case-by-case basis.

Since 2004, when the Bush administration proposed that ENR technologies be restricted to the few states currently having them—which includes the United States—many countries have objected that this would violate their “rights” to peaceful nuclear development, expressed in both the International Atomic Energy Agency (IAEA) statute and in Article IV of the Nuclear Non-Proliferation Treaty.

The United States sought to codify this ban in nuclear trade guidelines upheld by the 46-member Nuclear Suppliers Group, but had to settle for a criteria-based approach adopted by the group in June 2011. Last fall, the U.S. House of Representatives introduced legislation that would set forth a blanket requirement that countries entering into nuclear cooperation with the United States forego ENR.

But **neither Congress nor the administration at a senior level has set a firm policy course on what should be required in future 123 agreements, leaving it up to negotiators themselves** to follow recommendations arising from lower-level internal deliberations. In practice, this means that there has been a strong difference of views between the State Department, which at high levels supports making the “gold standard” a requirement in all 123 agreements, and the Department of Energy, which favors a more differentiated approach also favored by the U.S. nuclear industry.

Currently, there is an interagency understanding that the State Department will aim to negotiate no-ENR provisions into nearly all future 123 agreements and that any exceptions to the no-ENR outcome must be jointly authorized by Secretary of State Hillary Clinton and Secretary of Energy Steven Chu.

Recent media accounts suggest that Taiwan has “volunteered” to adopt the “gold standard” and that one or more advocates at the State Department behind the scenes then pushed Taiwan to the top of the list of 123 agreements to be negotiated in order to quickly establish the “gold standard” as a precedent for all future agreements. But issues about the timing of the pending Taiwan negotiation were in fact triggered by a State Department staffer’s travel schedule and were unrelated to any policy discussion.

Taiwan and the United States have understood from the very outset that because the United States has immense leverage over Taiwan, a four decade-old policy of no enrichment and reprocessing in Taiwan enforced by the United States will be enshrined in the new agreement.

A new Taiwan agreement will not serve as a precedent for any of the agreements the United States is currently negotiating with other states because the United States enjoys far less leverage, and may have overriding policy goals, in these cases.

Vietnamese officials, for example, have informed their U.S. counterparts that they don’t want to negotiate a nuclear cooperation agreement on the basis that Vietnam must forfeit its ENR “rights.” Vietnam has little incentive to do so. While Taiwan’s nuclear infrastructure was set up decades ago hand-in-hand with U.S. industry, Vietnam will build reactors with the help of Russia and Japan and it doesn’t need an agreement with the United States to do that. Russia has agreed to supply fresh nuclear fuel to Vietnam and thereafter to take back and reprocess in Russia the spent fuel from reactors in Vietnam.

Hanoi has spelled out that it has no interest in setting up enrichment or reprocessing plants, and U.S. officials on the ground appear unworried that Vietnam will try to develop sensitive nuclear fuel cycle capabilities—a consideration that may matter should U.S. negotiators eventually ask Chu and Clinton to make an exception to the no-ENR policy for Vietnam.

Saudi Arabia might be a different story. While Vietnam has decided to bet its chips on nuclear energy partnerships with Russian and Japanese industry, Riyadh has so far not identified who its future industrial collaborators will be, and it is considering possible linkups with American firms. That would not be possible without a 123 agreement.

The Saudi government is also aware that should Riyadh not assure Washington that it won’t build sensitive enrichment and reprocessing installations, U.S. lawmakers, concerned about the security of Israel, would almost certainly forbid the United States to cooperate with Saudi Arabia on those terms. What’s more, like neighboring UAE, Saudi Arabia may want to accommodate the United States in the interest of its bilateral defense arrangements, especially in view of its perceived threat from Iran.

The U.S. State Department is highly aware of the differences in the calculus of each of its prospective nuclear trading partners and the varying extent of U.S. leverage in these cases. Before Washington began broaching nuclear cooperation with Vietnam and Saudi Arabia, it had been negotiating bilateral nuclear agreements with South Korea and Jordan.

South Korea may become one of the exceptions made to a no-ENR outcome, as Seoul is hardly inclined to abandon its interest to enrich and reprocess. To the contrary, South Korea argues that Washington should afford it the same freedom to reprocess its growing inventory of spent fuel to minimize nuclear waste as the United States provided Japan when its 123 agreement was renegotiated in the 1980s.

The United States has long argued that a 1991 bilateral agreement between South Korea and North Korea, which commits both to renounce ENR, stands in the way. But South Korean officials argue that the bilateral agreement is null and void in the wake of North Korea’s revelation that it is now enriching uranium outside of IAEA safeguards, not to mention that it also produced plutonium outside of safeguards and used it in two nuclear explosions in 2006 and 2009. Officials argue that the size of South Korea’s ever-expanding nuclear program—the country now has 23 power reactors—will soon justify the establishment of a domestic uranium enrichment capacity.

With the exception of the ENR issue, negotiation of a 123 agreement with Jordan is virtually complete. But Jordan, like Vietnam, will likely build power reactors in cooperation with non-U.S. vendors (in this case French or Canadian firms) and Jordan has informed the United States it will not negotiate away its generic “right” to enrich uranium or reprocess spent fuel.

Amman’s refusal to legally forfeit its ENR options doesn’t have to mean that Jordan can’t accommodate the United States on this point if both sides really want a nuclear cooperation agreement. Instead of forcing Jordan to legally commit itself not to enrich or reprocess, the U.S.-Jordan agreement might include a declaration by Jordan—in a preamble or in a side letter—to the effect that Jordan will not set up sensitive fuel cycle infrastructure because it is not justified by the anticipated requirements of Jordan’s nuclear power program.

Such a declaration may or may not be legally binding, but it would be politically robust in the context of a bilateral agreement with the United States. Jordan would retain its “right” to develop or acquire reprocessing and enrichment capabilities, but it could agree not to exercise this option. Jordan and the United States might agree to periodically reassess Jordan’s nuclear fuel supply requirements.

A similar approach was successfully taken by Canada in a somewhat different context concerning its interest in enriching uranium. When the United States proposed to the Nuclear Suppliers Group in 2004 that transfers of ENR items to newcomers be banned, Canada objected. Unlike Vietnam, but like Jordan, Canada has domestic uranium reserves (indeed it’s currently the world’s leading uranium exporter) and, like Jordan, Canada does not want to forfeit its option to add value by processing the uranium into commercial power reactor fuel in coming years. In 2008, Ottawa overcame an impasse with the United States on this issue by voluntarily suspending its freedom to import enrichment technology for a limited period of time pending successful negotiation of global ENR trade rules.

U.S. resolve to include a no-ENR pledge in the body of new bilateral agreements will be seen by some countries as arrogant and unacceptable. Incorporating ENR terms into side-letters or preambles may be less offensive. That approach would also more easily facilitate including reciprocal commitments by the United States into its 123 bargains with foreign countries. These might include guaranteeing nuclear fuel supply through participation in the U.S. fuel bank, facilitating the country’s access to other back-up sources of nuclear fuel, and, in the future, perhaps even taking back U.S.-origin spent fuel.

The outcome of any negotiation for a bilateral nuclear cooperation agreement **will depend on the leverage both sides bring** to the table. When the United States negotiated most of the 22 such agreements in force today, it was the world’s leading provider of nuclear technology, equipment, and fuel. As the examples of Jordan and Vietnam show, unlike half a century ago, nuclear newcomers today don’t need to buy American.

The vendor field is populated by firms in Argentina, Australia, Canada, the European Union, Japan, Kazakhstan, Namibia, Niger, Russia, and South Korea, and in the future they will be joined by others in China and India. Governments in these countries do not seek to establish a no-ENR requirement as a condition for foreign nuclear cooperation. Some of them, Australia and Canada for example, have strong nonproliferation track records. Countries now seeking to form foreign industrial partnerships to set up nuclear power programs have numerous options and they will favor arrangements that provide them the most freedom and flexibility.

Equity in international nuclear affairs matters. By negotiating with its partners voluntary political agreements, including side benefits to limit the application of sensitive technologies, instead of trying to legally compel them to make concessions that are politically onerous, the United States can serve its nonproliferation and security interests while avoiding the challenge to U.S. credibility that would follow from rigid application of a one-size-fits-all policy.

The United States should show nonproliferation leadership by generally discouraging countries without enrichment and reprocessing capabilities from embarking in this direction. But negotiators need policy guidelines that provide for flexibility and encourage them to create incentives to get desired results. To some extent, the current policy may be informed by the insight that trying to negotiate no-ENR terms into the operative text of an agreement may fail, and that other approaches may be more productive. It also reflects the reality that U.S. leverage on nuclear trade is declining.

#### The impact is ROK alliance

Seongho **Sheen 11**, associate professor at the Graduate School of International Studies, Seoul National University, Nuclear Sovereignty versus Nuclear Security: Renewing the ROK-U.S. Atomic Energy Agreement, The Korean Journal of Defense Analysis, Vol. 23, No. 2, June 2011, 273–288, http://www.brookings.edu/~~/media/research/files/papers/2011/8/nuclear%20korea%20sheen/08\_nuclear\_korea\_sheen

The most important challenge for Washington and Seoul is to prevent the issue from becoming a test-case for the alliance. During their summit meeting in June 2009, President Obama and President Lee promised close cooperation regarding the peaceful use of nuclear energy, among others. 35 Yet, any hint of U.S. objections to South Korea’s demand for “peaceful” nuclear sovereignty could send the current amicable alliance relationship into turmoil, as shown during the fierce anti-American rallies in Seoul over the U.S. beef import issue in 2008. Many South Koreans often compare the ROK-U.S. revision of the atomic agreement with the U.S.-Japan revision in the 1980s. In its renegotiation in the late 1980s of its nuclear agreement with the United States, Japan acquired an advanced agreement on full-scale spent fuel reprocessing and uranium enrichment. Japan has become the only non-nuclear weapons state with a full reprocessing capability.

36 Washington believed that Japan posed no proliferation risk given its excellent nonproliferation credentials; however, many in South Korea think that they deserve the same right. Washington seems to have difficulty in giving the same benefit of doubt to South Korea when it comes to sensitive nuclear technology. They may say South Korea is different from Japan, which already had reprocessing and enrichment plants under the existing agreement that was agreed to before North Korea’s nuclear program was revealed.

Yet, it will be difficult for the United States to simply ignore South Korea’s demand and its growing nuclear capacity because South Korea, along with Japan, is one of the most important U.S. allies in Asia. It will be a challenge for the United States to balance its bilateral alliance management with Seoul and its commitment to global nonproliferation efforts. An editorial in the Chosun Ilbo, a prominent Korean newspaper, warned the ROK-U.S. alliance could, “come under strain if Washington stubbornly insists on blocking South Korea from reprocessing.” 37

For many Koreans the negotiation could be another test case for the U.S. commitment to the alliance after the very controversial KORUS FTA negotiations. The U.S. attitude could be regarded as another referendum on America’s sincerity and respect for South Korea’s status as a key ally. The comparison with Japan would provide a compelling case for both critics and supporters of the alliance in Korea. In addition, the 2008 Bush administration’s decision to award another long-term consent to India for reprocessing nuclear waste will make it more difficult for U.S. negotiators to persuade Seoul to forgo the same right.

38 How minor they might be, some strong nationalists may even argue for the need for South Korea to have its own nuclear weapons program. Recently, Kim Dae-Joong, a prominent Korean conservative journalist called for a South Korean nuclear weapons program. 39 In addition, some members of the National Assembly argued for having a “conditional” nuclear option until the complete resolution of North Korea’s nuclear issue. 40

#### Key to deter North Korea and maintain regional stability

Kurt M. **Campbell 11** Assistant Secretary, Bureau of East Asian and Pacific Affairs "U.S. Policy Toward North Korea" March 1 Testimony Before SFRC

The primary strategic objective for U.S. engagement in the Asia-Pacific region is to promote a peaceful and stable security environment that advances the interests of the United States, our allies, and partners in the region. Essential to this approach is the security and stability that our alliances with Japan, the Republic of Korea (ROK), Australia, Thailand, and the Philippines provide. These relationships underwrite peace and security in the region and provide a context for the region’s tremendous economic dynamism and vitality. In addition, our alliances are buttressed by a network of partnerships ranging from Indonesia to New Zealand and an evolving regional political and security architecture that will help create rules of the road for this rapidly evolving and strategically critical region. China is also a key U.S. partner in promoting peace and security in the Asia-Pacific region and globally, and the joint statement issued during President Hu’s January 2011 to Washington underscored that ‘‘in coordination with other parties, the United States and China will endeavor to increase cooperation to address common concerns and promote shared interests.’’

Despite the tremendous opportunities in Asia that have become part of our popular discourse, one country stands out as an outlier, and in fact an impediment, to the region’s promising future: the Democratic People’s Republic of Korea’s (DPRK). The DPRK’s brazen attack on the ROK corvette Cheonan in March of last year, its recent disclosure of a uranium enrichment program, its shelling of Yeonpyong Island that resulted in the tragic loss of South Korean lives, and its ongoing human rights violations underscore the threat that the DPRK’s policies and provocations, including its nuclear and ballistic missile programs and proliferation activities, pose to regional stability and global security.

The verifiable denuclearization of the Korean Peninsula, which is the core objective of the 2005 joint statement of the six-party talks, is an essential ingredient to the Asia-Pacific region’s long-term success and to our own security. Progress toward this goal requires close coordination between the ROK, Japan, and the United States, as well as with China and Russia. Our Northeast Asian alliances play an essential role in maintaining regional security, deterring North Korean provocations, providing a reliable and robust strategic deterrent posture, and bringing maximum leverage to bear on the DPRK to change its current course and become a member of the community of nations. To this end, we have actively engaged our regional partners to ensure robust implementation of U.N. Security Council Resolutions (UNSCR) 1718 and 1874 on North Korea, and though there is still work to be done, strong regional cooperation, particularly with Japan and South Korea, has made it more difficult for North Korea to successfully engage in proliferation and other illicit activities. We will continue to take steps to enhance and broaden our bilateral political, economic, and security relations, as well as make progress on key alliance modernization initiatives. We will also work to develop a more integrated trilateral framework for cooperation and coordination between Seoul, Tokyo, and Washington. Furthermore, we are taking steps to enhance coordination with China and Russia—both of which have important relationships with North Korea—to create a more favorable context for denuclearization and peace and security. In addition to the aforementioned five key parties, we are working more closely with other stakeholders like the Association of Southeast Nations (ASEAN), India, and Australia to broaden regionwide efforts to compel North Korea to abide by its denuclearization commitments and obligations, as well as with the U.N. Security Council.

The Republic of Korea

The United States-ROK alliance is grounded in the threat that North Korea poses to the ROK. However, over the course of the past few years, the United States has undertaken steps to expand alliance cooperation in both regional and global settings. In 2011, we will aggressively pursue initiatives to increase collaboration in the peninsular, regional, and global contexts.

#### Causes great power war and arms racing

**Dibb 6**, Emeritus Prof of IR @ Australian National University, Sydney Morning Herald (Australia), August 15, 2006 Tuesday, As one nuclear flashpoint reaches a lull, another simmers away, Pg. 11, Lexis

NOW that the building blocks for achieving a cessation in hostilities in the crisis involving Israel and Hezbollah in Lebanon are in place, the focus can shift back to the main game - Iran and North Korea. Both flashpoints have the potential to escalate out of control if they are not managed carefully. Yet neither region is noted for the success of its diplomacy. Both the Middle East and North-East Asia are heavily armed parts of the world characterised by deep-seated hatreds and long-standing territorial disputes. Historically, such situations have been a recipe for disaster. Not so long ago we were being told that we were living in a peaceful, interdependent world. Yet the fact is that the constraints and understandings of the bipolar Cold War world have been replaced by a more uncertain world, where there is much more jockeying for position and influence. In the Middle East, the destruction of Saddam Hussein's regime and its replacement, at least for now, by a weakened Iraq has allowed Iran to become the dominant regional power. The regime in Tehran is hell-bent on exporting terrorism and acquiring nuclear weapons. For Israel, the ceasefire may stall the military action, but the longer-term real strategic threat it faces - the spectre of a nuclear -armed Iran equipped with ballistic missiles of sufficient range and accuracy to target Israel without taking out Palestinian or neighbouring Arab territories - will not go away. Israel will not tolerate this and the US needs to make it clear to Tehran that any such attack on Israel will bring about Iran's destruction. That was a good enough understanding with the USSR at the height of the Cold War. But this discipline no longer applies because now there is only one superpower, which cannot control both Israel and Arab-Iranian protagonists. In North Korea a similar situation applies. Having seen the destruction of Saddam's regime, North Korea's Kim Jong-il is intent on acquiring nuclear weapons to preserve his regime. But the end of the Cold War has eroded the influence of North Korea's allies over its military ambitions and sense of security. China has been embarrassed by its inability to restrain North Korea from testing nuclear -capable ballistic missiles and Russia no longer wields any influence over the rogue state. In many ways, the situation in North-East Asia is potentially even more dire than in the Middle East. North Korea's recalcitrance in dismantling its nuclear weapons program comes at a time of unprecedented tensions between China and Japan and South Korea and Japan where one false move could spell disaster. North Korea is playing a dangerous game of bellicose brinkmanship; it continues to keep more than a million troops on high-alert status, including heavy artillery concentrations only 50 kilometres from Seoul, a city of more than 10 million people. North Korea's acquisition of nuclear weapons threatens to seriously destabilise North-East Asia and result in a nuclear arms race developing there. As it is, the North's belligerence is encouraging Japan to build up its military capabilities. This at a time when China's poor relations with Japan are worrying. The Chinese communist leadership drums up anti-Japanese nationalism whenever it suits, while China's military build-up greatly concerns Japan. The pace of Beijing's defence spending is puzzling, particularly as China faces no military threat for the first time in many decades. Similarly, Japan's relations with South Korea are at a low point, partly over Japan's view of the history of World War II but also because of territorial disputes, which Seoul has elevated to the level of national pride, threatening the use of military force. This is occurring when, from Tokyo's perspective, South Korea is drifting from the orbit of the US alliance and getting uncomfortably close to China, as well as appeasing North Korea. All this is an unhealthy mix of great power tensions and deep-seated historical distrust and growing military capabilities. The bigger worry is that Pyongyang's adventurism will incinerate any efforts to stabilise a region full of dangerous rivalries, as will the inevitable collision between Iran and Israel in the Middle East. Emeritus Professor Paul Dibb was the Australian representative at the first plenary meeting of Experts and Eminent Persons at the ASEAN Regional Forum in South Korea in June.

#### Strong alliance ties prevent extinction

**Snyder et al 10** – director of the Center for U.S.-Korea Policy and senior associate of Washington programs in the International Relations program of The Asia Foundation (Charles L. Pitchard and John H. Tilleli Jr. “US Policy Toward the Korean Peninsula” ww.cfr.org/content/publications/attachments/Korean\_PeninsulaTFR64.pdf)

Strong alliance coordination with South Korea has ensured peninsu­lar stability for more than five decades, initially in response to North Korea’s conventional threat and now in promoting a coordinated response to North Korea’s efforts to develop nuclear weapons. While successfully deterring North Korea, the alliance also provided the polit­ical stability necessary for South Korea’s economic and political trans­formation into a leading market economy with a vibrant democratic political system. South Korea’s democratic transformation has allowed a more robust and enduring partnership with the United States that also applies to a growing list of regional and global security, economic, and political issues beyond North Korea. Presidents Obama and Lee recognized the potential for such coop­eration through the adoption of a Joint Vision Statement at their White House meeting in June 2oo9.43 Citing shared values between the two countries, the statement outlines an agenda for broadened global coop­eration on peacekeeping, postconflict stabilization, and development assistance, as well as for addressing a wide range of common challenges to human security, including “terrorism, proliferation of weapons of mass destruction, piracy, organized crime and narcotics, climate change, poverty, infringement on human rights, energy security, and epidemic disease.”44 The Joint Vision Statement also underscores U.S. commitments to defend South Korea from North Korea’s nuclear challenge by providing extended deterrence to protect South Korea—that is, a pledge to use its nuclear arsenal in response to any nuclear attack on South Korea—and to transition the role of U.S. forces in South Korea from a leading to a supporting role. It also pledges to strengthen bilateral economic, trade, and investment ties through ratification of the Korea-U.S. Free Trade Agreement (KORUS FTA). The Task Force believes that the Joint Vision Statement consti­tutes a valuable foundation for U.S.-ROK cooperation and should be implemented fully. The Korean decision in late ŒŸŸ9 to provide a Provincial Reconstruction U.S. Policy Toward the Korea Peninsula Team (PRT) to Afghanistan is a welcome contribution to the global security issue at the top of the Obama admin­istration’s agenda, and South Korea’s role as host and chair of the Group of Twenty (Gro) summit in ŒŸŠŸ and the ŒŸŠŒ nuclear security summit is a basis on which the United States and South Korea can build cooperation to manage recovery from the global financial crisis. The role of the alliance as a platform for constructive South Korean regional diplomacy is likely to become more important in the context of rising Chinese influence. When paired with the U.S.-Japan alliance, which is based on a complementary set of values and interests, the U.S.-led alliance system in Northeast Asia is a cornerstone for regional stability and provides a framework for promoting East Asian security cooperation.

### 1nc warming

#### No energy crunch

George Wuerthner 3-29-2012; received his undergraduate degree in botany and wildlife biology from the University of Montana, and obtained a graduate degree in Science Communication from the University of California, “The Real Problem is Not Too Little Oil, But Too Much: The Myth of Peak Oil” by GEORGE WUERTHNER <http://www.counterpunch.org/2012/03/29/the-myth-of-peak-oil/>

While no one realistically believes it’s possible to get every last drop of oil from an oil reservoir, new technologies are often able to get significantly more oil from existing fields than was possible in the past. The important fact is that the recovery factor often changes over time due to changes in technology and economics. Since the bulk of global oil still remains in the ground, and any shift upward in price and improvement in technology suddenly makes it profitable to exploit reserves that were previously not included in the “proven reserves” estimate. Thus proven reserve estimates are a minimum, not the maximum amount of oil available.

**Resource wars won’t escalate to great power conflict**

**Dombrowski 4** – associate professor, US Naval War College's Strategic Research Department (Peter, Naval War College Review, http://findarticles.com/p/articles/mi\_m0JIW/is\_1\_57/ai\_113755359/print)

Unfortunately, Klare barely pauses to consider the possibility that diplomatic, economic, and political developments might ease potential resource conflicts before they escalate into armed conflicts. After all, countries fighting over access to water or oil could simply negotiate arrangements or allow market forces to dictate outcomes; the author himself notes examples and cases where diplomatic solutions have succeeded in the past. In fact, the absence of economic reasoning in this book is startling. After all, economists from cranks to countless mainstream professionals have demonstrated how market forces can help manage the worst aspects of resource shortages. Thus energy shortages that lead to price increases in turn encourage consumers to conserve; consumption is reduced, as well as overall dependence. Hence, despite tremendous economic growth, Western Europe, Japan, and even the United States have become much more energy efficient since the oil shock of the 1970s. Substitution effects are also possible, although perhaps not for a resource as fundamental and elemental as water.

#### Turn—CO2 key to ag, water tables, and biodiversity—outweighs their impact

**Carter 11**, Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) [“Climate Change Reconsidered 2011 Interim Report,” September, Science and Environmental Policy Project, Center for the Study of Carbon Dioxide and Global Change, Published by The Heartland Institute]

Several years ago, Waggoner (1995) rhetorically asked: How much land can ten billion people spare for nature? That was the title of an essay he wrote to illuminate the dynamic tension between the need for land to support the agricultural enterprises that sustain mankind and the need for land to support the natural ecosystems that sustain all other creatures. As noted by Huang et al. (2002), human populations ―have encroached on almost all of the world‘s frontiers, leaving little new land that is cultivatable.‖ And in consequence of humanity‘s ongoing usurpation of this most basic of natural resources, Raven (2002) has noted ―species-area relationships, taken worldwide in relation to habitat destruction, lead to projections of the loss of fully two-thirds of all species on earth by the end of this century.‖ In addition, Wallace (2000) has calculated we will need to divert essentially all usable non-saline water on the face of the Earth to the agricultural enterprises that will be required to meet the food and fiber needs of humanity‘s growing numbers well before that. So what parts of the world are likely to be hit hardest by the great land-grabbing and water-consuming machine of humanity? Tilman et al. (2001) report developed countries are expected to withdraw large areas of land from farming between now and the middle of the century (2050), leaving developing countries to shoulder essentially all of the growing burden of feeding our expanding population. In addition, they calculate the loss of these countries‘ natural ecosystems to crops and pasture represent about half of all potentially suitable remaining land, which ―could lead to the loss of about a third of remaining tropical and temperate forests, savannas, and grasslands,‖ along with the many unique species they support. If one were to pick the most significant problem currently facing the biosphere, this would probably be it: a single species of life, Homo sapiens, is on course to annihilate two-thirds of the ten million or so other species with which we share the planet within the next several decades, simply by taking their land and water. Global warming, by comparison, pales in significance, as its impact is nowhere near as severe and in fact may be neutral or even positive. In addition, its chief cause is highly debated, and actions to thwart it are much more difficult, if not impossible, to define and implement. Furthermore, what many people believe to be the main cause of global warming—anthropogenic CO2 emissions—may actually be a powerful force for preserving land and water for nature. In an analysis of the problem of human land-use expansion, Tilman et al. (2002) introduced a few more facts before suggesting some solutions. They noted, for example, that by 2050 the human population of the globe is projected to be 50 percent larger than it was in 2000, and that global grain demand could double because of expected increases in per-capita real income and dietary shifts toward a higher proportion of meat. Hence, they stated the obvious when they concluded, ―raising yields on existing farmland is essential for ‗saving land for nature‘.‖ So how is it to be done? Tilman et al. (2002) suggested a strategy built around three essential tasks: (1) increasing crop yield per unit land area, (2) increasing crop yield per unit of nutrients applied, and (3) increasing crop yield per unit of water used. Regarding the first of these requirements, Tilman et al. note that in many parts of the world the historical rate of increase in crop yields is declining, as the genetic ceiling for maximal yield potential is being approached. This observation, in their words, ―highlights the need for efforts to steadily increase the yield potential ceiling.‖ With respect to the second requirement, they indicate, ―without the use of synthetic fertilizers, world food production could not have increased at the rate it did [in the past] and more natural ecosystems would have been converted to agriculture.‖ Hence, they state the solution ―will require significant increases in nutrient use efficiency, that is, in cereal production per unit of added nitrogen, phosphorus,‖ and so forth. Finally, as to the third requirement, Tilman et al. remind us ―water is regionally scarce,‖ and ―many countries in a band from China through India and Pakistan, and the Middle East to North Africa either currently or will soon fail to have adequate water to maintain per capita food production from irrigated land.‖ Increasing crop water use efficiency, therefore, is also a must. Although the impending biological crisis and several important elements of its potential solution are thus well defined, Tilman et al. (2001) noted ―even the best available technologies, fully deployed, cannot prevent many of the forecasted problems.‖ This was also the conclusion of Idso and Idso (2000), who stated that although ―expected advances in agricultural technology and expertise will significantly increase the food production potential of many countries and regions,‖ these advances ―will not increase production fast enough to meet the demands of the even faster-growing human population of the planet.‖ Fortunately, we have a powerful ally in the ongoing rise in the air‘s CO2 content that can provide what we can‘t. Since atmospheric CO2 is the basic ―food‖ of essentially all plants, the more of it there is in the air, the bigger and better they grow. For a nominal doubling of the air‘s CO2 concentration, for example, the productivity of Earth‘s herbaceous plants rises by 30 to 50 percent (Kimball, 1983; Idso and Idso, 1994), and the productivity of its woody plants rises by 50 to 80 percent or more (Saxe et al. 1998; Idso and Kimball, 2001). Hence, as the air‘s CO2 content continues to rise, the land use efficiency of the planet will rise right along with it. In addition, atmospheric CO2 enrichment typically increases plant nutrient use efficiency and plant water use efficiency. Thus, with respect to all three of the major needs identified by Tilman et al. (2002), increases in the air‘s CO2 content pay huge dividends, helping to increase agricultural output without the taking of new land and water from nature.

#### No extinction

**McShane 8** — Owen, chairman of the policy panel of the New Zealand Climate Science Coalition and director of the Centre for Resource Management Studies, April 4, 2008 (Cites Roy Spencer, principal research scientist for U of Alabama in Huntsville and recipient of NASA's Medal for Exceptional Scientific Achievement, “Climate change confirmed but global warming is cancelled”, The National Business Review (New Zealand), Lexis)

Atmospheric scientists generally agree that as carbon dioxide levels increase there is a law of "diminishing returns" - or more properly "diminishing effects" - and that ongoing increases in CO2 concentration do not generate proportional increases in temperature. The common analogy is painting over window glass. The first layers of paint cut out lots of light but subsequent layers have diminishing impact. So, you might be asking, why the panic? Why does Al Gore talk about temperatures spiraling out of control, causing mass extinctions and catastrophic rises in sea-level, and all his other disastrous outcomes when there is no evidence to support it? The alarmists argue that increased CO2 leads to more water vapour - the main greenhouse gas - and this provides positive feedback and hence makes the overall climate highly sensitive to small increases in the concentration of CO2. Consequently, the IPCC argues that while carbon dioxide may well "run out of puff" the consequent evaporation of water vapour provides the positive feedback loop that will make anthropogenic global warming reach dangerous levels. This assumption that water vapour provides positive feedback lies behind the famous "tipping point," which nourishes Al Gore's dreams of destruction, and indeed all those calls for action now - "before it is too late!" But no climate models predict such a tipping point. However, while the absence of hot spots has refuted one important aspect of the IPCC models we lack a mechanism that fully explains these supposed outcomes. Hence the IPCC, and its supporters, have been able to ignore this "refutation." So by the end of last year, we were in a similar situation to the 19th century astronomers, who had figured out that the sun could not be "burning" its fuel - or it would have turned to ashes long ago - but could not explain where the energy was coming from. Then along came Einstein and E=mc2. Hard to explain Similarly, the climate sceptics have had to explain why the hotspots are not where they should be - not just challenge the theory with their observations. This is why I felt so lucky to be in the right place at the right time when I heard Roy Spencer speak at the New York conference on climate change in March. At first I thought this was just another paper setting out observations against the forecasts, further confirming Evans' earlier work. But as the argument unfolded I realised Spencer was drawing on observations and measurements from the new Aqua satellites to explain the mechanism behind this anomaly between model forecasts and observation. You may have heard that the IPCC models cannot predict clouds and rain with any accuracy. Their models assume water vapour goes up to the troposphere and hangs around to cook us all in a greenhouse future. However, there is a mechanism at work that "washes out" the water vapour and returns it to the oceans along with the extra CO2 and thus turns the added water vapour into a NEGATIVE feedback mechanism. The newly discovered mechanism is a combination of clouds and rain (Spencer's mechanism adds to the mechanism earlier identified by Professor Richard Lindzen called the Iris effect). The IPCC models assumed water vapour formed clouds at high altitudes that lead to further warming. The Aqua satellite observations and Spencer's analysis show water vapour actually forms clouds at low altitudes that lead to cooling. Furthermore, Spencer shows the extra rain that falls from these clouds cools the underlying oceans, providing a second negative feedback to negate the CO2 warming. Alarmists' quandary This has struck the alarmists like a thunderbolt, especially as the lead author of the IPCC chapter on feedback has written to Spencer agreeing that he is right! There goes the alarmist neighbourhood! The climate is not highly sensitive to CO2 warming because water vapour is a damper against the warming effect of CO2. That is why history is full of Ice Ages - where other effects, such as increased reflection from the ice cover, do provide positive feedback - while we do not hear about Heat Ages. The Medieval Warm Period, for example, is known for being benignly warm - not dangerously hot. We live on a benign planet - except when it occasionally gets damned cold. While I have done my best to simplify these developments they remain highly technical and many people distrust their own ability to assess competing scientific claims. However, in this case the tipping point theories are based on models that do not include the effects of rain and clouds. The new Nasa Aqua satellite is the first to measure the effects of clouds and rainfall. Spencer's interpretation of the new data means all previous models and forecasts are obsolete. Would anyone trust long-term forecasts of farm production that were hopeless at forecasting rainfall? The implications of these breakthroughs in measurement and understanding are dramatic to say the least. The responses will be fun to watch.

#### There is absolutely no chance the aff solves warming

Squassoni, ‘8

[Sharon, Senior Associate, Nonproliferation Program -- Carnegie Endowment for International Peace, 3-12, “The Realities of Nuclear Expansion” Congressional Testimony: House Select Committee for Energy Independence and Global Warming, Washington, DC]

In 2004, Princeton scientists Stephen Pacala and Robert Socolow published a “wedge analysis” for stabilizing global climate change.3 Since fossil fuels currently emit seven billion tons of carbon/year and are projected to double that level through 2050 in the business-as-usual scenario, Pacala and Socolow considered what technologies and/or approaches might help stabilize those emissions at current levels (about 375 ppm). Seven wedges of reduced emissions (a cumulative effect of 25 billion tons through 2050, or one billion tons of carbon/year reduction at the end of that period) were postulated. One “wedge” would ultimately achieve a reduction of one billion tons per year (or 25 billion cumulative tons) by 2050. For nuclear energy to “solve” just one-seventh of the problem – lowering emissions by one billion tons per year – an additional 700 GWe of capacity would have to be built, assuming the reactors replaced 700 GWe of modern coal-electric plants.4 Because virtually all operating reactors will have to be retired in that time, this means building approximately 1070 reactors in 42 years, or about 25 reactors per year. Current global reactor capacity is 373 GWe or 439 reactors worldwide. In short, one “nuclear wedge” would require almost tripling current capacity. Mapping A “Realistic Growth” Scenario Nuclear Expansion5 The attached maps (see slide 1) depict estimates of reactor capacity growth for 2030 and 2050, according to three scenarios. The first is a “realistic growth” scenario, based on the U.S. Energy Information Administration figures for 2030.6 The second is what states have planned for 2030, or a “wildly optimistic” scenario. The third is roughly based on the high-end projections for 2050 done by MIT in their 2003 study entitled “The Future of Nuclear Power.” This 1500 GWe scenario lies between the Pacala-Socolow wedge and the Stern Review on the Economics of Climate Change estimates that nuclear energy could reduce carbon emissions between two billion and six billion tons/year (or 1800 GWe – 4500 GWe).7 A few caveats with respect to projecting nuclear energy expansion are necessary. Nuclear energy is undoubtedly safer and more efficient now than when it began fifty years ago, but it still faces four fundamental challenges: waste, cost, proliferation, and safety. It is an inherently risky business. Most industry executives will admit that it will only take one significant accident to plunge the “renaissance” back into the nuclear Dark Ages. Because of this, estimates are highly uncertain. For example, the U.S. Energy Information Administration does not use its computer model to estimate nuclear energy growth because, among other things, key variables such as public attitudes and government policy are difficult to quantify and project. That said, estimates tend to extrapolate electricity consumption and demand from gross domestic product (GDP) growth, make assumptions about nuclear energy’s share of electricity production, and then estimate nuclear reactor capacity. The United States, France, and Japan constitute more than half of total world nuclear reactor capacity (see slide 1). Yet half of the 34 reactors now under construction are in Asia.8 Under any scenario, nuclear power is expected to grow most in Asia, because of high Chinese and Indian growth and electricity demand. Under the realistic growth scenario, the U.S. Energy Information Administration estimates 2030 reactor capacity at 481 GWe. The International Energy Agency (IEA) envisions greater potential for expansion, projecting a range from 414 to 679 GWe in 2030, but the higher number would require significant policy support. With electricity consumption expected to double by 2030, nuclear energy will have a difficult time just keeping its market share – currently 16 percent of global production.9 According to the Intergovernmental Panel on Climate Change, with no change in energy policies, “the energy mix supplied to run the global economy in the 2025-2030 time-frame will essentially remain unchanged with about 80% of the energy supply based on fossil fuels.”10 Coal now provides 59% of electricity production, followed by hydroelectric power at 39% and oil and gas together provide 25%. Renewables are just 1-2% of total electricity production. Moreover, regions that have coal tend to use it, particularly for electricity generation, which increases greenhouse gas emissions. The IPCC has noted that “in recent years, intensified coal use has been observed for a variety of reasons in developing Asian countries, the USA and some European countries. In a number of countries, the changing relative prices of coal to natural gas have changed the dispatch order in power generation in favor of coal.” Many fear that states such as China and India – both of which are not subject to Kyoto Protocol targets because they are developing states – will meet their increased demand with cheap coal. Without further policy changes, according to the International Energy Agency, the share of nuclear energy could drop to 10% of global electricity production. “Wildly Optimistic” Growth Scenario Although some states, such as Germany and Sweden, plan to phase out nuclear power, the trend line is moving in the opposite direction. This growth scenario does not contain projections based on electricity demand, but instead takes at face value what states have projected for themselves. The result is a total of 700 GWe global capacity (see slide 2) – two-thirds of what one nuclear wedge to affect global climate change would require. The reason these estimates are wildly optimistic is that over 20 nations have announced intentions to install nuclear reactors. Several of these – Turkey, Egypt, and Philippines – had planned for nuclear power in the past, but abandoned such plans for various reasons. Some of these new nuclear plans are more credible than others and can be differentiated into those that have approved or funded construction, those that have clear proposals but without formal commitments, and those that are exploring nuclear energy (see slide 3). In the Middle East, these include Iran, Israel, Jordan and Yemen, with potential interest expressed by Syria, Kuwait, and the Gulf Cooperation Council states of Saudi Arabia, Oman, United Arab Emirates, Qatar, and Bahrain. In Europe, Belarus, Turkey and Azerbaijan have announced plans, as well as Kazakhstan. In Asia, Bangladesh, Thailand, Vietnam, Malaysia, and Indonesia have announced plans, and the Philippines has also expressed interest. Venezuela has also declared it will develop nuclear power. In Africa, Morocco, Tunisia, Libya, Egypt, and Nigeria have announced plans to develop nuclear power, and Algeria and Ghana have expressed interest.11 More than half of all those states are in the Middle East. Although this could result in reduced carbon emissions, because Middle Eastern states use more oil for electricity production (34%) than elsewhere, this is not where the real electricity demand is coming from. “Climate Change” Growth Scenario A rough approximation of where reactor capacity would expand in a climate change scenario is based on the high scenario of the 2003 MIT Study, “The Future of Nuclear Power.” For 1500 GW capacity, MIT estimated that 54 countries (an additional 23) would have commercial nuclear power programs. This essentially means a five-fold increase in the numbers of reactors worldwide and an annual build rate of 35 per year. In the event that smaller-sized reactors are deployed in developing countries – which makes eminent sense – the numbers could be much higher.12 If nuclear energy were assumed to be able to contribute a reduction of between two and six billion tons of carbon per year as outlined in the Stern Report, the resulting reactor capacity would range between 1800 GWe and 4500 GWe – increases ranging from six to ten times the current capacity.13 This would require building between 42 and 107 reactors per year through 2050. Impact on Uranium Enrichment Such increases in reactor capacity would certainly have repercussions for the front and back ends of the fuel cycle. Almost 90 percent of current operating reactors use lowenriched uranium (LEU). Presently, eleven countries have commercial uranium enrichment capacity and produce between 40 and 50 million SWU. A capacity of 1070 GWe – the one “wedge” scenario – could mean tripling enrichment capacity, requiring anywhere from 11 to 22 additional enrichment plants.14 A capacity of 1500 GWe would require quadrupling enrichment capacity (see slide 4).15 Further, if Stern Report nuclear expansion levels are achieved, enrichment capacity would have to increase ten-fold. In assessing where new uranium enrichment capacity might develop, the MIT study assumed that 18 states would have 10 GWe reactor capacity – the point at which domestic uranium enrichment becomes competitive with LEU sold on the international market – and thus might enrich uranium. (See slide 4 for a more modest approach, with nine additional countries enriching uranium).16 Impact on Spent Fuel Reprocessing A key question is whether an expansion of nuclear reactors would result in an expansion of spent fuel reprocessing. This is not necessarily the case, because decisions about whether to store fuel or reprocess it depend on several factors: existing storage capacities; fuel cycle approaches (once-through, one recycle, fast reactors) and new technologies; and cost. A shift to fast reactors that can burn or breed plutonium implies an increase in recycling, whether this is traditional reprocessing that separates out plutonium, or options under consideration now that would not separate out the plutonium. France and Japan now commercially reprocess their spent fuel and recycle the plutonium once in mixed oxide-fuelled reactors. Russia also reprocesses a small percentage of its spent fuel. A troubling development in the last two years from a nonproliferation perspective has been the U.S. embrace of recycling spent fuel under the Global Nuclear Energy Partnership, after a policy of 30 years of not encouraging the use of plutonium in the civil nuclear fuel cycle. Whether or not the United States ultimately reprocesses or recycles fuel, other states are now more likely to view reprocessing as necessary for an advanced fuel cycle. Constraints on Nuclear Expansion17 There are significant questions about whether nuclear expansion that could affect global climate change is even possible. In the United States, as the chief operating officer of Exelon recently told an industry conference, constraints include: the lack of any recent U.S. nuclear construction experience; the atrophy of U.S. nuclear manufacturing infrastructure; production bottlenecks created by an increase in worldwide demand; and an aging labor force.

#### Physically impossible

**Smith and Makhijani 6** \*Brice Smith is an assistant professor of physics at the State University of New York, Cortland, and the author of Insurmountable Risks: The Dangers of Using Nuclear Power to Combat Global Climate Change (2006). Arjun Makhijani is president of the Institute for Energy and Environmental Research in Takoma Park, Maryland, and the principal author of Nuclear Power Deception: U.S. Nuclear Mythology From Electricity “Too Cheap to Meter” to ‘‘Inherently Safe” Reactors (1999) [http://www2.econ.iastate.edu/faculty/bhattacharya/102H/nuclear1.pdf, “Nuclear is not the Way” 2006]

The most important consideration is how many nuclear plants would be needed to significantly reduce future CO2 emissions. A 2003 study by researchers at the Massachusetts Institute of Technology, The Future of Nuclear Power, considered a reference case in which 1,000 one-gigawatt (GW) nuclear plants would be in operation around the world by 2050. (A gigawatt is enough electricity to power a U.S. city of half a million.) **Even with such an increase**, however, the proportion of electricity supplied by nuclear power worldwide would rise only slightly, from about 16 percent in 2000 to about 20 percent in 2050. As a result, the number of fossil fuel power plants, and thus the amount of CO2 emissions, would continue to increase. A more serious effort to limit carbon emissions through the use of nuclear power would require a larger number of reactors. In Insurmountable Risks: The Dangers of Using Nuclear Power to Combat Climate Change (2006), one of us used the same projected growth in electricity demand employed in the MIT report to estimate the number of reactors required simply to maintain the electricity sector’s CO2 emissions at their 2000 levels. Some 2,500 one-GW nuclear plants would be needed by midcentury. To meet that goal, one plant would have to come online somewhere in the world every six days between 2010 and 2050.

#### Too late to solve warming

**Solomon et al ‘10** Susan Solomon et. Al, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration, Ph.D. in Climotology University of California, Berkeley, Nobel Peace Prize Winner, Chairman of the IPCC, Gian-Kasper Plattner, Deputy Head, Director of Science, Technical Support Unit Working Group I, Intergovernmental Panel on Climate Change Affiliated Scientist, Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland, John S. Daniel, research scientist at the National Oceanic and Atmospheric Administration (NOAA), Ph.D. in physics from the University of Michigan, Ann Arbor, Todd J. Sanford, Cooperative Institute for Research in Environmental Science, University of Colorado Daniel M. Murphy, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration, Boulder Gian-Kasper Plattner, Deputy Head, Director of Science, Technical Support Unit Working Group I, Intergovernmental Panel on Climate Change, Affiliated Scientist, Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland Reto Knutti, Institute for Atmospheric and Climate Science, Eidgenössiche Technische Hochschule Zurich and Pierre Friedlingstein, Chair, Mathematical Modelling of Climate Systems, member of the Science Steering Committee of the Analysis Integration and Modeling of the Earth System (AIMES) programme of IGBP and of the Global Carbon Project (GCP) of the Earth System Science Partnership (ESSP) (Proceedings of the National Academy of the Sciences of the United States of America, "Persistence of climate changes due to a range of greenhouse gases", October 26, 2010 Vol 107.43: 18354-18359)

Carbon dioxide, methane, nitrous oxide, and other greenhouse gases increased over the course of the 20th century due to human activities. The human-caused increases in these gases are the primary forcing that accounts for much of the global warming of the past fifty years, with carbon dioxide being the most important single radiative forcing agent (1). Recent studies have shown that the human-caused warming linked to carbon dioxide is nearly irreversible for more than 1,000 y, even if emissions of the gas were to cease entirely (2–5). The importance of the ocean in taking up heat and slowing the response of the climate system to radiative forcing changes has been noted in many studies (e.g., refs. 6 and 7). The key role of the ocean’s thermal lag has also been highlighted by recent approaches to proposed metrics for comparing the warming of different greenhouse gases (8, 9). Among the observations attesting to the importance of these effects are those showing that climate changes caused by transient volcanic aerosol loading persist for more than 5 y (7, 10), and a portion can be expected to last more than a century in the ocean (11–13); clearly these signals persist far longer than the radiative forcing decay timescale of about 12–18 mo for the volcanic aerosol (14, 15). Thus the observed climate response to volcanic events suggests that some persistence of climate change should be expected even for quite short-lived radiative forcing perturbations. It follows that the climate changes induced by short-lived anthropogenic greenhouse gases such as methane or hydrofluorocarbons (HFCs) may not decrease in concert with decreases in concentration if the anthropogenic emissions of those gases were to be eliminated. In this paper, our primary goal is to show how different processes and timescales contribute to determining how long the climate changes due to various greenhouse gases could be expected to remain if anthropogenic emissions were to cease. Advances in modeling have led to improved AtmosphereOcean General Circulation Models (AOGCMs) as well as to Earth Models of Intermediate Complexity (EMICs). Although a detailed representation of the climate system changes on regional scales can only be provided by AOGCMs, the simpler EMICs have been shown to be useful, particularly to examine phenomena on a global average basis. In this work, we use the Bern 2.5CC EMIC (see Materials and Methods and SI Text), which has been extensively intercompared to other EMICs and to complex AOGCMs (3, 4). It should be noted that, although the Bern 2.5CC EMIC includes a representation of the surface and deep ocean, it does not include processes such as ice sheet losses or changes in the Earth’s albedo linked to evolution of vegetation. However, it is noteworthy that this EMIC, although parameterized and simplified, includes 14 levels in the ocean; further, its global ocean heat uptake and climate sensitivity are near the mean of available complex models, and its computed timescales for uptake of tracers into the ocean have been shown to compare well to observations (16). A recent study (17) explored the response of one AOGCM to a sudden stop of all forcing, and the Bern 2.5CC EMIC shows broad similarities in computed warming to that study (see Fig. S1), although there are also differences in detail. The climate sensitivity (which characterizes the long-term absolute warming response to a doubling of atmospheric carbon dioxide concentrations) is 3 °C for the model used here. Our results should be considered illustrative and exploratory rather than fully quantitative given the limitations of the EMIC and the uncertainties in climate sensitivity. Results One Illustrative Scenario to 2050. In the absence of mitigation policy, concentrations of the three major greenhouse gases, carbon dioxide, methane, and nitrous oxide can be expected to increase in this century. If emissions were to cease, anthropogenic CO2 would be removed from the atmosphere by a series of processes operating at different timescales (18). Over timescales of decades, both the land and upper ocean are important sinks. Over centuries to millennia, deep oceanic processes become dominant and are controlled by relatively well-understood physics and chemistry that provide broad consistency across models (see, for example, Fig. S2 showing how the removal of a pulse of carbon compares across a range of models). About 20% of the emitted anthropogenic carbon **remains in the atmosphere for** many **thousands of years** (with a range across models including the Bern 2.5CC model being about 19 4% at year 1000 after a pulse emission; see ref. 19), until much slower weathering processes affect the carbonate balance in the ocean (e.g., ref. 18). Models with stronger carbon/climate feedbacks than the one considered here could display larger and more persistent warmings due to both CO2 and non-CO2 greenhouse gases, through reduced land and ocean uptake of carbon in a warmer world. Here our focus is not on the strength of carbon/climate feedbacks that can lead to differences in the carbon concentration decay, but rather on the factors that control the climate response to a given decay. The removal processes of other anthropogenic gases including methane and nitrous oxide are much more simply described by exponential decay constants of about 10 and 114 y, respectively (1), due mainly to known chemical reactions in the atmosphere. In this illustrative study, we do not include the feedback of changes in methane upon its own lifetime (20). We also do not account for potential interactions between CO2 and other gases, such as the production of carbon dioxide from methane oxidation (21), or changes to the carbon cycle through, e.g., methane/ozone chemistry (22). Fig. 1 shows the computed future global warming contributions for carbon dioxide, methane, and nitrous oxide for a midrange scenario (23) of projected future anthropogenic emissions of these gases to 2050. Radiative forcings for all three of these gases, and their spectral overlaps, are represented in this work using the expressions assessed in ref. 24. In 2050, the anthropogenic emissions are stopped entirely for illustration purposes. The figure shows nearly irreversible warming for at least 1,000 y due to the imposed carbon dioxide increases, as in previous work. **All published studies to date**, which use multiple EMICs and one AOGCM, show largely irreversible warming due to future carbon dioxide increases (to within about 0.5 °C) on a timescale of at least 1,000 y (3–5, 25, 26). Fig. 1 shows that the calculated future warmings due to anthropogenic CH4 and N2O also persist notably longer than the lifetimes of these gases. The figure illustrates that emissions of key non-CO2 greenhouse gases such as CH4 or N2O could lead to warming that both temporarily exceeds a given stabilization target (e.g., 2 °C as proposed by the G8 group of nations and in the Copenhagen goals) and remains present longer than the gas lifetimes even if emissions were to cease. A number of recent studies have underscored the important point that reductions of non-CO2 greenhouse gas emissions are an approach that can indeed reverse some past climate changes (e.g., ref. 27). Understanding how quickly such reversal could happen and why is an important policy and science question. Fig. 1 implies that the use of policy measures to reduce emissions of short-lived gases will be less effective as a rapid climate mitigation strategy than would be thought if based only upon the gas lifetime. Fig. 2 illustrates the factors influencing the warming contributions of each gas for the test case in Fig. 1 in more detail, by showing normalized values (relative to one at their peaks) of the warming along with the radiative forcings and concentrations of CO2 , N2O, and CH4 . For example, about two-thirds of the calculated warming due to N2O is still present 114 y (one atmospheric lifetime) after emissions are halted, despite the fact that its excess concentration and associated radiative forcing at that time has dropped to about one-third of the peak value.

### back to advantage

#### Can't solve perception of strong economy—debt, failed banking sector, housing crisis all outweigh.

#### Competitiveness is durable

**Nye, December 10 –** University Distinguished Service Professor at Harvard (Joseph, Foreign Affairs, “**The Future of American Power: Dominance and Decline in Perspective,”** November/December, proquest)

In the 1980s, many observers believed that the U.S. economy had run out of steam and that Germany and Japan were overtaking the United States. The country seemed to have lost its competitive edge. Today, however, even after the financial crisis and the ensuing recession, the World Economic Forum has ranked the United States fourth (after Switzerland, Sweden, and Singapore) in global economic competitiveness. (China, in comparison, was ranked 27th.) The U.S. economy leads in many new growth sectors, such as information technology, biotechnology, and nanotechnology. And even though optimists tend to cite the United States' dominance in the production and use of information technology, that is not the only source of U.S. productivity. The United States has seen significant agricultural innovation, too, and its openness to globalization, if it continues, will also drive up productivity. Economic experts project that American productivity growth will be between 1.5 and 2.25 percent in the next decade.

#### Multiple alt causes to competitiveness

**Bordoff et al., economics chair, 9** – Director of the Hamilton Project, an econ policy initiative @ Brookings [Jason, Lael Brainard is Vice President and Director of Brookings Global Economy and Development, and the holder of the Bernard L. Schwartz Chair in International Economics, Carola McGiffert, Senior Fellow at the Center for Strategic and International Studies, Isaac Sorkin is a Research Assistant in the Global Economy and Development program at Brookings, “STRENGTHENING AMERICAN COMPETITIVENESS: REGAINING OUR COMPETITIVE EDGE FOUR PRIORITIES AND 20 NEW IDEAS”, Feb, http://www.brookings.edu/~/media/Files/rc/reports/2009/02\_american\_competitiveness\_brainard/02\_american\_competitiveness\_brainard.pdf] cmr

A new agenda for action begins with a presidential vision for how the United States can regain its competitiveness by making a major investment in the American people, the tools they need to succeed and the safety nets that will help them manage transitions. **Health care reform, education, job training, innovation, infrastructure, and economic security are all critical components of** a forward-looking, integrated competitiveness agenda. Addressing our climate change challenge is also critical to longterm competitiveness, and indeed our efforts in every other policy area need to be consistent with meeting our climate objectives.

#### China wont catch up

**Ernst 11** – Economist, analysis service provided by the East-West Center (Dieter, 6/20/11, “China not an Immediate Threat to U.S. Tech Leadership,” http://www.hartfordbusiness.com/news19061.html,)

Contrary to common misperceptions, **China’s innovation policies do not pose a threat to U.S. leadership in science and technology**, East-West Center economist Dieter Ernst said June 15 in testimony before the congressionally mandated U.S.-China Economic and Security Review Commission. “The U.S. retains a strong lead in overall innovative capacity, and China still has a long way to go to close the innovation gap,” Ernst said. Instead, he said, China’s progress in innovation should be seen as a wake-up call for America: “Rather than fearing China and blaming it for our problems, we need to focus constructively on how this relationship can be improved.” Ernst urged the U.S. government and private sector to work together in implementing proactive trade diplomacy that takes into account the diverse forces and the conflicting agendas that drive China’s innovation policy, and in developing a national strategy to upgrade America’s own innovation system in order to cope with the competitive challenges posed by China. “Trade diplomacy and national innovation strategy are interrelated, and hence we need to pursue them simultaneously,” he testified. “Corrective action needs to start now, but there is still time to adjust policies and corporate strategies to the new challenges of an increasingly multi-polar global knowledge economy.” Ernst was among a handful of experts invited to testify before the commission, which was created by Congress in 2000 to monitor the national security implications of the bilateral trade and economic relationship between the United States and China, and to provide recommendations for legislative and administrative action where appropriate. The topic of the hearing was “China’s Five-Year Plan, Indigenous Innovation and Technology Transfers, and Outsourcing.” China’s innovation policy has produced massive investments in research and development infrastructure and higher education, Ernst said. Since 2000, China has increased R&D spending roughly 10 percent each year, with the result that China’s share in global R&D spending has increased from 9.1 percent in 2008 to 12.3 percent in 2010, while the U.S. share has declined from 35.4 percent to 34.4 percent. China’s share is projected to grow even further in 2011, Ernst said, overtaking Japan as the world’s second largest R&D investor. Since 1998, the number of colleges in China has doubled, and the number of students has more than quintupled to around 6 million, he said. More importantly, China’s domestic doctorate awards in science and engineering have increased more than ten-fold since the early 1990s, nearing the number of such doctorates awarded in the United States. China’s patent boom is of particular interest, Ernst said. In terms of total patenting activity, China has overtaken Korea and Europe, and it is catching up with the U.S. and Japan. And in 2009, he said, Chinese nationals accounted for nearly 90 percent of the country’s domestic patent applications, indicating that the government’s “indigenous innovation” policies have been successful, at least in quantitative terms. Even so, Ernst said, the gap in innovation capacity persists, and **China’s leadership is very conscious that the U.S. retains a strong lead** in R&D spending, patent applications and the per-capita number of scientists and engineers. A telling example, he said, is that no Chinese company is among the top 20 global R&D spenders in the information technology industry. In addition, China owns just two percent of worldwide patents, with 95 percent of its patents being domestic only. Ernst said that root causes of China’s continuing innovation gap include severe quality problems in education, scientific plagiarism and barriers to private R&D investment. A major weakness of China’s policy, he said, is its elaborate product and technology lists — constructed to assess compliance with government standardization requirements — which can quickly become outdated. Even more significant for China’s indigenous innovation push, he added, is that such control lists focus on existing technologies, rather than on the future innovations they are designed to promote.

## 2nc

### 2nc solvency block

**The tech would work – all that is necessary is funding**

**Betancourt 2010**

[Kiantar, University of Maryland School of Law, “Space Based Solar Power: Worth the effort?”, <http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407>]

One solar power satellite could provide 1 gigawatt of continuous power, enough to power 500’000 homes, also the equivalent of a large nuclear power plant.[[17]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn17)  Like a nuclear power plant, SBSP would do so without emitting any carbon dioxide into the atmosphere.[[18]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn18)  Unlike a nuclear power plant, SBSP would do so without any radioactive waste by-product or danger of nuclear meltdown.[[19]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn19)  Unlike ground-based solar, without the interference of the earth’s atmosphere a solar power satellite could collect 7-10 times the amount of power.[[20]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn20)  The sun’s rays would shine continuously on a solar power satellite, thus this power could be supplied continuously without interruption.   Solar power satellites could then transmit that power anywhere in the world.[[21]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn21)   These are 2 properties that set SBSP apart from other renewable energy sources.[[22]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn22) Ground-based solar power requires a power storage system to supply power when the sun is blocked by bad weather or during the night which adds to its cost and decreases its efficiency.[[23]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn23)  Wind power is often available only from remote or offshore locations.[[24]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn24)  Even countries with minimal energy infrastructure or people located in remote areas could install receivers to get a continuous power supply from SBSP.                 The base technology of SBSP is already proven.  In 2008, SBSP had a milestone breakthrough.[[25]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn25)  American and Japanese researchers, in only four months and on a budget of only $1 million, successfully transmitted a microwave beam 148 kilometers between two Hawaiian Islands.[[26]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn26)  The distance was chosen because of its equivalence to the thickness of the atmosphere that a microwave beam from space must penetrate to reach the planet’s surface.[[27]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn27)  This experiment was significant because it proved power transmission over large distances at high efficiency rates is possible.[[28]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn28)  Also, since 1977 the efficiency of solar cells has increased from around 10% to over 40%.[[29]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn29)  The efficiency of solid-state amplifiers has increased from 20% to 80%.[[30]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn30)   Solar power satellites using these new technologies should weigh around 25 tons, much smaller than the 250 ton satellites originally contemplated by Dr. Peter E. Glaser, the scientist who introduced SBSP.[[31]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn31)  Dr. Glaser’s original proposal in the 60’s required hundreds of astronauts in space to build solar power satellites.[[32]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn32)  This is no longer the case as advances in computing and robotics would allow satellites to be self-assembling made up of many small parts.[[33]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn33)  More time and research will help to lower the initial cost and improve efficiency to the scale needed for SBSP, but no new breakthrough discovery or invention is necessary.[[34]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn34) Public health and safety issues with microwave use have been examined extensively.  Microwaves used in SSP have no ionizing effect and there is no danger of cancer or genetic alterations due to microwave radiation.[[35]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn35)  The potential danger of microwaves, like energy from the sun or artificially light source, relates directly to the energy’s density in a given area.[[36]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn36)  The design of SSP systems calls for power densities well within safe limits at the planet’s surface.  For example, the average power density of the sun’s rays is about 100 mW/cm2 while the design maximum of satellite solar power systems is 25 mW/cm2 on the planet’s surface.[[37]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn37)  Even high flying birds would still remain well within safe limits.[[38]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn38)  Scientist still plan further safety studies, a necessary precaution for technology on this scale.[[39]](http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=56407#_ftn39)

#### SSP is technologically viable

Cox, 11 [William John, retired prosecutor and public interest lawyer, author and political activist, The Peoples Voice, March 26, <http://www.thepeoplesvoice.org/TPV3/Voices.php/2011/03/26/the-race-for-space-solar-energy>, BJM]

Space-solar energy is the greatest source of untapped energy which could, potentially, completely solve the world’s energy and greenhouse gas emission problems. The technology currently exists to launch solar-collector satellites into geostationary orbits around the Earth to convert the Sun’s radiant energy into electricity 24 hours a day and to safely transmit the electricity by microwave beams to rectifying antennas on Earth. Following its proposal by Dr. Peter Glaser in 1968, the concept of solar power satellites was extensively studied by the U.S. Department of Energy (DOE) and the National Aeronautics and Space Administration (NASA). By 1981, the organizations determined that the idea was a high-risk venture; however, they recommended further study. With increases in electricity demand and costs, NASA took a "fresh look" at the concept between 1995 and 1997. The NASA study envisioned a trillion-dollar project to place several dozen solar-power satellites in geostationary orbits by 2050, sending between two gigawatts and five gigawatts of power to Earth. The NASA effort successfully demonstrated the ability to transmit electrical energy by microwaves through the atmosphere; however, the study’s leader, John Mankins, now says the program "has fallen through the cracks because no organization is responsible for both space programs and energy security." The project may have remained shelved except for the military’s need for sources of energy in its campaigns in Iraq and Afghanistan, where the cost of gasoline and diesel exceeds $400 a gallon. A report by the Department of Defense’s National Security Space Office in 2007 recommended that the U.S. "begin a coordinated national program" to develop space-based solar power. There are three basic engineering problems presented in the deployment of a space-based solar power system: the size, weight and capacity of solar collectors to absorb energy; the ability of robots to assemble solar collectors in outer space; and the cost and reliability of lifting collectors and robots into space. Two of these problems have been substantially solved since space-solar power was originally proposed. New thin-film advances in the design of solar collectors have steadily improved, allowing for increases in the efficiency of energy conversion and decreases in size and weight. At the same time, industrial robots have been greatly improved and are now used extensively in heavy manufacturing to perform complex tasks. The remaining problem is the expense of lifting equipment and materials into space. The last few flights of the space shuttle this year will cost $20,000 per kilogram of payload to move satellites into orbit and resupply the space station. It has been estimated that economic viability of space solar energy would require a reduction in the payload cost to less than $200 per kilogram and the total expense, including delivery and assembly in orbit, to less than $3,500 per kilogram. Although there are substantial costs associated with the development of space-solar power, it makes far more sense to invest precious public resources in the development of an efficient and reliable power supply for the future, rather than to waste U.S. tax dollars on an ineffective missile defense system, an ego trip to Mars, or $36 billion in risky loan guarantees by the DOE to the nuclear power industry. With funding for the space shuttle ending next year and for the space station in 2017, the United States must decide upon a realistic policy for space exploration, or else it will be left on the ground by other nations, which are rapidly developing futuristic space projects.

#### Recent ev

Johnathan **Coopersmith** historian of technology **10** (AIP Conference Proceedings “Solar Power Satellites: Creating the Market for Beamed Energy Propulsion, May 6, 2010 -- Volume [1230](http://scitation.aip.org/dbt/dbt.jsp?KEY=APCPCS&Volume=1230), pp. 103-110, <http://link.aip.org/link/?APCPCS/1230/103/1>) Herm

Space-Based Solar Power (SBSP) has great potential to supply baseload electric power to Earth with minimum environmental damage. The tempting promise of gigawatts of electricity, harvested from kilometer-wide arrays of solar cells in geosynchronous orbit and beamed by microwave to receiving stations on earth, was technologically too ambitious when first proposed by Peter Glaser in 1968 [10]. Interest in SBSP has grown in recent years due to technological advances and growing concern about providing future baseload electricity in environmentally friendly and economically feasible ways [11-15]. SBSP technology has matured greatly since first studied in the 1970s. Advances in solar cells, microwave transmission, and construction techniques in space have made SBSP much more attractive technically. The most recent major study, by the National Space Security Office (NSSO) of the American Department of Defense in 2007, concluded that a one GW solar power station could be built in geosynchronous orbit [16]. Growing interest in SBSP is reflected by papers like the Naval Research Laboratory’s 2008 SBSP study [17], websites [18], and conferences like Space Canada International Symposium on Solar Energy from Space [19]. The International Academy of Astronautics will complete an exhaustive study in 2010 on the main technological options and provide a roadmap forward [20].

#### Military procurement jumpstarts the civilian market for SPS

**The Space Review 7**, (Taylor Dinerman, “Solar power satellites and space radar” <http://integrator.hanscom.af.mil/2007/July/07262007/07262007-16.htm>, July 16, 2007) // CCH

The first steps in such a program would be to begin work on an experiment to prove that power transmission in space via laser is possible. Already lasers are being used for communications in civil and military applications; taking this one step beyond to encompass power should be within the state of the art. At the same time the US Defense Department and NASA could begin joint work on a new generation of high-capacity power systems for future spacecraft. The power management and thermal control needs of a spacecraft that will carry a human crew to Mars may not be all that different from those of an SPS or an SR satellite.

The bulk of the development work on the radars themselves can be left until later in the program. Meanwhile, the US could profitably study less ambitious space radar programs such as Canada’s Radarsat. Launching one or two modest technology development satellites over the next five or ten years would be a helpful way to set the stage for a new SR program. In the long term, say, by around 2010, the GMTI radar could be replaced and supplemented by an Air Moving Target Indicator (AMTI), which would need even more power.

Instead of using a single large antenna or multiple smaller ones on the same spacecraft, a future stealthy SR could use radars on multiple satellites. Formation flying is now commonplace and coordinating multiple beams from two or three satellites in different orbits should not be that hard. The biggest problem will be to prove to Congress that the technology is ready for prime time.

Almost all of America’s major military space programs are too far along to effectively incorporate the lessons of China’s ASAT test. SR, due to repeated budget cuts, is the great exception. Other satellite programs that could be modified to incorporate the needs of the new space warfare requirements include the T-SAT Transformational Communications project and the possibly the NRO’s problem-plagued Future Imagery Architecture (FIA).

The stealthiness and robustness of all these programs, or their successors, would benefit from being able to draw electricity from a set of SPSs in GEO. The solar power satellites themselves would not necessarily have to be owned by the US government. They could be built privately based on a contract that promises that the Defense Department would buy a given amount of power at a predetermined price. This would be similar to the “power by the hour” contracts that are sometimes signed with jet engine manufacturers or the privately-financed initiative that the British RAF has established with a consortium for a new squadron of Airbus refueling tanker aircraft.

In GEO an SPS is a large and conspicuous target. A realistic new space architecture would have to find ways to give both active and passive protection to such valuable assets. At the same time, these measures must not detract from the commercial profitability of the operation. The Civil Reserve Air Fleet system is a possible model; airlines buy some planes that are modified for possible military use in an emergency and the government compensates them for the extra weight they carry while in normal commercial use.

Space solar power is, in the long run, inevitable. The Earth’s economy is going to need so much extra power over the next few decades that every new system that can be shown to be viable will be developed. If the US were to develop space solar power for military applications it would give the US civilian industry a big head start. As long as the military requirements are legitimate, there is no reason why this cannot be made into a win-win outcome.

#### Cost estimates are based on old studies when solar components were much more expensive

**Nansen 2000** - President Solar Space Industries, (Ralph, Statement to the United States Congress Subcommittee on Space Science “The Technical Feasibility of Space Solar Power” Before the Subcommittee on Space and Aeronautics, United States House of Representatives Committee on Science September 7, 2000, <http://www.spaceref.com/news/viewpr.html?pid=2571>) // CCH

The situation is much different now than it was in 1980 when the earlier studies were terminated. In the ensuing years much has changed. Other programs have sponsored research and development of several of the enabling technologies and much of the required infrastructure has been developed. Studies have continued in several countries outside of the United States and some limited activity is sustained by individuals and companies on their own funds within the United States. The development of terrestrial solar cells has caused the photovoltaic industry to grow from a very small specialty group of companies manufacturing expensive solar cells in laboratory quantities to an industry that is approaching maturity. Annual production is now well over a hundred megawatts and growing rapidly. Production processes have become automated and the number of different types of cells is greatly expanded. Thin film cells with efficiencies over 18% on metal film substrates and with inherent resistance to space radiation degradation will soon be in production. These cells will produce 1400 watts per kilogram of mass with a cost potential of 35 cents per watt. The decreased weight and cost will significantly reduce satellite cost and weight from earlier estimates.

#### There are no technological barriers and the first demonstration would occur in 4 years

**Ashworth, 08 -** Fellow of the British Interplanetary Society (Stephen, The Space Review, “In defense of the knights”, 6/23, http://www.thespacereview.com/article/1153/1)

Usually, Day’s articles are among the best-written and most informative space commentary on the market. But this time he appears to have made a number of unjustified assertions.

He writes: “Space activists, who are motivated by the desire to personally live and work in space, do not care about SSP per se […] they have latched on to SSP because it is expedient.” There may well exist people who answer to this description, but if so, they must be remarkably shortsighted. The facts are clear: fossil fuels have served civilization well in the first phase of its industrialization (approximately 1700–2000), but possess a number of problems, of which the current climate hysteria is only one; the others concern the long-term sustainability and growth of industrial energy consumption. Therefore we can predict an imminent shift of the baseload energy supply away from fossil fuels to, most likely, a mixture of artificial nuclear fission and fusion, and terrestrial and space-based solar power.

I should add that my personal chances of ever living and working in space are zero. My concern is that society should make the best strategic choices for its prosperity and growth. Given the fact that almost all the natural resources of the universe of potential economic value are extraterrestrial, I am therefore bound to argue the importance of systematic access to those resources.

SSP is not merely expedient, rather it is strategic, in the sense that it has the potential to permanently raise the whole of human civilization to a higher level of prosperity, security and spatial range. According to Day’s reading of the NSSO study, this is not for us, but only apparently for future generations, many decades in the future: “The NSSO study […] states that we are nowhere near developing practical SSP […] that the technology to implement space solar power does not currently exist… and is unlikely to exist for the next forty years.”

This came as news to me. Since SSP has been regularly used on a small scale to power satellites for forty years already (in marked contrast to the development effort that has gone into nuclear fusion), how could the NSSO have concluded that the technology “does not exist”? What actually does the NSSO report say? It reports:

“FINDING: The SBSP Study Group found that Space-Based Solar Power is a complex engineering challenge, but requires no fundamental scientific breakthroughs or new physics to become a reality.” (p.20)

“FINDING: The SBSP Study Group found that significant progress in the underlying technologies has been made since previous government examination of this topic, and the direction and pace of progress continues to be positive and in many cases accelerating.” (p.20)

This sounds promising. Does it mean we’ll be able to start work in forty years time?

“FINDING: The SBSP Study Group found that individual SBSP technologies are sufficiently mature to fly a basic proof-of-concept demonstration within 4–6 years and a substantial power demonstration as early as 2017–2020, though these are likely to cost between $5B–$10B in total. This is a serious challenge for a capable agency with a transformational agenda. A proposed spiral demonstration project can be found in Appendix B.” (p.22–23)

Turning to Appendix B, we find that its introductory paragraphs point out that significant technological progress has been achieved in the past decade, which would allow an accelerated pace of progress compared with that proposed by NASA in the late 1990s. But Day is not impressed, for his article reads: “from a technological standpoint, we are not much closer to space solar power today than we were when NASA conducted a big study of it in the 1970s.” He seems to have been reading a completely different report.

Appendix B is subheaded: “AN AGGRESSIVE AND ACHIEVABLE SBSP TECHNOLOGY DEMONSTRATOR ROADMAP: 10 Years — 10 Megawatts — $10 Billion”. It offers an updated program to build “an integrated large-scale demonstrator, to be flown in less than 10 years, at a cost of less than $10B, and delivering power to the Earth of approximately 10 megawatts.” Again, Day’s assertion that the technology is “unlikely to exist for the next forty years” is completely contradicted by the actual contents of the NSSO study report.

#### SSP would immediately start reducing launch costs by creating a market – which means it creates the spinoff advantages that solve competitiveness

**Eades, 07 -** (Jeremy, “US military proposes space-based solar power station”, Futurismic Blog, 10/17, <http://futurismic.com/2007/10/17/us-military-proposes-space-based-solar-power-station/>)

The idea is that the Pentagon has decided that energy independence is now a national security issue, and as such falls under their purview.  In addition, this orbiting power station would negate the need for long fuel supply lines.  Units could have needed energy beamed down directly from orbit.  Another benefit of having the military act as the early adopter is that prices should begin to decrease almost immediately, making it more affordable for commercial enterprises to license the technology for civilian consumption.

#### The technology exists and a federal commitment will substantially drive down costs

**The Engineer, 5** (“Solar Power From Space: Sun Seekers” 03-11-05, LN) // DCM

<This will require a significant reduction in launch costs. But the increase in launch frequencies required to build an SPS system would go some way to reducing these costs, and this reduction could well open up new markets, further decreasing prices. Companies such as California- based SpaceX are already developing low-cost launch vehicles with the aim of making access to space more affordable. But with launch costs of $15.8m (£8.2m) for SpaceX's 6,020kg payload Falcon V (£1,362 per kilo), there is still some way to go.

The concept of solar power-generating satellites is also being investigated as a means of transmitting power to bases on the Moon or Mars, where lunar eclipses and Martian dust storms would hamper the effectiveness of ground-based solar generators.

Beyond Europe and Japan, US researchers have also been looking at the concept. NASA first began studying SPS after the oil embargo of the mid- 1970s. Over the years the agency has evaluated almost 30 systems. Chief among these is the Suntower concept. Similar in principle to the European Sail Tower, it consists of a constellation of tether-based solar satellites that would initially be deployed in low Earth orbit, then moved to an elliptical Earth orbit for operation.

While the status of the core technology meant that early concepts were prohibitively expensive, studies over the past 20 years have identified a steady improvement in many key technologies.

John Mankins, manager of NASA's Exploration Systems Research and Technology division and a key advocate of SPS, puts much of this progress down to advances in exploration technology. He said that while there's currently no focused SPS programme at NASA, much of the core technology required to build an SPS system has advanced significantly in the past couple of years.

Mankins explained that important work has been done on the development of modular space structures that can be assembled and maintained in orbit by robots. The agency has been developing a range of walking and crawling robots since the late 1990s, including the anthropomorphic 'robo-naut', a highly flexible 'snake' robot, and the Skyworker mobile crane system concept.

Once an SPS system has been assembled it must still be moved into the optimum operational orbit, and Mankins said that work carried out on in- space transportation could be extremely important. 'We have made substantial investment into advanced electromagnetic propulsion that is able to move large payloads cheaply out of low Earth orbit.'

But perhaps the most important strides have been made in the improvement in the conversion efficiency rate of solar cells. 'We have developed new types of solar cell that are highly efficient and lightweight,' he said.

Like their ESA counterparts, NASA's researchers have also investigated a variety of approaches to wireless power transmission, including microwave phased arrays using magnetrons or solid state transmitters, as well as visible light transmission using solid state lasers. But Mankins said that beaming is one area in which NASA has made little progress.

The other key obstacle, he said, is the cost of access to space. 'Large space solar power systems are going to weigh so much more than anything else we're ever going to do that we've got to have really low-cost launches.' While this may remain something of a dream one proposed method of keeping launch costs down for SPS is to develop smaller concepts that use solar mirrors to concentrate the sun's rays.

Mankins said that while the technology exists to produce small-scale demonstration systems and put them into orbit with existing launchers, an economical system that sells power for profit is a couple of decades away. 'If we make the right kind of progress, you could see SPS systems by 2030 - so many technologies are being driven by the needs of exploration that there's a good foundation for it.'

But while Mankins believes that the SPS will be driven by exploration, others have claimed that the concept will be moved forward by more commercially minded industries. Prof Marty Hoffert, a leading expert in climate change from New York University's physics department, has suggested that, with co-operation from the communications and utility companies, it should be possible to piggyback space solar power systems on the ever-increasing number of low-Earth-orbiting (LEO) communications satellites.

Such a system would help share launch costs and provide access to an existing space-based infrastructure of sorts. Also, by using communications satellites in low Earth orbit, only a few hundred miles up, microwaves used to beam energy to Earth would disperse less than those beamed from geostationery orbit, enabling the construction of smaller ground-based receivers.

While there's little government backing for such a system, researchers like Hoffert believe that private sector activity could help push the concept forward. One promising host for such a project would be the Iridium Satellite System, which uses a constellation of 66 low Earth- orbiting (LEO) satellites operated by Boeing to provide its customers, including the US Department of Defence, with complete coverage of the Earth. Satellite phone company Globalstar also operates a constellation of 48 LEO satellites, while Virginia-based global data service provider Orbcomm has 30 operational LEO satellites and a licence for 17 more.

Hoffert claimed that the future of SPS depends on the willingness of electrical and telecoms companies to get involved. He said that there is a general level of ignorance in the business community about the potential of SPS, and energy technology in general. 'Engineers can solve the problem of transforming the world energy system away from fossil fuels, but it's a major challenge, and we need to be open to new ideas like space solar power,' he said.

Hoffert is one of an increasingly vocal group of engineers, physicists, atmospheric researchers and economists calling for a massive R&D programme in the US along the lines of the Manhattan & Apollo projects to develop a broad spectrum of alternative energy technologies. 'Right now decisions on the global climate/energy problem are predominantly made by economists and politicians. Good guys, sometimes, but more people need to work on this who have the expertise and skills to make something happen. Once innovative energy technologies are demonstrated convincingly, and the potential for cost-effectiveness shown, venture capitalists will pile on, as they did for computers, telecommunications, biotech and now nanotech.'

Could SPS be a compelling enough technology to make this happen? NASA's John Mankins certainly thinks so. 'The US currently generates something like 700 or 800GW, the world generates four times that. A hundred years from now it's going to take thousands of gigawatts to satisfy the world's needs. We will require a whole set of energy sources to do that and SPS could be one of the major ones.'>

### aff is slow too

#### Too long to solve anything

**Diesendorf 10** [Mark, “Nuclear power: no solution to climate change”, Green Left, April 17, 2010]

The integral fast reactor [which promises to use existing stockpiles of nuclear waste to make carbon-free energy,] doesn't exist — it is the archetypal ink-moderated paper reactor. It's true that a tiny physical version of this concept, called Experimental Breeder Reactor-2, once operated in the US. But experimental energy technologies are just that — experiments, designed to test a concept.¶ They have to be redesigned before they can be scaled-up to a medium-sized demonstration stage. Then, provided several successful demonstrations can be achieved over a period of many years, they usually need further design modifications before they could possibly move to commercial scale with full mass-production.¶ Realistically, this whole process would take at least 20 years in the US — much longer in Australia if our government was so foolish as to become involved.

#### IFR’s only exist on paper

**Burke et al 12** [Guardian, “Renewed push for nuclear power”, Feb 8, 2012, Tom Burke Founding director, E3G, Dr Paul Dorfman Founding co-ordinator, Nuclear Consulting Group, John Sauven Executive director, Greenpeace UKP]

Proponents of integral fast reactors have so far failed to answer three key questions: do these reactors work, how much do they cost, and how long to build? There have been many unsuccessful attempts to build a working fast reactor. The Japanese spent four decades and $13bn trying. A UK fast reactor at Dounreay was a costly failure which we are still working out how to decommission. No one has built a fast reactor on a commercial basis. Even if these latest plans could be made to work, prism reactors do nothing to resolve the main problems with nuclear: the industry's repeated failure to build reactors on time and to budget. Even the Department of Energy and Climate Change's scientific adviser, David MacKay, says "it isn't the nuclear fuel that's the expensive bit – it's the power stations and the other facilities that go with them."¶ We have a very small window in which to get a grip on our greenhouse gas emissions, but despite proven green technologies existing we are being asked to wait while an industry that has a track record for very costly failures researches yet another much-hyped but still theoretical new technology. You can make paper designs for anything, but that is a long way from sorting out the real world engineering and economic issues that will actually deliver affordable and low-carbon energy. That is why ideas like fast reactors work much better in the headlines than they do in fine print.

#### Aff is slow too

Wald, ‘11

[Matthew L., NYT, 2-12, “Administration to Push for Small ‘Modular’ Reactors,”http://www.nytimes.com/2011/02/13/science/earth/13nuke.html?pagewanted=all&\_moc.semityn.www]

Advocates say the modules can be built inexpensively and with good quality control in a central factory and then set up quickly where they are needed. But the $500 million cost of the design and approval process, steep for a product with **uncertain market appeal**, is a **major barrier**.¶ The Energy Department’s notion is that if the government provides half the money up front and signs a contract to buy power from the reactor, a utility will be persuaded to order one. That contract, because it guarantees revenue for the utility company, would make it easier for the utility to receive financing.¶ Military bases, which also must reduce their carbon footprint 28 percent, could sign such contracts as well, Energy Department officials say. Each power purchase agreement would be negotiated at a favorable rate, compensating the Energy Department for its investment.¶ If Congress approves, the Energy Department will invite companies to apply for help. At least four companies could potentially build such a reactor. One is Babcock & Wilcox, which builds reactors for nuclear submarines whose power output is more similar to the proposed reactors than to full-size reactors.¶ The company is trying to build interest in a modular reactor called mPower. It puts into a single package many components that for conventional reactors must be shipped to a site separatelyand then assembled.¶ Another possible builder is NuScale, which is trying to commercialize a design developed at Oregon State University.¶ The department also anticipates applications from Westinghouse, which builds reactors, and Holtec, which now makes nuclear equipment.¶ Experts at the Energy Department and elsewhere suggest that a small reactor could be built in an advanced factory in the United States and delivered across the globe to replace coal-fired power plants.¶ What is more, the modular reactors would provide about the same power output as coal plants that were built in the United States in the 1950s and 1960s and are now ready for retirement, planners say.¶ Still, the actual cost and reliability of modular reactors remains uncertain.¶ There are other unknowns that are likely to raise questions from the Nuclear Regulatory Commission. Rules for control-room staffing, security and even calculation of license fees are all based on big reactors and may not be appropriate to small ones, commission officials say.¶ “We may want to modify our regulations to make them a little more tailored to the uniqueness of these design types,” the commission’s chairman, Gregory B. Jaczko, told reporters on Feb. 2 at a discussion hosted by Platts, the energy information company.¶ Smaller reactors present some advantages **and** some **drawbacks**, said David Lochbaum, a nuclear expert at the Union of Concerned Scientists, which generally opposes nuclear power.¶ Mr. Lochbaum said that reactors of 1,000 or 1,500 megawatts, the output of traditional reactors, are so big that it has been difficult to match them to anticipated demand. “Either you build it early, and like ‘Field of Dreams,’ you hope the customers come, or you’re short by 1,000 or 1,500 megawatts and you hope nobody notices while you’re building your plant,” he said.¶ But since the attacks of Sept. 11, 2001, he said, all plants have had to bolster security and keep control room operators and maintenance staff on duty, increasing overhead costs to produce a relatively small amount of energy. And the cost to build small reactors is uncertain.

#### Supply chain atrophy

ITA, ‘11

[International Trade Administration -- U.S. Department of Commerce, February, “The Commercial Outlook for U.S. Small Modular Nuclear Reactors,” http://trade.gov/mas/ian/build/groups/public/@tg\_ian/@nuclear/documents/webcontent/tg\_ian\_003185.pdf]

There are also domestic policies that hinder U.S. SMR competitiveness, with some policies relevant to all nuclear suppliers and some specific to SMR deployment, both at home and abroad. One obstacle is diminished manufacturing capacity. U.S. nuclear competitiveness is hampered because U.S. manufacturing capacity has been eroded through the lack of new reactor construction during the past few decades. Some government **resources to help manufacturers are not appropriate for nuclear** suppliers, or the resources exclude the suppliers entirely. For example, only two U.S. nuclear manufacturers qualified for the advanced energy manufacturing tax credit. The timeline to be eligible for the credit requires a facility to be up and running four years from certification. Some U.S. firms say that the timeline is too short for many nuclear suppliers; just acquiring the high-precision machines necessary to retool and rebuild capacity can require a lead time of several years.

### heat arg

**SPS solves global cooling – it can be used to heat the earth**

**Hempsell, 06** – University of Bristol (Mark, “Space power as a response to global catastrophes,” Acta Astronautica, v. 59, science direct) //DH

One of the common features of past natural global catastrophes is a cooling of the Earth’s climate, which is the key vector triggering famine, disease and other causes of death. In cases of NEO impact and caldaria volcanoes this is caused by material in the atmosphere and lasts for over a year. The cause of the cooling dur- ing the little ice age is less certain but it lasted for a considerable period of time. A system to counter this cooling would have widespread applicability and great efﬁcacy in these cases, and could in itself prevent the majority of deaths.

The system would not have to heat the whole Earth but rather selectively target regions where cooling in- duced effects create a hazard. Examples might be heat- ing plague reservoirs regularly to above 25◦ to prevent breakout of the disease, ensuring snow melt in early spring in high latitude countries (so ice reﬂectivity does not reduce solar heating) reducing occurrence of frost in high-yield agricultural areas, and the heating of ocean regions to ensure viable rainfall.

If a signiﬁcant SPS capability existed that used microwave power transmission, then heating could be achieved by defocusing the transmission antenna and pointing the power beam at the area that requires heating. That is to use the SPS as a microwave oven. This is clearly a “zero cost” option as no new sys- tems are required and one 5 GW unit could provide 10 mW/cm2 –500 km2 (a circle 25 km diameter at the equator). In practice, the target areas are more likely to be in the order several 100 km in diameter so tens of SPS would need to be used together.

#### Heat pollution from reactors will fuel warming

**Smith 11** \*GAR SMITH—Editor Emeritus of Earth Island Journal, a former editor of Common Ground magazine, a Project Censored Award-winning journalist, and co-founder of Environmentalists Against War [“Nuclear Roulette the case against a nuclear renaissance http://ifg.org/pdf/Nuclear\_Roulette\_book.pdf, This publication is No.5 in the International Forum on Globalization series focussed on False Solutions to the global climate crisis. JUNE 2011]

Unlike a coal-fired plant, where production can be ramped up or slowed to meet power demands, a nuclear reactor spins out a constant level of electricity day in and day out. Because nuclear plants need to be operated full-time, they often “throw away” the electric energy generated during off-peak hours. Day in and day out, nuclear power plants routinely release clouds of 1,000°F steam directly into the atmosphere.According to one estimate, the waste heat from all the world’s electric power plants (including coal, oil and nuclear) amounts to more than 27,000 trillion BTUs per year.68 The added heat from a “Nuclear Renaissance” would only further fuel global warming. The situation was summed up by energy expert Amory Lovins who calculated that, from an efficiency standpoint, investing in nuclear power would make global warming worse since pouring money into reactors instead of renewables produces “two to ten times less climate-solution per dollar.”69

### politics

#### SPS has bipartisan support

**Moore 2k** (Taylor, “Renewed Interest in Space Solar Power”, EPRI Journal, Spring, academic onefile) //DH

As a result of bipartisan support from Congress and the Clinton administration, additional funding for an SPS exploratory research and technology program was authorized for fiscal year 1999 and is continuing in the current fiscal year. "Large power systems are likely to be essential for achieving ambitious space science and exploration goals, including both extra-solar system robotic probes and the development of large, permanent installations on the moon, Mars, or other targets, such as near-Earth and main-belt asteroids," says Mankins.

#### No cost arg

**NASA, 2007** (NASA, “Space Based Solar Power as an Opportunity for Strategic Security” Phase 0 Architecture Feasibility Study, October 10, 2007)

When all indirect and support costs are included, it is estimated that the DoD currently spends over $1 per kilowatt hour for electrical power delivered to troops in forward military bases in war regions. OSD(PA&E) has computed that at a wholesale price of $2.30 a gallon, the fully burdened average price of fuel for the Army exceeds $5 a gallon. For Operation\ IRAQI FREEDOM the estimated delivered price of fuel in certain areas may approach $20 a gallon. Significant numbers of American servicemen and women are injured or killed as a result of attacks on supply convoys in Iraq. Petroleum products account for approximately 70% of delivered tonnage to U.S. forces in Iraq—total daily consumption is approximately 1.6 million gallons. Any estimated cost of battlefield energy (fuel and electricity) does not include the cost in lives of American men and women. The DoD is a potential anchor tenant customer of space‐based solar power that can be reliably delivered to U.S. troops located in forward bases in hostile territory in amounts of 5‐50 megawatts continuous at an estimated price of $1 per kilowatt hour.

#### Plan has strong congressional and interest group support

**NSSO 2007**

[National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf]

The SBSP Study Group found that SBSP is an idea that appears to generate significant interest and support across a broad variety of sectors. Compared to other ideas either for space exploration or alternative energy, Space-Based Solar Power is presently not a publicly well-known idea, in part because it has no organizational advocate within government, and has not received any substantial funding or public attention for a significant period of time. Nevertheless, DoD review team leaders were virtually overwhelmed by the interest in Space-Based Solar Power that they discovered. What began as a small e-mail group became unmanageable as the social network & map-of-expertise expanded and word spread. To cope, study leaders were forced to move to an on-line collaborative group with nearly daily requests for new account access, ultimately growing to over 170 aerospace and policy experts all contributing pro-bono. This group became so large, and the need to more closely examine certain questions so acute, that the group had to be split into four additional groups. As word spread and enthusiasm grew in the space advocacy community, study leaders were invited to further expand to an open web log in collaboration with the Space Frontier Foundation. The amount of media interest was substantial. Activity was so intense that total e-mail traffic for the study leads could be as high as 200 SBSP-related e-mails a day, and the sources of interest were very diverse. There was clear interest from potential military ground customers—the Army, Marines, and USAF Security Forces, and installations personnel, all of which have an interest in clean, low environmental-impact energy sources, and especially sources that are agile without a long, vulnerable, and continuing logistics chain. There was clear interest from both traditional “big aerospace,” and the entrepreneurial space community. Individuals from each of the major American aerospace companies participated and contributed. The subject was an agenda item for the Space Resources Roundtable, a dedicated industry group. Study leaders were made aware of significant and serious discussions between aerospace companies and several major energy and construction companies both in and outside of United States. As the study progressed the study team was invited to brief in various policy circles and think tanks, including the Marshall Institute, the Center for the Study of the Presidency, the Energy Consensus Group, the National Defense Industry Association, the Defense Science Board, the Department of Commerce’s Office of Commercial Space, and the Office of Science and Technology Policy (OSTP). Interest in the idea was exceptionally strong in the space advocacy community, particularly in the Space Frontier Foundation (SFF), National Space Society (NSS), Space Development Steering Committee, and Aerospace Technology Working Group (ATWG), all of which hosted or participated in events related to this subject during the study period. There is reason to think that this interest may extend to the greater public. The most recent survey indicating public interest in SBSP was conducted in 2005 when respondents were asked where they prefer to see their space tax dollars spent. The most popular response was collecting energy from space, with support from 35% of those polled—twice the support for the second most popular response, planetary defense (17%)—and three times the support for the current space exploration goals of the Moon (4%) / Mars(10%). How does one account for such significant interest? Perhaps it is because SBSP lies “at the intersection of missionary and mercenary”—appealing both to man’s idealism and pragmatism, the United States’ special mission in the world and her citizens’ faith in business and technology. As an ambitious and optimistic project, it excites the imagination with its scale and grandeur, besting America’s previous projects, and opening new frontiers. Such interest goes directly to the concerns of the Aerospace commission, which stated, “The aerospace industry has always been a reflection of the spirit of America. It has been, and continues to be, a sector of pioneers drawn to the challenge of new frontiers in science, air, space, and engineering. For this nation to maintain its present proud heritage and leadership in the global arena, we must remain dedicated to a strong and prosperous aerospace industry. A healthy and vigorous aerospace industry also holds a promise for the future, by kindling a passion within our youth that beckons them to reach for the stars and thereby assure our nation’s destiny.”

#### DOD

**Schoenbrod, 1993** (David, professor at New York Law School, Power

Without Responsibility: How Congress Abuses the People through

Delegation, p. 95)

Second, presidents must take personal responsibility for laws embodied in statutes that they sign, but they can shift some of the blame for agency laws to the agency. Shifting blame is easy when an independent agency has made the law, because the leaders of such agencies do not serve at the president's pleasure. Presidents also often avoid substantial political losses they might sustain for the unpopular actions of appointees who do serve at the president's pleasure by taking no position on what the agency has done or even by expressing some disagreement. Indeed, even incumbent presidents try to "run against the government."

### weapon

**The DOD won’t weaponize SSP – better options already exist**

**NSSO, 8** (National Space Security Office, Space-Based Solar Power Study Group, Ad Astra, “Strategic Importance” Spring 2008, pg. 28, http://www.nss.org/adastra/AdAstra-SBSP-2008.pdf)

1. The DoD is not looking to SBSP for new armaments capabilities. Its motivation for study-ing SBSP is to identify sources of energy at a reasonable cost any-where in the world, to shorten the logistics lines and huge amount of infrastructure needed to support military combat operations, and to prevent conflicts over energy as current sources become increasingly costly.

2. SBSP does not offer any capability as a weapon that does not already exist in much less-expensive options. For example, the nation already has working ICBMs with nuclear warheads should it choose to use them to destroy large enemy targets.

3. SBSP is not suitable for attacking ground targets. The peak intensity of the microwave beam that reaches the ground is less than a quarter of noon-sunlight; a worker could safely walk in the center of the beam. The physics of microwave trans-mission and deliberate safe-design of the transmitting antenna act to prevent beam focusing above a pre-determined maximum inten-sity level. Additionally, by coupling the transmitting beam to a unique ground-based pilot signal, the beam can be designed to instantly diffuse should pilot signal lock ever be lost or disrupted.

4. SBSP would not be a preci-sion weapon. Today’s militar-ies are looking for more precise and lower collateral-damage weapons. At several kilometers across, the beam from geostationary Earth orbit is just too wide to shoot indi- vidual targets—even if the intensity were sufficient to cause harm.

5. SBSP is an anti-war capability. America can use the existing technical expertise in its military to catalyze an energy transformation that lessens the likelihood of conflict between great powers over energy scarcity, lessens the need to inter-vene in failed states which cannot afford required energy, helps the world climb from poverty to prevent the spawn of terrorism, and averts the potential costs and disaster responses from climate change.

**SSP solves the impact to militarization – all countries will be invested in the clean energy**

**Valentine, 07 -** executive vice president of the Space Studies Institute (Lee, “Space Solar Power”, 10/9, <http://update.ssi.org/?p=17>)

Satellite solar power is inherently geopolitically stabilizing. When economical power satellites are built, all countries will want them. All countries will therefore desire peace on the High Frontier. Power satellites are not vulnerable to terrorists, but they would be vulnerable to attacks by any of the major space faring powers.

### enr/korea stuff

#### Their 1ac Stanford evidence actually says it is about prolif – here’s the article

**Stanford 10** (Dr George S. Stanford, nuclear reactor physicist, retired from Argonne National Laboratory, “IFR FaD context – the need for U.S. implementation of the IFR,” 2/18/10) <http://bravenewclimate.com/2010/02/18/ifr-fad-context/>

ON THE NEED FOR U.S. IMPLEMENTATION OF THE INTEGRAL FAST REACTOR

The IFR ties into a very big picture — international stability, prevention of war, and avoiding “proliferation” (spread) of nuclear weapons.

– The need for energy is the basis of many wars, including the ones we are engaged in right now (Iraq and Afghanistan). If every nation had enough energy to give its people a decent standard of living, that reason for conflict would disappear.

– The only sustainable energy source that can provide the bulk of the energy needed is nuclear power.

– The current need is for more thermal reactors — the kind we now use.

– But for the longer term, to provide the growing amount of energy that will be needed to maintain civilization, the only proven way available today is with fast-reactor technology.

– The most promising fast-reactor type is the IFR – metal-fueled, sodium-cooled, with pyroprocessing to recycle its fuel.

– Nobody knows yet how much IFR plants would cost to build and operate. Without the commercial-scale demo of the IFR, along with rationalization of the licensing process, any claims about costs are simply hand-waving guesses.

\* \* \* \*

Background info on proliferation (of nuclear weapons). Please follow the reasoning carefully.

– Atomic bombs can be made with highly enriched uranium (90% U-235) or with good-quality plutonium (bomb designers want plutonium that is ~93% Pu-239).

– For fuel for an LWR, the uranium only has to be enriched to 3 or 4% U-235.

– To make a uranium bomb you don’t need a reactor — but you do need access to an enrichment facility or some other source of highly enriched uranium…

– Any kind of nuclear reactor can be used to make weapons-quality plutonium from uranium-238, but the uranium has to have been irradiated for only a very short period. In other words, nobody would try to make a plutonium weapon from ordinary spent fuel, because there are easier ways to get plutonium of much better quality.

– Plutonium for a weapon not only has to have good isotopic quality, it also has to be chemically uncontaminated. Thus the lightly irradiated fuel has to be processed to extract the plutonium in a chemically pure form. But mere possession of a reactor is not sufficient for a weapons capability — a facility using a chemical process called PUREX is also needed.

– Regardless of how many reactors a country has, it cannot have a weapons capability unless it has either the ability to enrich uranium or to do PUREX-type fuel reprocessing.

– Therefore, the **spread** of weapons capability **will be strongly inhibited if the only e**nrichment **and r**eprocessing **facilities are in countries that already have a nuclear arsenal**.

– But that can only happen if countries with reactors (and soon that will be most of the nations of the world) have absolutely ironclad guarantees that they can get the fuel they need even if they can’t make their own, regardless of how obnoxious their political actions might be.

– Such guarantees will have to be backed up by some sort of international **arrangement, and that can only come to pass if there is effective leadership** for the laborious international negotiations that will have to take place. (For a relevant discussion, see here)

– At present, the only nation that has a realistic potential to be such a leader is the United States.

– But a country cannot be such a leader in the political arena unless it is also in the technological forefront.

– The United States used to be the reactor-technology leader, but it abandoned that role in 1994 when it terminated the development of the IFR.

– Since then, other nations — China, India, Japan, South Korea, Russia, France — have proceeded to work on their own fast-reactor versions, which necessarily will involve instituting a fuel-processing capability.

– Thus the United States is being left behind, and is rapidly losing its ability to help assure that the global evolution of the technology of nuclear energy proceeds in a safe and orderly manner.

– But maybe it’s not too late yet. After all, the IFR is the fast-reactor technology with the post promise (for a variety of reasons), and is ready for a commercial-scale demonstration to settle some uncertainties about how to scale up the pyroprocess as needed, to establish better limits on the expected cost of production units, and to develop an appropriate, expeditious licensing process.

– Such a demo will require federal seed money. It’s time to get moving.

#### No licensing standards, insufficient government support, and bureaucracy

ITA, U.S. Department of Commerce International Trade Administration, February ‘11

(“The Commercial Outlook for U.S. Small Modular Nuclear Reactors,” <http://trade.gov/mas/ian/build/groups/public/@tg_ian/@nuclear/documents/webcontent/tg_ian_003185.pdf>)

Just like exporters of traditional large reactors, U.S. SMR vendors would face intense foreign competition, primarily by state-owned or state-aligned enterprises. Foreign nuclear companies have enjoyed **significant** government **support**, ranging from direct government ownership and management to favorable financing, industrial coordination, and support for manufacturers. Some U.S. suppliers also regard the lack of international licensing standards as an obstacle to expanding their business. They say that obtaining regulatory approval in one market does not provide any “leg up” in obtaining approval in another market, which means that the process has to be repeated for each country that the supplier wants to sell to. However, **it is difficult to see how international licensing standards could be developed or enforced** given the unique national circumstances that factor into a regulator’s licensing decisionmaking. The discretion of these national regulators cannot be compromised. More generally, **U.S. suppliers** also **say** that the lack of regulatory infrastructure in many countries interested in SMR technology **is a problem** for ensuring the safe and secure deployment of the technology. This challenge also applies to larger, traditional reactors. Nuclear liability is a significant concern for SMR and large reactor designers. Currently, no global nuclear liability regime exists. This situation not only complicates commercial arrangements, but also means that, in the unlikely event of a nuclear incident, claims for damages would be the subject of protracted and complicated litigation in the courts of many countries against multiple potential defendants with no guarantee of recovery. The IAEA-sponsored Convention on Supplementary Compensation for Nuclear Damage (CSC) is the only international instrument that provides the basis for establishing a global regime, including countries with and without nuclear power facilities. U.S. nuclear suppliers have stated that the implementation of CSC is a necessity for pursuing a major nuclear export program.

#### Backlash means no nuclear industry—turns case

McGoldrick 10

Fred McGoldrick, CSIS, spent 30 years at the U.S. State and Energy Departments and at the U.S. mission to the IAEA, negotiated peaceful nuclear cooperation agreements with a number of countries and helped shape the policy of the United States to prevent the spread of nuclear weapons, 11/30/10, The U.S.-UAE Peaceful Nuclear Cooperation Agreement: A Gold Standard or Fool’s Gold?, http://csis.org/files/publication/101130\_McGoldrick\_USUAENuclear.pdf

On November 14,2010, a number of experts in the nonproliferation field wrote the president urging him not to provide “US federal energy loan guarantees, federal contracts, or other subsidies or assistance to help foreign government-backed nuclear firms expand their nuclear business in the US unless they have committed to apply the nonproliferation standards (including with respect to enrichment and spent fuel recycling) established in the U.S.-United Arab Emirates (UAE) civilian nuclear cooperation agreement in all of their future civilian nuclear cooperation agreements.”11 However, any such proposal would not only **compromise** our ability to rebuild our own nuclear industry and to compete in the international market, but it would also alienate close allies whose cooperation is essential for strengthening the global nonproliferation regime.

In sum, the United States is facing an uphill battle to compete in the international nuclear market and cannot dictate nonproliferation conditions that others will find unacceptable. Nations embarking on new nuclear programs do not need to rely on the United States for their nuclear fuel, equipment, components, or technology. They have alternatives and lots of them, as other states with nuclear programs have steadily built up their nuclear export capacities, which in some cases are state run or state supported.

#### Civilian trade lowers prolif barriers even when the reactors are safe—this guarantees future prolif and requires restrictive agreements to have a shot

Fuhrmann 9

Matthew Fuhrmann, Assistant Professor of Political Science at the University of South Carolina, Summer 2009, Spreading Temptation: Proliferation and Peaceful Nuclear Cooperation Agreements, http://belfercenter.hks.harvard.edu/files/Spreading-Temptation-Proliferation-and-Peaceful-Nuclear-Cooperation-Agreements.pdf

Recent research finds that countries receiving certain “sensitive” nuclear assistance are more likely to acquire nuclear weapons.126 For the reasons I argued above, the relationship between nuclear assistance and proliferation is broader. Training in nuclear engineering, the supply of research or power reactors, and the transfer of certain nuclear materials also affect proliferation. To test whether my results may be driven by a few sensitive deals, I excluded them from the coding of my independent variable. This type of sensitive agreement is extremely rare, so this change resulted in the removal of a small number of agreements. I then estimated all models displayed in table 4 with this alternate coding of the independent variable. The findings relevant to my argument are generally unaltered when sensitive agreements are excluded from my coding of atomic assistance.127

Conclusion

Aided by a new data set, this article systematically explored the relationship between civilian nuclear cooperation and nuclear proliferation. It argued that civilian assistance and weapons proliferation are linked because the former leads to the supply of technology and materials that have applications for nu- clear energy and nuclear weapons, and because civilian assistance establishes an indigenous base of knowledge in nuclear matters that could be useful for a weapons program. These linkages reduce the expected costs of a nuclear weapons program, **making states more likely to begin such a campaign when they have accumulated peaceful assistance—especially when a crisis** or security threat **arises**. Sim

ilarly, countries receiving civilian aid are more likely to acquire nuclear bombs because important technological hurdles are lowered.

The analysis conducted in this article lends support for these arguments, even when controlling for the other variables believed to influence proliferation. Other factors are also strong predictors of proliferation, but peaceful nuclear cooperation is one of the more salient variables in explaining why atomic weapons spread. Thus, this article suggests that students of proliferation should take greater stock of civilian nuclear assistance. This is particularly true given that the links between the peaceful and military uses of the atom appear broader than previously believed. Even seemingly “innocuous” nuclear cooperation such as providing training to nuclear scientists or supplying power/ research reactors **can produce** deleterious effects. **There is** no such thing as “proliferation-proof” atomic assistance.

#### \*note: this card started with the highlighting, followed by the underlining

#### The alliance has never been more vulnerable – fissures in South Korean politics mean its in trouble

**Byong-chul, 10/3**/12 - formerly on the national-security planning staff for presidents Kim Young-sam and Kim Dae-jung, is a senior fellow at the Institute for Peace and Cooperation, Seoul. (Lee, A nuclear South Korea? , Today’s Zaman,

<http://www.todayszaman.com/news-294151-a-nuclear-south-korea-by-lee-byong-chul.html>

Former Deputy Foreign Minister

Chun Yung-woo warned an American official in 2010 that revising the Nuclear Cooperation Agreement could soon become a “defining issue” in South Korea-US relations, and that it was already attracting “significant amounts of negative press attention.” Given South Korea's status as one of the world's top five nuclear-power producers, Chun argued, the South Korean public would not tolerate the perception that Japan was receiving preferential treatment.

Indeed, right-wing leaders like Representative Chung Mong-joon of the governing Saenuri Party have been vocal in expressing their doubts about South Korea's current denuclearization policy, suggesting that a nuclear weapons program could prevent a second war on the peninsula.

The conservatives seem to believe that American nuclear protection for South Korea is a thing of the past.

#### Yes escalation

**Carroll 10**—Lt. Col, Airforce (Jay, North Korea, South Korea: The Military Balance on the Peninsula, 26 May 2010, STRATFOR)

So the real issue is the potential for escalation — or an accident that could precipitate escalation — that would be beyond the control of Pyongyang or Seoul. With both sides on high alert, both adhering to their own national (and contradictory) definitions of where disputed boundaries lie and with rules of engagement loosened, the potential for sudden and rapid escalation is quite real. Indeed, North Korea’s navy, though sizable on paper, is largely a hollow shell of old, laid-up vessels. What remains are small fast attack craft and submarines — mostly Sang-O “Shark” class boats and midget submersibles. These vessels are best employed in the cluttered littoral environment to bring asymmetric tactics to bear — not unlike those Iran has prepared for use in the Strait of Hormuz. These kinds of vessels and tactics — including, especially, the deployment of naval mines — are poorly controlled when dispersed in a crisis and are often impossible to recall. For nearly 40 years, tensions on the Korean Peninsula were managed within the context of the wider Cold War. During that time it was feared that a second Korean War could all too easily escalate into and a thermonuclear World War III, so both Pyongyang and Seoul were being heavily managed from their respective corners. In fact, USFK was long designed to ensure that South Korea could not independently provoke that war and drag the Americans into it, which for much of the Cold War period was of far greater concern to Washington than North Korea attacking southward. Today, those constraints no longer exist. There are certainly still constraints — neither the United States nor China wants war on the peninsula. But current tensions are quickly escalating to a level unprecedented in the post-Cold War period, and the constraints that do exist have never been tested in the way they might be if the situation escalates much further.

### resource wars

#### No risk of resource wars

**Pinker 11**—Harvard College Professor, Johnstone Family Professor in the Department of Psychology at Harvard University (Steven, © 2011, The Better Angels of our Nature: Why Violence has Declined, RBatra)

Once again it seems to me that the appropriate response is “maybe, but maybe not.” Though climate change can cause plenty of misery and deserves to be mitigated for that reason alone, **it will not necessarily lead to armed conflict**. The political scientists who track war and peace, such as Halvard Buhaug, Idean Salehyan, Ole Theisen, and Nils Gleditsch, are skeptical of the popular idea that people fight wars over scarce resources.290 Hunger and resource shortages are tragically common in sub-Saharan countries such as Malawi, Zambia, and Tanzania, but wars involving them are not. Hurricanes, floods, droughts, and tsunamis (such as the disastrous one in the Indian Ocean in 2004) do not generally lead to armed conflict. The American dust bowl in the 1930s, to take another example, caused plenty of deprivation but no civil war. And while temperatures have been rising steadily in Africa during the past fifteen years, civil wars and war deaths have been falling. Pressures on access to land and water can certainly cause **local skirmishes, but a genuine war requires that hostile forces be organized and armed**, and that depends more on the influence of bad governments, closed economies, and militant ideologies than on the sheer availability of land and water. Certainly any connection to terrorism is in the imagination of the terror warriors: terrorists tend to be underemployed lower-middle-class men, not subsistence farmers.291 As for genocide, the Sudanese government finds it convenient to blame violence in Darfur on desertification, distracting the world from its own role in tolerating or encouraging the ethnic cleansing.

In a regression analysis on armed conflicts from 1980 to 1992, Theisen found that conflict was more likely if a country was poor, populous, politically unstable, and abundant in oil, but not if it had suffered from droughts, water shortages, or mild land degradation. (Severe land degradation did have a small effect.) Reviewing analyses that examined a large number (N) of countries **rather than cherry-picking one or two**, he concluded, “**Those who foresee doom, because of the relationship between resource scarcity and violent internal conflict, have very little support in the large-N literature**.” Salehyan adds that relatively inexpensive advances in water use and agricultural practices in the developing world can yield massive increases in productivity with a constant or even shrinking amount of land, and that better governance can mitigate the human costs of environmental damage, as it does in developed democracies. Since the state of the environment is at most one ingredient in a mixture that depends far more on political and social organization, resource wars are far from inevitable, even in a climate-changed world.

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## 1nr

### at: ssp = weapon

**The DOD won’t weaponize SSP – better options already exist**

**NSSO, 8** (National Space Security Office, Space-Based Solar Power Study Group, Ad Astra, “Strategic Importance” Spring 2008, pg. 28, http://www.nss.org/adastra/AdAstra-SBSP-2008.pdf)

1. The DoD is not looking to SBSP for new armaments capabilities. Its motivation for study-ing SBSP is to identify sources of energy at a reasonable cost any-where in the world, to shorten the logistics lines and huge amount of infrastructure needed to support military combat operations, and to prevent conflicts over energy as current sources become increasingly costly.

2. SBSP does not offer any capability as a weapon that does not already exist in much less-expensive options. For example, the nation already has working ICBMs with nuclear warheads should it choose to use them to destroy large enemy targets.

3. SBSP is not suitable for attacking ground targets. The peak intensity of the microwave beam that reaches the ground is less than a quarter of noon-sunlight; a worker could safely walk in the center of the beam. The physics of microwave trans-mission and deliberate safe-design of the transmitting antenna act to prevent beam focusing above a pre-determined maximum inten-sity level. Additionally, by coupling the transmitting beam to a unique ground-based pilot signal, the beam can be designed to instantly diffuse should pilot signal lock ever be lost or disrupted.

4. SBSP would not be a preci-sion weapon. Today’s militar-ies are looking for more precise and lower collateral-damage weapons. At several kilometers across, the beam from geostationary Earth orbit is just too wide to shoot indi- vidual targets—even if the intensity were sufficient to cause harm.

5. SBSP is an anti-war capability. America can use the existing technical expertise in its military to catalyze an energy transformation that lessens the likelihood of conflict between great powers over energy scarcity, lessens the need to inter-vene in failed states which cannot afford required energy, helps the world climb from poverty to prevent the spawn of terrorism, and averts the potential costs and disaster responses from climate change.

**SSP solves the impact to militarization – all countries will be invested in the clean energy**

**Valentine, 07 -** executive vice president of the Space Studies Institute (Lee, “Space Solar Power”, 10/9, <http://update.ssi.org/?p=17>)

Satellite solar power is inherently geopolitically stabilizing. When economical power satellites are built, all countries will want them. All countries will therefore desire peace on the High Frontier. Power satellites are not vulnerable to terrorists, but they would be vulnerable to attacks by any of the major space faring powers.

### at: add on

**Their impact card is wrong**

**Quinlan 2005** – Consulting Senior Fellow in the IISS South Asia Programme, former Permanent Under-Secretary of State for Defence 1988–92 and Director of the Ditchley Foundation (Michael, Survival, Volume 47 Issue 3, "India-Pakistan deterrence revisited", Informaworld, WEA)

It is impossible to reduce to a single ‘sound-bite’ any overall judgement upon the situation and performance of India and Pakistan as nuclear-weapon possessors today and in near prospect. The past ﬁve years have seen disquieting events, but these have been substantially surmounted, and the more severe fears expressed in and soon after 1998 have been, if not everywhere dispelled, at least mostly lightened. **The security relationship between the two countries is less heated and more stable than it seemed in 2000;** the development of armouries and doctrines, so far as outsiders can discern them, has not taken unsettling forms; and responsibilities within the global system are plainly recognised. Risks of several kinds nevertheless remain, and the improvements made are not securely irreversible. As both countries undoubtedly recognise, there is still both scope and need for diverse further action – some of it, moreover, capable in principle of being done collaboratively – to enhance stability and reduce danger.

**No interest in fighting on either side—empirically proven**

**Ali 2005** – Balsillie Fellow at the Centre for International Governance Innovation (11/13, Asim, with The Record, Centre for International Governance Innovation, "India goes soft on Pakistan to please the U.S.", http://www.cigionline.org/articles/2005/11/india-goes-soft-pakistan-please-us, WEA)

After a series of co-ordinated bomb blasts in New Delhi that killed 62 people and injured hundreds, India has restrained from blaming its arch-rival Pakistan.

The attacks came at a particularly sensitive moment as India and Pakistan hashed out an unprecedented agreement to partially open the heavily militarized frontier that divides the disputed territory of Kashmir to speed relief to victims of the region's Oct. 8 earthquake.

Western diplomats say this would have been unthinkable three years ago, when India and Pakistan nearly went to war following a terrorist attack on the main parliament building in New Delhi.

The diplomats said this reflected progress in the peace process.

**No Pakistani collapse**

Stratfor 1-11-2012; prominent intelligence agency, A Key Shift in Pakistan’s Civil-Military Dynamics http://www.stratfor.com/geopolitical-diary/key-shift-pakistan%E2%80%99s-civil-military-dynamics?utm\_source=freelist-f&utm\_medium=email&utm\_campaign=20120112&utm\_term=sweekly&utm\_content=copy4&elq=eb25ebb70df64bfc89c50fd0bdea0375

The constitutional option is also not presently viable. In the past, the military would align with the presidency and opposition parties in parliament to counter the government. But Pakistani President Asif Ali Zardari leads the ruling Pakistan People’s Party. And while opposition parties in parliament would like to reap the benefits of a weakened ruling party, they are unwilling to see the army gain the upper hand. That leaves the Supreme Court, which has taken a clear stance against the civilian administration and is pressing the president and others in the government on corruption charges. However, even a Supreme Court ruling against it would not necessarily bring about the government’s ouster. For that to happen, parliament needs to vote down both the prime minister and the president -- and the arithmetic of such a theoretical vote right now favors the ruling party. So even as it retains a great deal of power, the military cannot oust governments as easily as it has done in the past. Even if the government is forced to call early elections and is unable to complete the term set to expire in about a year, a shift in the civil-military power dynamic is undeniably in the making in Pakistan. Given the historical trend, the military will not become subordinate to civilians anytime soon -- while the country’s political parties have yet to demonstrate they are a coherent lot capable of effective governance. That said, the military’s ability to dominate the polity is no longer what it once was.

### 2nc overview

#### Turns warming – regulations

Walter and Nan Simpson, 4-22-2012; Walter, University Energy Officer for 26 years and was director of the UB Green Office at the University at Buffalo (SUNY Buffalo); Buffalo News

http://www.buffalonews.com/editorial-page/viewpoints/article822432.ece

Let’s not reverse progress While Obama has not yet delivered on some environmental priorities, his environmental record is solid in many areas. He appears to be committed to addressing environmental problems in a meaningful way within the constraints of what he views as politically possible. Obama’s re-election offers the promise of continuing his pro-environment programs and the hope he will do more in his second term. Cleaner air, water and energy mean tens of thousands of green jobs with improved public health outcomes that reduce health care costs. The president understands this win-win. Additionally, Obama is likely to do more on climate change in a second term if re-elected with a Democratic Congress and an increasingly informed public demanding action on this life-and-death issue. None of this will happen if Romney is elected our next president. Worse, given the GOP’s radical turn, a Republican victory would take us in reverse — undermining and eliminating laws and regulations that now protect our environment and public health. The critically important environmental vote goes to Obama.

#### And, it turns their resource wars argument – gulf instability

**Curiel 2010** (Jonathan Curiel, respected journalist, taught as Fulbright Scholar at Punjab University in Lahore, Pakistan, researched at Oxford as a Reuters Foundation Fellow, “What just might happen if Obama loses in 2012,” Jonathan Curiel’s blog, google)

War in Iran: The Republicans’ ascension marks the return of chickenhawk diplomacy. Instead of the Obama administration’s reasoned approach to Iran, the new administration relies on all-or-nothing antagonism, leading to the third Gulf War in two decades. What ensues are thousands of new military deaths, a dangerously destabilized Middle East, and an oil crisis that shocks Western economies for years. As in Afghanistan and Iraq, the U.S. tries to shepherd in a friendlier government, but now all three countries – connected geographically, religiously and historically – become the world’s leading front for insurgency against the United States.

#### And, Romney win increase the debt and deficit – turns their competitiveness argument

Glaeser 12 –– Associated Press Staff Writer for Bloomberg (Edward, July 25, “Pick a President to Save the U.S. From Greece’s Fate,” http://www.bloomberg.com/news/2012-07-25/pick-a-president-to-save-the-u-s-from-greece-s-fate.html)

Since cutting taxes is a lot more fun than cutting spending, I fear that a return to Republican rule will mean bigger deficits, not smaller government. From 1980 to 1992, the ratio of the federal debt (held by the public) to GDP increased from 21.7 percent to 43.3 percent, and the debt-to-GDP ratio also rose under President George W. Bush. Voters who want smaller government, as opposed to just passing the price of public spending on to their children, should push Romney to be far more specific about spending cuts. Moreover, legitimate advantages can come from big government. The U.S. is a very unequal society, and that seems unlikely to change with less government. Although the new health-care law still splits the nation, Medicare is profoundly popular. Eighty-five percent of Americans want more regulation of Wall Street, which is understandable since they have seen financial risk taking lead to substantial public bailouts.

### 2nc uniqueness

#### Reject evidence by dick Morris – his analysis is fraudulent

**Media Matters for America, 9-8-10,** p. http://mediamatters.org/blog/2010/09/08/dick-morriss-fraudulent-political-analysis/170388

The economy's role in the Democrats' current political predicament is so obvious, it's nearly impossible that anyone -- even someone with Dick Morris's spectacular history of being wrong -- could be unaware of it. So when someone like Morris suggests that Democrats are in trouble not because the economy is lousy, but because of health care reform, the obvious conclusion is that he wants to mislead people. He's ideologically opposed to the steps that economists think need to be taken to fix the economy, and politically opposed to the Democrats doing things that would help their political fortunes. And he's ideologically opposed to things like health care reform, so he wants Democrats (and the media and the public) to believe that health care reform, rather than a poor economy, is to blame for the Democrats' political peril.

Morris's political analysis is fraudulent: It isn't intended to explain what is happening; it's intended to manipulate perceptions of what is happening. Either that or Morris is honestly unaware that 9.6 percent unemployment plays a role in the political misfortunes of the incumbent party, in which case he's so spectacularly unqualified to offer political analysis that The Hill would be better off setting a chimpanzee in front of a word processor and publishing whatever it has typed after 90 minutes.

### 1nr a2 link uniqueness

#### Voters have just started paying attention now

**Fahrenthold 9/7**/12 (David, "Obama, Romney embark on post-convention drive to Election Day" Washington Post, www.washingtonpost.com/politics/obama-romney-embark-on-post-convention-drive-to-election-day/2012/09/07/df887d98-f8f0-11e1-8b93-c4f4ab1c8d13\_story.html)

Even now, after all that Romney and Obama have already said and done, it’s likely that many of their campaigns’ defining moments are still in the future. At this point in 2008, for instance, Lehman Brothers was still in business. Joe the Plumber was still just Joe, a plumber. And Obama was behind.

This year, Romney is hoping that the next plot twists will favor him.

“I know there’s a lot of bad news out there, but I’m looking beyond the bad news,” Romney said in Orange City, Iowa, trying to project optimism about both the U.S. economy and his own campaign. “I’m looking over the hill and seeing what’s going to happen just down the road just a bit. And what’s going to happen is America’s about to come roaring back.”

This is the last lap of a race that has always been close. Obama officially began his campaign last April. Romney began his last June. Now, after 15 months, the two remain virtually tied in national polls.

Obama does have a slight lead in two of eight key swing states: Florida and New Hampshire. Obama’s staff believes it has a “small but important” lead in others. But the polls show the remaining six — Virginia, Ohio, Iowa, Colorado, Nevada and Wisconsin — are still anybody’s guess.

In the past two weeks, both parties had hoped that their elaborate conventions might finally move this election’s stuck needle. Romney tried and failed: Polls showed no significant “bounce.” Obama’s convention ended Thursday, so it’s too soon to tell whether he did better.

At this point, few voters seem to be genuinely undecided. Polls show that less than one in 10 is genuinely open to changing his or her vote. But now, two vast machines — campaigns and allied organizations with at least $1 billion to spend — will set out to change the minds they can and motivate the ones already on their side.

On Friday, Romney’s campaign rolled out a $4.5 million ad buy, 15 new TV spots in eight states. “Here in [insert state name], we’re not better off under President Obama,” the ads said.

“This is when ordinary people, as opposed to you and I . . . really begin to pay attention,” said Candice Nelson, a professor at American University. “Most people have real lives.”

#### Obama is cutting nuclear incentives

**Bendery, 12** – Huffington Post (Jennifer, "Obama's Budget Nixes New Money For Program That Funded Solyndra," Huffington Post, 2/14, www.huffingtonpost.com/2012/02/14/obama-budget-solyndra-program\_n\_1276605.html)

WASHINGTON -- In a quiet shift from the past two years, President Barack Obama's 2013 budget includes no new money for the Department of Energy loan guarantee program, the same program that House Republicans have scrutinized for losing more than $500 million in taxpayer dollars to the now-defunct solar power company, Solyndra.

Obama has regularly included huge increases to the program's loan guarantee authority in his budget, though Congress has not approved his proposals. He provided a $36 billion increase for nuclear reactors in his 2011 budget, and again in his 2012 budget. He also included $200 million in credit subsidies for renewable and energy efficiency projects in his 2012 budget. This year, he provided nothing.

Meg Reilly, a spokeswoman for the Office of Management and Budget, said in an email that Obama opted not to put new money toward the loan guarantee program this time because the administration is waiting on the results of an evaluation of the Energy Department's loan portfolio. Reilly also said the program still has "a significant amount of remaining resources" from prior years and that the focus will be on putting those funds to use. There's about $10 billion in its reserves.

The Energy Department "continues to conduct due diligence and is in active negotiations with a number of additional project sponsors," Reilly said. "It's important to point out here that, as of January 2012, over $24 billion in direct loans and loan guarantees have closed to support a diverse range of over 30 wind, solar, electric vehicles and other clean energy projects projected to fund more than 50,000 jobs."

But some environmental groups say Obama's budgetary shift is hugely significant because it means no new money for building nuclear power plants -- and they speculate that, at least in part, they have Solyndra to thank for the shift.

"The entire loan program has fallen into some disrepute on Capitol Hill ... because of Solyndra and some of the other renewable programs getting in trouble," said Michael Mariotte, executive director of Nuclear Information and Resource Service, an information hub for organizations concerned with nuclear power. The administration "may have decided to cut their losses" and stop providing new funds to the program altogether.

#### Nuclear power not mentioned now or perceived

JOHNSON ’12 (John; Nuclear Energy Insider, “US Campaign Trail: is nuclear in the equation?” 4/25, <http://analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation>)

Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions.¶ Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry.¶ Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S.

#### Obama distancing himself from nuclear issues in the run-up to the election

LEVINE 9/7/12 (Gregg; Contributing Editor and Former Managing Editor – Firedoglake and Contributing Writer for Truthout, “Obama Drops Nuclear from Energy Segment of Convention Speech,” <http://capitoilette.com/2012/09/07/obama-drops-nuclear-from-energy-segment-of-convention-speech/>)

President Obama no longer promises to “safely harness nuclear power”–that likely would have sounded like a cruel joke in a world now contaminated by the ongoing Fukushima disaster–but beyond that, he does not promise anything about nuclear power at all. There was no platitude, no carefully crafted signal to the industry that has subsidized much of Obama’s political career, no mention of nuclear power whatsoever.

That is not to say that the entire 2012 Democratic National Convention was a nuclear-free zone. A few hours before the president took the stage at the Time Warner Cable Arena, James Rogers, co-chair of the Charlotte host committee, and oh, by the way, CEO of Duke Energy, stepped to the lectern and endorsed Obama’s “all of the above” energy “strategy” (they keep using that word; I do not think it means what they think it means):

We need to work even harder toward a future of affordable, reliable and cleaner energy. That means we need to invest heavily in new zero-emission power sources, like new nuclear, wind and solar projects, as well as new technologies, like electric vehicles.

Well, if you are looking for a future of affordable, reliable and cleaner energy, you need look no further than nu–wait, what? If you are looking for those three features in an energy future, it is hard to imagine a worse option than the unsustainably expensive, chronically unreliable and dangerously dirty nuclear power plant. And, as has been discussed here many times, nuclear is not a zero-emission source, either. The massive carbon footprint of the nuclear fuel lifecycle rivals coal, and that doesn’t even consider the radioactive isotopes that facilities emit, even when they are not encountering one of their many “unusual events.”

But the CEO of the Charlotte-based energy giant probably has his eyes on a different prize. Rogers, who has been dogged by questions about a power grab after Duke’s merger with Progress Energy and his lackluster performance as fundraiser-in-chief for the DNC, sits atop a company that operates seven US nuclear power plants, and is partners in a plan to build two new AP1000 reactors in Cherokee County, South Carolina.

That last project, which is under active review by the Nuclear Regulatory Commission, awaiting a combined construction and operating license, is one of a small handful of proposed new nuclear facilities currently scrambling for financing. The South Carolina plant, along with a pair of reactors in Georgia, two slated for a different site in South Carolina, and possibly one more in Tennessee, represent what industry lobbyists like to call the “nuclear renaissance.”

But completion of any of the above is nowhere close to guaranteed, and even if some of these reactors are eventually built, none will be able to generate even one kilowatt of commercial power until years after President Obama completes his sought-after second term.

Which, if you really care about America’s energy future, is, of course, all for the better. As even James Rogers noted in his speech (and he gets props for this):

[W]e cannot lose sight of energy efficiency. Because the cleanest, most efficient power plant is the one we never have to build.

That Duke’s CEO thought to highlight efficiency is interesting. That President Obama, with his well-documented ties to the nuclear industry, chose not to even mention nuclear power is important.

### 1nr a2 public likes – 1nc link

#### The public supports existing reactors, not new ones – reject lobby spin

**Mariotte, 12** - Executive Director of Nuclear Information and Resource Service (Michael, “Nuclear Power and Public Opinion: What the polls say” Daily Kos, 6/5, http://www.dailykos.com/story/2012/06/05/1097574/-Nuclear-Power-and-Public-Opinion-What-the-polls-say)

Conclusion 3: On new reactors, how one asks the question matters. Gallup and the Nuclear Energy Institute ask the same question: “Overall, do you strongly favor, somewhat favor, somewhat oppose or strongly oppose the use of nuclear energy as one of the ways to provide electricity in the U.S.?” This question doesn’t really get to the issue of support for new nuclear reactors, although NEI typically tries to spin it that way. Although a question of support for current reactors wasn’t asked in any recent poll we saw, the public traditionally has been more supportive of existing reactors than new ones, and the question above could easily be interpreted as support for existing reactors, or even simple recognition that they exist. The results may also be skewed by the pollsters throwing nuclear in as “one of the ways,” without a context of how large a way. Nonetheless, despite asking the same question, Gallup and NEI can’t agree on the answer. NEI, for example, in November 2011 asserted that 28% of the public strongly favors nuclear power with an additional 35% somewhat in favor. NEI found only 13% strongly opposed and another 21% somewhat opposed. A May 2012 NEI poll did not publicly break down the numbers into strongly vs somewhat, but claimed a similar 64-33% split between support for nuclear power and opposition. Gallup, asking the same question in March 2012, found a narrower split. A smaller number was strongly in favor (23%, a drop of 5%) and a larger number strongly opposed (24%, increase of 3%)—overall an 8-point anti-nuclear swing among those with strong opinions. Those in the middle were 34% somewhat favor vs 16% somewhat opposed. The 2012 numbers were slightly worse for nuclear power than the identical question asked in March 2011, just before Fukushima. But other polls suggest that Gallup and NEI may be asking the wrong question. For example, the LA Times reported on a Yale-George Mason University poll in April 2012 that found that support for new nuclear power had dropped significantly, from 61% in 2008 to 42% today. Even Rasmussen in its May 2012 poll found that only 44% support building new reactors. That was good news for Rasmussen since it found that only 38% oppose them, with a surprising 18% undecided (surprising because no other poll we saw had such a high undecided contingent for any nuclear-related question). Meanwhile the March 2012 ORC International poll found that: “Nearly six in 10 Americans (57 percent) are less supportive of expanding nuclear power in the United States than they were before the Japanese reactor crisis, a nearly identical finding to the 58 percent who responded the same way when asked the same question one year ago. Those who say they are more supportive of nuclear power a year after Fukushima account for well under a third (28 percent) of all Americans, little changed from the 24 percent who shared that view in 2011.” But perhaps the most telling, and easily the most interesting, poll comes from a March 2012 poll from the Yale Project on Climate Change Communications. Participants were asked, “When you think of nuclear power, what is the first word or phrase that comes to your mind?” 29% of those polled said “disaster.” Another 24% said “bad.” Only about 15% said “good” and that was the only measurable group that had anything positive to say. That poll also found that, “…only 47 percent of Americans in May 2011 supported building more nuclear power plants, down 6 points from the prior year (June 2010), while only 33 percent supported building a nuclear power plant in their own local area.” Conclusions Americans are not exactly wild about the idea of building new nuclear reactors. Polls asking the question different ways arrive at different results; at the lowest common denominator it is safe to say the country is divided on the issue. But Americans clearly don’t want to pay for construction of new reactors. And the reality is that no utility wants to or even can spend its own money building new reactors—they’re just too expensive. Congress, State legislatures and Public Service Commissions would do well to heed that warning, especially since it crosses all party and political lines.

#### Massive opposition to nuclear plant expansion

Chandler, 10 [David, Bruce Mahan Professor of Chemistry at the University of California, Berkeley, “Implications of a Nuclear Renaissance”, Extensively citing a wide range of Harvard professors, http://environment.harvard.edu/news/general/implications-nuclear-renaissance]

For the present, at least, nuclear power remains the most politicized of all potential power sources, and the one with the highest negative public perceptions. In a recent survey, Ansolabehere found that 55 percent of Americans were strongly opposed to having a nuclear plant built within 25 miles of their homes, compared to 45 percent for a coal plant, 26 percent for a natural gas plant, and just 11 percent for a wind power facility.

### at: jobs

#### Plans aren’t shovel ready

#### No link turns – nuclear has no political clout – there’s not enough of a constituency

Tucker, 8-16-12

[William, veteran journalist, has written for many high-profile publications, “Nuclear’s Problem — Too Much Energy, Not Enough Jobs,” http://www.nucleartownhall.com/blog/william-tucker-nuclear%E2%80%99s-problem-%E2%80%94-too-much-energy-not-enough-jobs/]

So there you have it. America’s energy future is a contest between coal and wind. Which can create more jobs? If you think there’s a better option, you don’t have a place at the table. And that’s where nuclear stands today. Sure, there may be questions about potential accidents and the effects of radiation, but the real problem is this: Nuclear is so energy intensive that it doesn’t produce enough jobs to create a political constituency. Why does coal still have such enormous political clout? The answer is simple. It requires so much mining and transportation of raw material that hundreds of thousands of workers – whole states, in fact – become involved in the task. There are now 1300 coal mines in 27 states employing 88,000 workers. More than half a dozen of these states identify themselves as “coal states” – West Virginia, Kentucky, Pennsylvania, Ohio, Indiana, Illinois, Colorado and Wyoming just fir a start. The state with the biggest coal reserves – Montana – hasn’t really started developing them yet. Next to farming, coal mining is most widely entrenched resource-based industry in the country. There is good reason for all this job creation. A1000-MW coal plant must be resupplied by a 110-car unit train arriving every 30 hours. Almost half the railroad freight in the U.S. is coal. Economists say there’s a real question of whether the railroads actually own the coal companies or the coal companies own the railroads. In any case, all this produces huge work forces with powerful labor union backing. Wind energy works the same way. Because each giant 45-story windmills produces only about 2 MW, thousands upon thousands will be required to produce electricity in commercial quantities. This creates a huge work force. The American Wind Energy Association claims 90,000 employees in the wind industry with more than 4,000 in California, Texas, Iowa, Illinois, Indiana, Ohio, Michigan, Pennsylvania and North Dakota. Building out the transmission lines to carry this electricity to population centers will eventually employ thousands more. Wind is nothing if not labor intensive. So how does nuclear do by comparison? According to the Uranium Producers of America, there are 13 uranium mines in the U.S. employing 1635 people. Their annual output was 16, 000 tons of uranium oxide – the equivalent of two coal trains leaving the Powder River Basin (where one now departs every eight minutes). Our domestic production of uranium has actually been suppressed over the last two decades because we have been using former Soviet weapons material for half our fuel in the Megatons to Megawatts program, although the pace may pick up when the treaty expires next year. Worldwide there are only 46 uranium mines – as opposed to 450 coal mines in Kentucky alone. Recently the Russians have proposed supplying the entire world out of one uranium mine in Siberia. Nuclear’s great energy density has one glaring weakness – there is no possibility of building a huge mining and transport constituencies that can support the technology. Uranium does require reprocessing and there are major facilities in Kentucky and Ohio. But even those hardly constitute more than a ripple in the two states’ economies. Traditionally, the only places where nuclear has gained a political foothold is those states that have national laboratories. New Mexico’s Democratic Senator Pete Domenici was long a leading supporter because of the Los Alamos and Sandia National Laboratories. Senator Lamar Alexander of Tennessee, which hosts Oak Ridge and the Tennessee Valley Authority, has now picked up the mantle. But Tennessee is much more involved in the auto industry and there is no “nuclear state” to match the half-dozen coal states. Well then, what about the 104 reactors that operate around the country? Don’t they generate some political support? The average reactor employs about 650 people and is extremely popular in its home territory. Bisconti Research has found that support for nuclear increases to around 85 percent in communities that host reactors. But this support tends to be highly localized and reactors create little ancillary employment. Replacing the fuel rods, for instance, requires only six tractor trailers arriving once every 18 months. Illinois gets almost half its electricity from nuclear and even Barack Obama was known to say a few nice things about it while he was Senator from Illinois. But most states with large nuclear complexes are equally committed to coal. Even in a state that is highly dependent on nuclear, the work force is so small as to be inconsequential. Vermont gets 60 percent of its electricity form Vermont Yankee, yet its efforts to close down the reactor have generated very little pushback. Vernon, the tiny town of 2,000 that supplies all this energy, is 100 percent in favor of keeping the reactor. But its interests are completed swamped by 623,000 other Vermonters who only get clean, cheap energy from nuclear and think they can do the same by covering the green mountains with 45-story windmills. The only place where nuclear has built a true constituency is in the South. This is partly because of the many military veterans in the region, since a large portion of the nuclear workforce has come up through the Nuclear Navy. South Carolina is probably the most pro-nuclear state in the country with Georgia and Tennessee also strongly in favor. It is no accident that the four new reactors licensed for construction will be built in Georgia and South Carolina. Areva is also completing its plutonium recycling plant at the Savannah River Site. But all these states are pretty much locked up for Republicans and have very little impact at the national level. So nuclear’s weakness is plain to see. It does very poorly at creating the kind of widespread employment that builds political constituencies. It is only good at producing energy.

### 2nc a2 econ key

#### Energy will be pivotal even if it’s not the top issue for voters because it will be close

**Levine, 12** - Steve LeVine is the author of The Oil and the Glory and a longtime foreign correspondent (“How dirty is Romney prepared to get to win election?” 6/13,

http://oilandglory.foreignpolicy.com/posts/2012/06/12/how\_dirty\_is\_romney\_prepared\_to\_get\_to\_win\_election)

Yet if the election is as close as the polls suggest, the energy ads could prove a pivotal factor. "Advertising is generally not decisive. Advertising matters at the margins. ... But ask Al Gore if the margin matters," said Ken Goldstein, president of the Campaign Media Analysis Group at Kantar Media. "This is looking like an election where the margin may matter."

#### Energy key to the election

Kingston 12 – Director of News at Platts (John, “US election 2012: if not "all energy, all the time," a lot of energy for sure” The Barrel, http://china.platts.com/weblog/oilblog/2012/04/11/election\_2012\_i.html)

Get ready for the energy election of 2012. Maybe because it was at a New York Times forum devoted to energy, so the inclination was to talk with that sort of grand vision. But three reporters for the Times who are out on the campaign trail made it clear to a packed room that energy will be a key area in which Mitt Romney goes after Barack Obama in 2012. As Helene Cooper, the Times' White House correspondent, noted, the Obama adminstration has a lot of confidence going into the campaign. But if national retail gasoline prices were to head toward the $5/gal mark, "all bets would be off." And lurking in the background to that is the possibility of some sort of spike in price driven by an Iranian incident. With the Romney vs. Obama race all but assured, the campaigns are now focusing more on each other, rather than on the GOP nominating process. As as the Times' domestic correspondent Jim Rutenberg said, "so far, energy is what the campaign is all about." The panelists showed two ads, one from the Obama campaign and one from American Crossroads, the Karl Rove-led group. We weren't able to find them online, but found similar ones that pretty much say the same thing as those shown at the Times forum. You can see them here and here. The "gist" of the American Crossroads ad, according to Rutenberg, is that "the Obama administration is shirking blame for everything," and is doing so on energy policy as well. "Drilling is down on federal lands, and federal lands' output is down." But Cooper quickly noted that the Obama administration's retort is that "it's down because we took a time out (the moratorium after Macondo)." Although that move still gets criticized in some quarters, the administration is "screaming about this," since it believes the drop in federal lands' output is justified by the actions it took in the wake of the Macondo spill. (This report does show that federal onshore production has risen, though the total is down. See page 5). When the President talks about energy, the Romney campaign "just loves it," according to Ashley Parker, the Times' reporter covering the former Massachussetts governor. "They like it because it gives (them) an opening."

### 2nc yes vote swtiching

#### Approval ratings are key to the election

**Cook, The National Journal Political Analyst, 11**

(Charlie, October 27, “Underwater,” http://www.nationaljournal.com/columns/cook-report/the-cook-report-obama-underwater-20111027, d/a 7-20-12, ads)

The best barometer of how a president is going to fare is his approval rating, which starts taking on predictive value about a year out. As each month goes by, the rating becomes a better indicator of the eventual results. Presidents with approval numbers above 48 to 50 percent in the Gallup Poll win reelection. Those with approval ratings below that level usually lose. If voters don’t approve of the job you are doing after four years in office, they usually don’t vote for you. Of course, a candidate can win the popular vote and still lose the Electoral College. It happened to Samuel Tilden in 1876, Grover Cleveland in 1888, and Al Gore in 2000. But the popular votes and the Electoral College numbers usually come down on the same side.

#### Turnout link

**Hunt, 8/19**/12 – executive editor of Bloomberg News (Albert, Bloomberg News, “Ryan on Ticket Focuses Both Campaigns on Turnout,”

http://www.bloomberg.com/news/2012-08-19/ryan-on-ticket-focuses-both-campaigns-on-turnout.html)

That enthusiasm is critical in an election that will be awash in cash from the well-heeled campaigns and the outside groups unleashed by court and political decisions. Voters in Columbus, Ohio, or Orlando, Florida, will be carpet-bombed with television commercials. The volume of ads will be overwhelming - - it’ll be like underlining every paragraph in a book -- and many are likely to tune out. Another aspect of this U.S. presidential election is a closely divided electorate with a smaller-than-usual bloc of uncommitted or persuadable voters, maybe in the high single digits.

That suggests both sides will place a premium on turnout. That’s what has been known as the ground game, old-fashioned shoe leather to identify and enlist supporters, except this time it’s lubricated by cutting-edge technology: social media, databases, micro-targeting and micro-listening.

Michael Whouley, the storied Democratic ground-game guru, and Curt Anderson, who helped mastermind President George W. Bush’s successful voter mobilization in 2004, say getting voters to the polls will be even more critical this time**.**

### A2 Same Foreign Policy

#### Their foreign policy philosophies are fundamentally different on the issues that matter for our impacts

Michael O’Hanlon 8-13-2012; Director of Research and Senior Fellow Foreign Policy at Brookings; Obama vs. Romney on Foreign Policy http://www.brookings.edu/research/opinions/2012/08/13-obama-romney-ohanlon

As a whole, Romney proposes a more traditionally realist foreign policy of emphasizing strong relations with allies, toughening policies toward others and building up the armed forces. Obama still seeks a muscular dimension to America’s role in the world — demonstrated most clearly by his commando raids and drone strikes against Al Qaeda. But the president seeks a more moderate tone and flavor in economic domains as well as policies toward Russia, China and the Muslim world. These differences are big enough set to merit a great deal of attention and debate. Obama and Romney are far from foreign policy carbon copies of each other.

#### Romney would intervene in Syria

Michael O’Hanlon 8-13-2012; Director of Research and Senior Fellow Foreign Policy at Brookings; Obama vs. Romney on Foreign Policy http://www.brookings.edu/research/opinions/2012/08/13-obama-romney-ohanlon

SYRIA: Romney has called for arming the opposition. Obama favors a more restrained U.S. approach. There are powerful arguments on both sides. Obama risks having Washington stand aside while thousands are slaughtered and extremists gain traction in Syria. Romney risks a limited intervention that, should it fail, would increase pressures to escalate. There are no good choices — but the two candidates have differed considerably on which policy is the least bad.

#### Draws in the entire region

Stewart M. Patrick, Senior Fellow and Director, Council on Foreign Relations Program on International Institutions and Global Governance, 1/19/2012 (http://blogs.cfr.org/patrick/2012/01/19/breaking-the-un-deadlock-on-syria/)

Without UN support, an intervention is unlikely, and would be unadvisable. Assad has a “firm hold” on the loyalties of Iran and Hezbollah, the Shiite power in Lebanon. A fierce conflict in Syria could pull one or both into the fight. With U.S.-Iranian tensions at new highs, and having exhausted public support for war in the Middle East, the Obama administration seems unlikely to use armed force in Syria without the Council’s imprimatur, even alongside a “coalition of the willing.” (China and Russia have no doubt factored this into their opposition to UNSC action.) But if the unrest in Syria boils over, the consequences would be significant. The nation borders Israel, Iraq and Jordan, NATO ally Turkey, and finally Lebanon, which could see its precarious stability threatened by civil war in Syria. Reporting from near the Syrian-Lebanese border, NPR correspondent Deborah Amos describes how the conflict is dividing Syria’s Alawite sect of Shiite Islam and its Sunni Muslims, raising the specter of a sectarian war that threatens regional stability.

#### Romney would support an Israeli strike on Iran

Robert W. Merry 8-1-2012; editor of The National Interest and the author of books on American history and foreign policyRomney Edges U.S. toward War with Iran http://nationalinterest.org/commentary/romney-edges-us-toward-war-iran-7275

The major newspapers all understood that GOP presidential candidate Mitt Romney’s expressions in Jerusalem last weekend were important, which is why they played the story on page one. But only the New York Times captured the subtle significance of what he said. The paper’s coverage, by Jodi Rudoren and Ashley Parker, reported that Romney sought to adhere to the code that says candidates shouldn’t criticize the president on foreign soil. “But,” they added, “there were subtle differences between what he said—and how he said it—and the positions of his opponent.” Most significantly, while Obama talks about stopping Iran from obtaining nuclear weapons, Israel insists Tehran should be prevented from having even the capacity to develop nuclear weapons. This means no nuclear development even for peaceful purposes. Romney embraced the Israeli language. In doing so, he nudged his nation closer to war with Iran. Based on Israeli prime minister Benjamin Netanyahu’s oft-repeated expressions, he clearly seems bent on attacking Iran to destroy or delay its nuclear program and, if possible, undermine the Iranian regime. And he wants America at his side when he does it. Obama has been seeking to dissuade Israel from contemplating such an assault in order to give the president’s austere sanctions regimen a chance to work. But what does he mean by “a chance to work?” If he means a complete capitulation by Iran, he’s dreaming, of course. History tells us that nations don’t respond to this kind of pressure by accepting humiliation. That’s the lesson of Pearl Harbor, as described in my commentary in these spaces. Many close observers of the Iran drama believe there may be an opportunity for a negotiated outcome that allows Iran to enrich uranium to a limited extent—say, 5 percent—for peaceful purposes. Iran insists, and most experts agree, that the Non-Proliferation Treaty allows such enrichment for energy production. In any event, numerous signatories to the NPT do in fact maintain limited enrichment programs for peaceful ends. Obama seems torn between pursuing such an outcome and embracing the Israeli position, which demands that Iran foreswear all enrichment and any peaceful nuclear development. In last spring’s Istanbul meeting between Iran and the so-called P5+1 group (the United States, Britain, France, China, Russia and Germany), there seemed to be a genuine interest on the part of those six nations to explore an outcome that would allow for some enrichment by Iran. Five weeks later in Baghdad, the P5+1 group seemed to backtrack and insist upon zero enrichment. Talks are ongoing but only among low-level technical people; any serious negotiations are on hold pending the election. Thus Obama has managed to maintain his flexibility during the delicate campaign period. But now we have Romney in Israel essentially telling the people there that they need fear no ambivalence on his part. If elected, he will embrace the Netanyahu position, which is designed to ensure the collapse of any negotiations attending anti-Iran sanctions, which Netanyahu already has labeled a failure. “We have to be honest,” he said over the weekend, during Romney’s visit, “and say that the sanctions and diplomacy so far have not set back the Iranian program by one iota.” That’s the view that Romney subtly embraced in Jerusalem.

## 2nr

#### No conflict management mechanisms left to prevent escalation

Paul **Stares**, CFR Center for Preventive Action Director and Conflict Prevention Senior Fellow, November 20**10**, “Military Escalation in Korea,” http://www.cfr.org/publication/23344/military\_escalation\_in\_korea.html, access 12/7/10

Management of a serious crisis on or around the Korean peninsula could also be complicated by other factors. Pyongyang’s grasp of potentially fast-moving events could be quite limited and slow, given the North’s relatively unsophisticated intelligence and communication systems. Furthermore, the limited options for communicating with the North Korean leadership could hinder attempts to bring a rapidly deteriorating situation under control. Since the Cheonan incident, the North has shut down the military-to-military hotline established in 2004 for maritime emergencies in the Yellow Sea; it also regularly turns off the UN fax machine communications link at Panmunjon to demonstrate its displeasure. (The United States recently had to use a bull horn to announce planned military exercises.) Other North-South military and intelligence links are evidently ad hoc and not reliable for rapid communications. Likewise, the use of various diplomatic channels, including those through the New York DPRK Liaison office, are likely to be slow given that they are maintained by the North Korean foreign ministry, which would in turn have to relay messages to the leadership.

#### Kim Jong-un will overplay his hand

Peter **Grier**, Christian Science Monitor staff writer, **11/23**/2010, "North Korean attack: What are US options for response?," http://www.csmonitor.com/USA/Foreign-Policy/2010/1123/North-Korean-attack-What-are-US-options-for-response, access 11/27/10

Third, North Korea remains embroiled in a leadership succession, and Kim Jong-un, the son of current leader Kim Jong-il and the choice to run the regime after his father passes from the scene, may feel the need to demonstrate his toughness to North Korea’s military.

For these reasons, the current state of diplomatic relations in the region is highly volatile. The North – and the South and its ally the US – could touch off conflict with a simple misstep.

“Although everyone concerned wants to prevent a major outbreak of hostilities – South Korea fears losing its hard-won prosperity and a much weaker North knows that another war would almost certainly result in its demise – the potential for miscalculation, misunderstanding, and unintended escalation cannot be dismissed,” writes Stares.

#### ROK relations are high but still susceptible to potential collapse

**Katz and Cha 2011** – \*Georgetown University Government Professor, CSIS Korea Chair, Former Deputy Head of U.S. Delegation to the 6 party talks on North Korea disarmament, Bush Administration Asian Affairs Director, \*\*Chicago-based independent consultant on East Asia, and former Fulbright Scholar (Katrin and Victor, Asian Survey, 51.1, “South Korea in 2010: Navigating New Heights in the Alliance”)

The past year has brought an auspicious turn of circumstances for the U.S.-Republic of Korea (ROK) alliance. For the Obama administration, un- foreseen regional dynamics—including Beijing’s resistance to deep engagement with Washington, Japan’s experimentation with a more “independent” policy vis-à-vis the U.S., and North Korea’s increasingly provocative behavior—have escalated the importance of the U.S.-ROK alliance to unprecedented levels for the U.S. Combined with the warm personal relationship President Barack Obama shares with South Korean President Lee Myung-bak, these dynamics have resulted in exceptionally close cooperation and coordination between Washington and Seoul.

But, as the past 60-plus years of ROK-U.S. ties have shown, this is a relationship that has seen the highest peaks followed by the lowest lows. The experiences of May and June 2008, when tens of thousands of South Kore- ans took to the streets to protest a trade deal to import U.S. beef, serve as the most recent example of the capacity for positive dynamics to come crashing down almost overnight. Recent public opinion surveys reveal ahistorically positive feelings among both the U.S. and South Korean publics toward the alliance, presenting a helpful backdrop for alliance managers in implement- ing ongoing projects and embarking on new initiatives. But the alliance re- mains vulnerable to external shocks, rendering the continuation of the current phase of unmitigated harmonious ties far from certain. Policymakers on both sides of the Pacific would do well to identify and delicately manage potential trouble areas while continuing to maximize benefits the current bilateral euphoria can bring.

# doubles aff v umkc bs

## 2ac

### 2ac china

#### Our aff understands contingent complexity – the 1ac’s scenario planning allows us to find an effective solution

Han, 10 [ Dong-ho Han, Ph.D. Candidate in Political Science at the University of Nebraska-Lincoln, , “Scenario Construction and Implications for IR Research: Connecting Theory to a Real World of Policy Making,” http://www.allacademic.com/one/isa/isa10/index.php?cmd=Download+Document&key=unpublished\_manuscript&file\_index=1&pop\_up=true&no\_click\_key=true&attachment\_style=attachment&PHPSESSID=3e890fb59257a0ca9bad2e2327d8a24f

How do we assess future possibilities with existing data and information? Do we have a systematic approach to analyze the future events of world politics? If the problem of uncertainty in future world politics is increasing and future international relations are hard to predict, then it is necessary to devise a useful tool to effectively deal with upcoming events so that policy makers can reduce the risks of future uncertainties. In this paper, I argue that the scenario methodology is one of the most effective methods to connect theory to practice, thereby leading to a better understanding of future world events. The purpose of this paper is to introduce the scenario methodology to the field of IR in a more acceptable fashion and to explore its implications for a real policy world. To achieve this goal, I will explain the scenario methodology and why it is adequate to provide a better understanding of future world events. More specifically, I will clarify what the scenario method is and what its core components are and explain the importance and implications of the scenario method in IR by analyzing existing IR literature with an emphasis on security studies that primarily provide the prospect of future security issues. 1. Introduction How do we assess future possibilities with existing data and information? Do we have a systematic approach to analyze the future events of world politics? Given various theoretical ideas for predicting and analyzing future events in the field of international relations (IR), to understand these events properly it is important both to cast out all plausible outcomes and to think through a relevant theory, or a combination of each major theory, in connection with those outcomes. This paper aims to explain the scenario methodology and why it is adequate to provide a better understanding of future world events. After clarifying the scenario methodology, its core components, and its processes and purposes, I will explore other field’s use of this methodology. Then I will explain the importance and implications of the scenario method in the field of IR. I will conclude with summarizing the advantage of the scenario method in a real world of policy making. 2. What is the Scenario Methodology? This section begins with one major question – what is the scenario methodology? To answer this, some history regarding the development of this method should be mentioned.1 Herman Kahn, a pioneer of the scenario method, in his famous 1962 book Thinking about the Unthinkable, argued that the decision makers in the United States should think of and prepare for all possible sequences of events with regard to nuclear war with the Soviet Union.2 Using scenarios and connecting them with various war games, Kahn showed the importance of thinking ahead in time and using the scenario method based upon imagination for the future.3 According to Kahn and his colleagues, scenarios are “attempts to describe in some detail a hypothetical sequence of events that could lead plausibly to the situation envisaged.”4 Similarly, Peter Schwartz defines scenarios as “stories about the way the world might turn out tomorrow, stories that can help us recognize and adapt to changing aspects of our present environment.”5 Given a variety of definitions of scenarios,6 for the purpose of this research, I refer to the scenario-building methodology as a means by which people can articulate different futures with trends, uncertainties, and rules over a certain amount of time. Showing all plausible future stories and clarifying important trends, scenario thinking enables decision makers to make an important decision at the present time. Key Terms in the Scenario Methodology The core of the scenario method lies in enabling policy makers to reach a critical decision at the present time based on thinking about all plausible future possibilities. Key concepts in the scenario method include: driving forces, predetermined elements, critical uncertainties, wild cards and scenario plot lines.7 Driving forces are defined as “the causal elements that surround a problem, event or decision,” which could be many factors, including those “that can be the basis, in different combinations, for diverse chains of connections and outcomes.”8 Schwartz defines driving forces as “the elements that move the plot of a scenario, that determine the story’s outcome.”9 In a word, driving forces constitute the basic structure of each scenario plot line in the scenario-making process. Predetermined elements refer to “events that have already occurred or that almost certainly will occur but whose consequences have not yet unfolded.”10 Predetermined elements are “givens” which could be safely assumed and understood in the scenario-building process. Although predetermined elements impact outcomes, they do not have a direct causal impact on a given outcome. Critical uncertainties “describe important determinants of events whose character, magnitude or consequences are unknown.”11 Exploring critical uncertainties lies at the heart of scenario construction in the sense that the most important task of scenario anaysts is to discover the elements that are most uncertain and most important to a specific decision or event.12 Wild cards are “conceivable, if low probability, events or actions that might undermine or modify radically the chains of logic or narrative plot lines.”13 In John Peterson’s terms, wild cards are “not simple trends, nor are they byproducts of anything else. They are events on their own. They are characterized by their scope, and a speed of change that challenges the outermost capabilities of today’s human capabilities.”14 Wild cards might be extremely important in that in the process of scenario planning their emergence could change the entire direction of each scenario plot line. A scenario plot line is “a compelling story about how things happen” and it describes “how driving forces might plausibly behave as they interact with predetermined elements and different combinations of critical uncertainties.”15 Narratives and/or stories are an essential part of the scenario method due to the identical structure of analytical narratives and scenarios: “both are sequential descriptions of a situation with the passage of time and explain the process of events from the base situation into the situation questioned.”16 Process and Purpose of Scenario Analysis Scenario analysis begins with the exploration of driving forces including some uncertainties. However, scenario building is more than just organizing future uncertainties; rather, it is a thorough understanding of uncertainties, thereby distinguishing between something clear and unclear in the process of decision making.17 As Pierre Wack has pointed out, “By carefully studying some uncertainties, we gained a deeper understanding of their interplay, which, paradoxically, led us to learn what was certain and inevitable and what was not.” In other words, a careful investigation of raw uncertainties helps people figure out more “critical uncertainties” by showing that “what may appear in some cases to be uncertain might actually be predetermined – that many outcomes were simply not possible.”18 Exploring future uncertainties thoroughly is one of the most important factors in scenario analysis. Kees van der Heijden argues that in the process of separating “knowns” from “unknowns” analysts could clarify driving forces because the process of separation between “predetermineds” and uncertainties demands a fair amount of knowledge of causal relationships surrounding the issue at stake.19 Thus, in scenario analysis a thorough understanding of critical uncertainties leads to a well-established knowledge of driving forces and causal relations.20 Robert Lempert succinctly summarized the scenario-construction process as follows: “scenario practice begins with the challenge facing the decisionmakers, ranks the most significant driving forces according to their level of uncertainty and their impact on trends seemingly relevant to that decision, and then creates a handful of scenarios that explore different manifestations of those driving forces.”21

#### Scenario Planning is consistent with complexity theory

KAVALSKI ‘7 (Emilian; University of Alberta, “The fifth debate and the emergence of complex international relations theory: notes on the application of complexity theory to the study of international life,” Cambridge Review of International Affairs, v. 20 n. 3, September)

In a further examination of the cognitive perspective, some proponents of CIR theory have suggested ‘scenarios’ as tools for the modelling of complexity (Feder 2002; Harcourt and Muliro 2004). Scenarios are defined as ‘imaginative stories of the future that describe alternative ways the present might evolve over a given period of time’ (Heinzen 2004, 4). They focus on subjective interpretations and perceptions. Understanding complexity, therefore, would depend on the relationship between the ‘cognitive schema’ (that is, available knowledge) and the ‘associative network’ (that is, the activation of the links between different concepts) of the observer (Bradfield 2004, 40). The suggestion is that in some sense ‘we create our own consciousness of complexity by seeking it out’ (LaPorte 1975, 329). In this respect, some proponents of CIR theory have asserted the analysis of discourses as an important distinction between human and nonhuman complex systems (Geyer 2003b, 26).14

The intellectual considerations of these epistemological frameworks suggest the challenging conceptual and methodological problems facing CIR theory. On a metatheoretical level, the problem stems from the realization that students of the complexity of international life can never be fully cognizant of the underlying truths, principles and processes that ‘govern reality’ because this would (i) involve (a degree of) simplification of complex phenomena (LaPorte 1975, 50), as well as (ii) imply ‘knowing the not knowable’ (Cioffi-Revilla 1998, 11). As suggested, analytically, the conscious consideration of complexity is hindered by the inherent difficulty of formalizing uncertainty and contingency (Whitman 2005, 105). Some commentators, therefore, have rejected the possibility of constructing comprehensive models for the study of complexity altogether in an attempt to overcome the trap of having to justify their methodologies in ways that are understandable to conventional IR. Therefore, a number of CIR proponents rely on ‘sensemaking’ (Browaeys and Baets 2003, 337; Coghill 2004, 53), ‘whatiffing’ (Beaumont 1994, 171) and other forms of ‘speculative thinking’ (Feder 2002, 114) for their interpretations of the complexity of international life. The claim is that the acceptance of endogeneity as a ‘fact’ of international life provides more insightful modes of analysis than the linear-regression-type approach of traditional IR (Johnston 2005 1040). Without ignoring some controversial aspects of incorporating ontological and epistemological reflection into methodological choices, the claim here is that CIR theory suggests intriguing heuristic devices that both challenge conventional wisdom and provoke analytical imaginations.

Complex international relations theory, therefore, proffers analytical tools both for explaining and understanding discontinuities. It is claimed that its approaches offer ‘antidotes’ to the anxiety that randomness engenders in traditional IR as well as provide a paradigm that accepts uncertainty as inevitable (Feder 2002, 117). Thus, in contrast to the typically linear perceptions of change in mainstream IR— that is, changes in variables occur, but the effect is constant—CIR suggests that ‘things suffer change’. The contention is that the unpredictability of the emergent patterns of international life needs to be conceptualized within the framework of self-organizing criticality—that is, their dynamics ‘adapt to, or are themselves on, the edge of chaos, and most of the changes take place through catastrophic events rather than by following a smooth gradual path’ (Dunn 2007, 99). Complex international relations, in other words, suggests that change entails the possibility of a ‘radical qualitative effect’ (Richards 2000, 1). Therefore, the alleged arbitrariness of occurrences that conventional IR might describe as the effects of randomness (or exogenous/surprising shocks) could (and, in fact, more often than not does) reflect ignorance of their interactions. In fact, the reference to ‘chance’ is merely a metaphor for our lack of knowledge of the dynamics of complexity (Smith and Jenks 2006, 273).

In this respect, CIR theory sketches the fifth debate in the study of international life (see Table 2). Its outlines follow the proposition of the Gulbenkian Commission to break down the division between ‘natural’ and ‘social’ sciences, since both are pervaded by ‘complexity’. Therefore, scholars should not be ‘conceiving of humanity as mechanical, but rather instead conceiving nature as active and creative [to make] the laws of nature compatible with the idea of novelty and of creativity’ (Wallerstein 1996, 61–63). Complex international relations (unlike other IR approaches) acknowledges that patterns of international life are panarchic ‘hybrids’ of physical and social relations (Urry 2003, 18) and advocates such fusion (through the dissolution of the outdated distinction) of scientific realities (Whitman 2005, 45–64). Its complex adaptive thinking in effect challenges the very existence of ‘objective standards’ for the assessment of competing knowledge claims, because these are ‘not nature’s, but rather always human standards, standards which are not given but made . . . adopted by convention by the members of a specific community’ (Hoffmann and Riley 2002, 304). The complex adaptive thinking of CIR theory, therefore, is an instance of ‘true thinking’—‘thinking that looks disorder and uncertainty straight in the face’ (Smith and Jenks 2006, 4).

#### No link—reps about China don’t spur rivalry but they’re key to avoid disaster

Friedberg 1—Aaron L. Friedberg, Professor of Politics and International Affairs. Woodrow Wilson School, Princeton University, Commentary, Vol. 111, No. 2, February 2001, p. <https://lists.lsit.ucsb.edu/archives/gordon-newspost/2001-May/001274.html>

Is it possible, finally, that merely by talking and perhaps even by thinking about a full-blown SinoAmerican rivalry we may increase the probability of its actually coming to pass? This is the clear implication of Michael Swaine ’s letter. Mr. Swaine worries that “ordinary observers,” unable to distinguish between descriptions of present reality and “hair-raising scenarios” of the future, will conclude that “an intense geostrategic rivalry is virtually inevitable, and . . . respond accordingly.” While I am flattered by the thought that my article could somehow change the course of history, I very much doubt that it, or a hundred more like it, will have any such effect. On the other hand, I am disturbed by the suggestion that we ought to avoid discussing unpleasant possibilities for fear that someone (presumably our political representatives and “ordinary” fellow citizens) might get the wrong idea. Acknowledging real dangers is a necessary first step to avoiding them, as well as to preparing to cope with them if they should nevertheless come to pass. Refusing or neglecting to do so, it seems to me, is a far more likely formula for disaster.

#### Self-fulfilling prophecy is backwards

Macy 95 (Joanna, general systems scholar and deep ecologist, Ecopsychology)

There is also the superstition that negative thoughts are self-fulfilling. This is of a piece with the notion, popular in New Age circles, that we create our own reality I have had people tell me that “to speak of catastrophe will just make it more likely to happen.” Actually, the contrary is nearer to the truth. Psychoanalytic theory and personal experience show us that it is precisely what we repress that eludes our conscious control and tends to erupt into behavior. As Carl Jung observed, “When an inner situation is not made conscious, it happens outside as fate.” But ironically, in our current situation, the person who gives warning of a likely ecological holocaust is often made to feel guilty of contributing to that very fate.

#### Our knowledge of China is accurate—their authors have flawed information

Chan 4—PhD in Political Science from Minnesota U, Professor and Chair of the Department of Political Science at Colorado U at Boulder (Steve, Asian Affairs, Vol 31, No. 3 (Fall, 2004), “Extended Deterrence in the Taiwan Strait: Learning from Rationalist Explanations in International Relations”, JSTOR, <http://www.jstor.org/stable/30172621>, p. 167, RBatra)

Rationalist interpretations do not imply that people are omnipotent in their ability to procure and process information. We know all too well that people are subject to a variety of cognitive and perceptual errors (for example, Jervis 1976; Levy 1997; Kahneman and Tversky 2000; Tversky and Kahneman 1977). This recognition of limits to rationality, however, hardly warrants general attributions of naiveté , even stupidity, to government leaders. On the contrary, it seems sensible to start from the premise that officials know their counterparts far better than scholars may wish to acknowledge. Washington, Beijing, and Taipei, for instance, invest enormous time, effort, and resources in trying to gain an accurate understanding of each other. Academics have a hard time claiming **any special insight** or unique source of wisdom, whether it is based on mastery of the other side's language, intimate familiarity with its culture, or access to timely and sensitive information with restricted distribution. If anything, they are usually at a considerable disadvantage on these scores when compared to diplomats, intelligence analysts, and even journalists and business people. Indeed, academics in fields such as history and political science typically operate in the realm of common knowledge, outdated information, and mundane data. This confession in turn implies that at least for some of us, our individual and collective forte lies with the analysis of persistent empirical patterns and the formulation of general models of foreign policy conduct.

### 2ac prolif

#### Prolif impacts outweigh the K and flip ethics

Ford 11 [Chris Ford, Senior Fellow at the Hudson Institute in Washington, D.C. He previously served as U.S. Special Representative for Nuclear Nonproliferation, Principal Deputy Assistant Secretary of State, and General Counsel to the U.S. Senate Select Committee on Intelligence, 1/10/11, Havea and Have-Nots: "Unfairness in nuclear Weapons possession," [www.newparadigmsforum.com/NPFtestsite/?p=658](http://www.newparadigmsforum.com/NPFtestsite/?p=658)]

First, however, let’s provide some context. As I noted above, it is fascinating that in the long history of military technological have/have not dynamics, the international politics of nuclear weaponry has acquired such a strong flavor of moral critique. To my knowledge, after all, one did not see Xiongnu politics emphasizing how darned unfair it was of those nasty Chinese Emperors to monopolize the presumed secrets of China’s bingjia strategic literature. Nor does the unfairness of Byzantine efforts to control the recipe for Greek Fire seem to have become a prevalent trope of Frankish or Persian diplomacy. “Have nots” have surely always coveted powerful tools possessed by the “haves,” or at least wished that the “haves” did not possess them. It seems pretty unusual, however, for non-possessors to articulate such understandable envy and resentment in the moral language of “unfairness,” and to assume that this presumed injustice should motivate the “haves” to change their behavior. This argument seems to be a curiously modern phenomenon.¶ One might respond that the very specialness of nuclear weapons makes such a position appropriate. After all, while a local monopoly on iron swords may have given the Vikings some advantage in skirmishes with Native Americans in what the Norsemen called Vinland, such technological asymmetry was not strategically decisive. (Indeed, the Vikings seem ultimately to have been pushed out of the New World entirely.) If iron had threatened to offer the Vikings an insuperable advantage, would the Skraelings have been justified in developing a moral language of “have/have not” resentment that demanded either the sharing of iron weaponry or Viking disarmament in the name of achieving a global “iron zero”? I’m skeptical, but for the sake of argument let’s say “maybe.”¶ The argument that nuclear weapons are “special,” however, is a two-edged sword. Perhaps they are indeed so peculiarly potent and militarily advantageous that their asymmetric possession is sufficiently “unfair” to compel sharing or disarmament. Such an argument, however, sits only awkwardly – to say the least – with the simultaneous claim by many advocates of the “have/have not” critique that nuclear weapons have no real utility in the modern world and can therefore safely be abandoned by their possessors. After all, it is hard to paint nuclear weapons as being strategically decisive and useless at the same time. (If they are indeed useless, the conclusion of “unfairness” hardly sounds very compelling. If they aren’t useless, however, it may be appropriately hard to abolish them.)¶ More importantly, any argument about the destructively “special” character of nuclear weaponry cuts against the “unfairness critique” in that it is this very specialness that seems to rob the “have/have not” issue of its moral relevance. Unlike iron swords, the bingjia literature, Greek Fire, or essentially all other past military technologies the introduction of which produced global control/acquisition dynamics, nuclear weapons have introduced **existential questions** about the future of human civilization which **utterly swamp** the conventional playground morality of unfair “have/have not” competition**.** No prior technology held the potential to destroy humanity**,** making nuclear weapons – with the possible exception of certain techniques of biological weaponry – a sui generis case to which the conventional “unfairness” critique simply does not very persuasively apply.¶III. Implications¶ Let me be clear about this. The moral critique of nuclear weapons possession may yet speak to the issue of whether anyone should have them. (This is not the place for a discussion of the feasibility of the remedies proposed by the disarmament community, but let us at least acknowledge the existence of a real moral issue.) But this matter has nothing to do with “unfairness” per se – and to the extent that it purports to, one should give it little credence. If indeed nuclear weapons do menace the survival of humanity, it is essentially irrelevant whether their possession is “unfairly” distributed – and it is certainly no solution to make the global balance of weaponry more “fair” by allowing more countries to have them. (Disarmament advocates hope to address the fairness problem by eliminating nuclear weapons, of course, but this is just icing. Disarmament is almost never articulated as being driven primarily by fairness; the critical part of that argument is instead consequentialist, stressing the dangers that any nuclear weapons are said to present.) As a moral critique, in other words, the fair/unfair dichotomy fails to speak intelligibly to the world’s nuclear dilemma. It isn’t really about “fairness” at all.¶ Given the entanglement of nuclear weapons issues with quasi-existential questions potentially affecting the survival of millions or perhaps even billions of people, moreover, it stands to reason that an “unfair” outcome that nonetheless staves off such horrors is a **perfectly good solution**. On this scale, one might say, non-catastrophe entirely trumps accusations of “unfairness.” Questions of stability are far more important than issues of asymmetric distribution.¶ This, of course, has powerful implications for nonproliferation policy, because pointing out the hollowness of the “unfairness” argument as applied to nuclear weapons suggests the moral sustainability of nonproliferation even if complete nuclear disarmament cannot be achieved and the world continues to be characterized by inequalities in weapons possession. We forget this at our collective peril.¶ Don’t get me wrong. “Unfairness” arguments will presumably continue to have a political impact upon the diplomacy of nuclear nonproliferation, either as a consequence of genuine resentment or as a cynical rationalization for the destabilizing pursuit of dangerous capabilities. (Indeed, one might even go so far as to suspect that the emergence of the “unfairness” critique in modern diplomatic discourse is in some sense partly the result of how morally compelling nonproliferation is, in this context, irrespective of the “fairness” of “have/have not” outcomes. Precisely because the moral case for nonproliferation-driven inequality is so obvious and so compelling if such imbalance serves the interests of strategic stability, perhaps it was necessary to develop a new rationale of “fairness” to help make proliferation aspirations seem more legitimate. Skraelings, one imagines, did not need an elaborate philosophy of “fairness” in order to justify trying to steal iron weapons; the desirability of such tools was simply obvious, and any effort to obtain them unsurprising and not in itself condemnable.) But even in this democratic and egalitarian age, merely to incant the mantra of “unfairness” – or to inveigh against the existence of “haves” when there also exist “have nots” – is not the same thing as having a compelling moral argument. Indeed, I would submit that we lose our moral bearings if we allow “unfairness” arguments to distract us from what is really important here: substantive outcomes in the global security environment.¶ “Unfairness,” in other words, is an overrated critique, and “fairness” is an overrated destination. At least where nuclear weapons are concerned, there are more important considerations in play. Let us not forget this.

#### Prolif exacerbates inequality—turns the K

Biswas 1 [Shampa Biswas, Whitman College Politics Professor, December 2001, “Nuclear apartheid" as political position: race as a postcolonial resource?, Alternatives 26.4]

At one level, as Partha Chatterjee has pointed out, the concept of apartheid relates to a discourse about "democracy." (49) To use apartheid to designate the unequal distribution of nuclear resources then is also simultaneously to draw attention to the undemocratic character of international relations--or, more literally, the exclusion of a group of people from some kind of legitimate and just entitlement. More specifically, to talk in terms of nuclear haves and have-nots is to talk in terms of a concept of democratic justice based on the "possession" (or lack thereof) of something. "Apartheid," as Sumit Sarkar points out, "implies as its valorised Other a notion of equal rights." (50) But that this something is "nuclear weapons" complicates the issue a great deal. If the vision of democracy that is implicit in the concept of nuclear apartheid implies a world of "equal possession" of nuclear weapons, a position implied in the Indian decision to test, that is a frightening thought indeed. Yet surely even India does not subscribe to that vision of democracy. "Would India," asks Sarkar, "welcome a nuclearised Nepal or Bangladesh?" (51) If Jaswant Singh is serious that "the country"s national security in a world of nuclear proliferation lies either in global disarmament or in exercise of the principle of equal and legitimate security for all," (52) then it should indeed support the "equal and legitimate" nuclearization of its neighbors, which is extremely unlikely given its own demonstrated hegemonic aspirations in the South Asian region. (53) Further, if India does indeed now sign the NPT and the CTBT, and sign them in the garb of a nuclear power as it wants to do, what does that say about its commitment to nuclear democracy? Even if India and Pakistan were to be included in the treaties as NWSs, all that would do is expand the size of the categories, not delegitimize the unequal privileges and burdens written into the categories themselves. ¶ Indian military scientists claim that India has now accumulated enough data for reliable future weaponization without explosive testing, and Indian leaders have, since the tests, indicated more willingness to sign the CTBT. India has already voluntarily accepted restraints on the exports of nuclear-related materials, as required by the NPT. According to an Indian strategic analyst with respect to negotiation of the Fissile Material Cut-Off Treaty, the next major arms-control treaty to be discussed in the Conference on Disarmament, "The key question in relation to the FMCT is not if it is global and nondiscriminatory. It is whether India has sufficient nuclear material at hand to maintain a credible nuclear deterrent." (54) If all India ever wanted was to move from the side of the discriminated to the side of the discriminators, so much for speaking for democratic ideals through the symbol of nuclear apartheid. (55) ¶ There are several troublesome issues here with respect to the concept of "nuclear democracy." On the one hand, it seems clear that the widespread proliferation of nuclear weapons sits ill at ease with any notion of democratic entitlement. It seems that rather than equalizing the possession of nuclear weapons, **it would be equalizing the dispossession of nuclear weapons that entails a more compelling democratic logic.** (56) On the other hand, there is also the question of the fundamentally undemocratic nature of nuclear weapons themselves. At one level, the sheer scope of such weapons to kill and destroy indiscriminately (a democratic logic here?) renders any laws of 'just war" moot. As Braful Bidwai and Achin Vanaik point out, the very use of nuclear weapons would be to break the principle of proportionate use of force, and such weapons clearly cannot be made to distinguish between combatants and noncombatants as required in the just conduct of war. (57) ¶ In this context, it might be worth pointing to the 1996 ruling by the International Court of Justice at the Hague that stipulated that the "the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict and, in particular, the principles and rules of humanitarian law." (58) If the regulation of war can be considered a democratic exercise, then nuclear weapons by their very nature make that exercise futile. At another level is the secrecy that has historically and perhaps necessarily accompanied the development of nuclear-weapons programs, relegated to an aspect of the national-security state that is immunized from democratic scrutiny. Chatterjee argues that nuclear weapons involve a technology that is intrinsically undemocratic -- both domestically and internationally -- since the enormous destructive potential that they embody requires a great deal of secrecy and inaccessibility. (59) Itty Abraham's excellent analysis shows how the intertwined emergence of the independent Indian state and the atomic-energy establishment legally foreclosed the democratic and institutional oversight of the entire atomic-energy enterprise because of its proximity to national security. In other words, the state sponsorship and control of nuclear science, and indeed its constitution in and through nuclear science, makes both science and the state susceptible to undemocratic governance. (60)

### 2ac a2 Heidegger (1) - 2:00

#### Framework – the k must prove the whole plan is bad – any other interpretation kills fairness and trivializes effective decisionmaking skills - deliberation key

**Kuzemko 12** [Caroline Kuzemko, CSGR University of Warwick, Security, the State and Political Agency: Putting ‘Politics’ back into UK Energy, <http://www.psa.ac.uk/journals/pdf/5/2012/381_61.pdf>]

Both Hay (2007) and Flinders and Buller (2006) suggest that there are other forms that depoliticisation can take, or in the terminology of Flinders and Buller ‘tactics’ which politicians can pursue in order to move a policy field to a more indirect governing relationship (Flinders and Buller 2006: 296). For the purposes of understanding the depoliticisation of UK energy policy, however, two of Colin Hay’s forms of depoliticisation are most useful: the ‘… offloading of areas of formal political responsibility to the market…’ and the passing of policymaking responsibility to quasipublic, or independent, authorities (Hay 2007: 82-3). 1 What each of these forms of depoliticisation has in common is the degree to which they can serve, over time, to reduce political capacity by removing processes of deliberation and contestation, thereby reducing the ability for informed agency and choice. In that politics can be understood as being inclusive of processes of deliberation, contestation, informed agency and collective choice the lack of deliberation and capacity for informed agency would result in sub-optimal politics (Hay 2007: 67; cf. Gamble 2000; Wood 2011; Jenkins 2011). There seems little doubt that, with regard to energy as a policy area, the principal of establishing a more indirect governing system had become accepted by UK political elites. One of the very few close observers of UK energy policy from the 1980s to early 2000s claims that both Conservative and New Labour politicians had actively sought to remove energy from politics, making it an ‘economic’ subject: From the early 1980s, British energy policy, and its associated regulatory regime, was designed to transform a state-owned and directed sector into a normal commodity market. Competition and 1 "These"forms"are"referred"to"elsewhere"by"the"author"as"‘marketised’"and"‘technocratic’"depoliticisation"(Kuzemko" 2012b:").liberalization would, its architects hoped, take energy out of the political arena… Labour shared this vision and hoped that energy would drop off the political agenda…. (Helm 2003: 386) 2 As already suggested this paper considers the intention to depoliticise energy to have been reasonably successful. By the early 2000s the Energy Ministry had been disbanded, there was little or no formal Parliamentary debate, energy was not represented at Cabinet level, responsibility for the supply of energy had been passed to the markets, it was regulated by an independent body, and the (cf. Kuzemko 2012b). Furthermore, the newly formed Energy Directorate within the Department of Trade and Industry (DTI), which now had responsibility for energy policy, had no specific energy mandates but instead mandates regarding encouraging the right conditions for business with an emphasis on competition (Helm et al 1989: 55; cf. Kuzemko 2012b: 107). As feared by various analysts who write about depoliticisation as a sub-optimal form of politics, these processes of depoliticisation had arguably resulted in a lack of deliberation about energy and its governance outside of narrow technocratic elite circles. Within these circles energy systems were modelled, language was specific and often unintelligible to others, including generalist politicians or wider publics, and this did, indeed, further encourage a high degree of disengagement with the subject (cf. Kern 2010; Kuzemko 2012b; Stern 1987). Technical language and hiring practices that emphasised certain forms of economic education further isolated elite technocratic circles from political contestation and other forms of knowledge about energy. Arguably, by placing those actors who have been elected to represent the national collective interest at one remove from processes of energy governance the result was a lack of formal political capacity in this policy field. It is worth, briefly, at this point reiterating the paradoxical nature of depoliticisation. Whilst decisions to depoliticise are deeply political, political capacity to deliberate, contest and act in an issue area can be reduced through these processes. Depoliticisation has been an ongoing form of governing throughout the 20 th century it may (Burnham 2001: 464), however, be particularly powerful and more difficult to reverse when underpinned by increasingly dominant ideas about how best to govern. For example Hay, in looking for the domestic sources of depoliticisation in the 1980s and 1990s, suggests that these processes were firmly underpinned by neoliberal and public choice ideas not only about the role of the state but also about the ability for political actors to make sound decisions relating, in particular, to economic governance (Hay 2007: 95-99). Given the degree to which such ideas were held increasingly to be legitimate over this time period depoliticisation was, arguably, genuinely understood by many as a process that would result in better governance (Interviews 1, 2, 3, 15 cf. Hay 2007: 94; Kern 2010). This to a certain extent makes decisions to depoliticise appear both less instrumental but also harder to reverse given the degree to which such ideas become further entrenched via processes of depoliticisation (cf. Kuzemko 2012b: 61-66; Wood 2011: 7).

#### Scholarship indicts require them disproving the specificity of the 1ac scenarios – if we win a disad to the alt – this argument cuts both ways – the 1ac is based on a robust examination of nuclear issues

#### Extinction outweighs ontology

Jonas 96 [Hans, Former Alvin Johnson Prof. Phil. At the New School for Social Research & Former Eric Voegelin Visiting Prof. at U. Munich, \*do not agree with gendered language, Mortality and Morality: A Search for the Good after Auschwitz, pg 111-2

With this look ahead at an ethics for the future, we are touching at the same time upon the question of the future of freedom. The unavoidable discussion of this question seems to give rise to misunderstandings. My dire prognosis that not only our material standard of living but also our democratic freedoms would fall victim to the growing pressure of a worldwide ecological crisis, until finally there would remain only some form of tyranny that would try to save the situation, has led to the accusation that I am defending dictatorship as a solution to our problems. I shall ignore here what is a confusion between warning and recommendation. But I have indeed said that such a tyranny would still be better than total ruin; thus, I have ethically accepted it as an alternative. I must now defend this standpoint, which I continue to support, before the court that I myself have created with the main argument of this essay. For are we not contradicting ourselves in prizing physical survival at the price of freedom? Did we not say that freedom was the condition of our capacity for responsibility—and that this capacity was a reason for the survival of humankind? By tolerating tyranny as an alternative to physical annihilation are we not violating the principle we established: that the How of existence must not take precedence over its Why? Yet we can make a terrible concession to the primacy of physical survival in the conviction that the ontological capacity for freedom, inseparable as it is from man’s being, cannot really be extinguished, only temporarily banished from the public realm. This conviction can be supported by experience we are all familiar with. We have seen that even in the most totalitarian societies the urge for freedom on the part of some individuals cannot be extinguished, and this renews our faith in human beings. Given this faith, we have reason to hope that, as long as there are human beings who survive, the image of God will continue to exist along with them and will wait in concealment for its new hour. With that hope—which in this particular case takes precedence over fear—it is permissible, for the sake of physical survival, to accept if need be a temporary absence of freedom in the external affairs of humanity. This is, I want to emphasize, a worst-case scenario, and it is the foremost task of responsibility at this particular moment in world history to prevent it from happening. This is in fact one of the noblest of duties (and at the same time one concerning self-preservation), on the part of the imperative of responsibility to avert future coercion that would lead to lack of freedom by acting freely in the present, thus preserving as much as possible the ability of future generations to assume responsibility. But more than that is involved. At stake is the preservation of the Earth’s entire miracle of creation, of which our human existence is a part and before which man reverently bows, even without philosophical “grounding.” Here too faith may precede and reason follow; it is faith that longs for this preservation of the Earth (fides quaerens intellectum), and reason comes as best it can to faith’s aid with arguments, not knowing or even asking how much depends on its success or failure in determining what action to take. With this confession of faith we come to the end of our essay ontology.

#### Ontology first is bogus – no warrant

Patrick Thaddeus Jackson, 2010. Associate Professor of International Relations in the School of International Service at the American University in Washington, DC. “The Conduct of Inquiry in International Relations: Philosophy of Science and its Implications for the Study of World Politics,” p 27-8.

However, I do not think that putting ontology first in the panacea that many seem to think it is. For one thing, if one puts ontology first then one is, at least provisionally, committed to a particular (if revisable) account of what the world is made up of: co-constituted agents and structures, states interacting under conditions of anarchy, global class relations, or what have you. This is a rather large leap to make on anyone’s authority, let alone that of a philosopher of science. Along these lines, it is unclear what if any *warrant* we could provide for most ontological claims if ontology in this sense were to always “come first.” If someone makes an ontological claim about something existing in the world, then we are faced with an intriguing epistemological problem of how possibly to know whether that claim is true, and the equally intriguing problem of selecting the proper methods to use in evaluating that claim (Chernoff 2009b, 391). But if epistemology and method are supposed to be fitted to ontology, then we are stuck with techniques and standards designed to respond to the specificity of the object under investigation. This problem is roughly akin to using state-centric measurements of cross-border transactions to determine whether globalization is eroding state borders, because the very object under investigation—“state borders”—is presupposed by the procedures of data collection, meaning that the answer will always, and necessarily, assert the persistence of the state.

#### Existence is prior to value – subjective desires

**Kacou, 08** [Amien, “Why Even Mind on the A Priori Value of Life, Cosmos and History”, The Journal of Natural and Social Philosophy, Vol 4, cosmosandhistory.org/index.php/journal/article/view/92/184]

Furthermore, that manner of finding things good that is in pleasure can certainly not exist in any world without consciousness (i.e., without “life,” as we now understand the word)—slight analogies put aside. In fact, we can begin to develop a more sophisticated definition of the concept of “pleasure,” in the broadest possible sense of the word, as follows: it is the common psychological element in all psychological experience of goodness (be it in joy, admiration, or whatever else). In this sense, pleasure can always be pictured to “mediate” all awareness or perception or judgment of goodness: there is pleasure in all consciousness of things good; pleasure is the common element of all conscious satisfaction. In short, it is simply the very experience of liking things, or the liking of experience, in general. In this sense, pleasure is, not only uniquely characteristic of life but also, the core expression of goodness in life—the most general sign or phenomenon for favorable conscious valuation, in other words. This does not mean that “good” is absolutely synonymous with “pleasant”—what we value may well go beyond pleasure. (The fact that we value things needs not be reduced to the experience of liking things.) However, what we value beyond pleasure remains a matter of speculation or theory. Moreover, we note that a variety of things that may seem otherwise unrelated are correlated with pleasure—some more strongly than others. In other words, there are many things the experience of which we like. For example: the admiration of others; sex; or rock-paper-scissors. But, again, what they are is irrelevant in an inquiry on a priori value—what gives us pleasure is a matter for empirical investigation. Thus, we can see now that, in general, something primitively valuable is attainable in living—that is, pleasure itself. And it seems equally clear that we have a priori logical reason to pay attention to the world in any world where pleasure exists. Moreover, we can now also articulate a foundation for a security interest in our life: since the good of pleasure can be found in living (to the extent pleasure remains attainable),[17] and only in living, therefore, a priori, life ought to be continuously (and indefinitely) pursued at least for the sake of preserving the possibility of finding that good. However, this platitude about the value that can be found in life turns out to be, at this point, insufficient for our purposes. It seems to amount to very little more than recognizing that our subjective desire for life in and of itself shows that life has some objective value. For what difference is there between saying, “living is unique in benefiting something I value (namely, my pleasure); therefore, I should desire to go on living,” and saying, “I have a unique desire to go on living; therefore I should have a desire to go on living,” whereas the latter proposition immediately seems senseless? In other words, “life gives me pleasure,” says little more than, “I like life.” Thus, we seem to have arrived at the conclusion that the fact that we already have some (subjective) desire for life shows life to have some (objective) value. But, if that is the most we can say, then it seems our enterprise of justification was quite superficial, and the subjective/objective distinction was useless—for all we have really done is highlight the correspondence between value and desire. Perhaps, our inquiry should be a bit more complex.

#### Value to life is inevitable, subjective, and they don’t control the link to it.

**Shermer, 8** –Michael, founder of the Skeptics Society and Editor of Skeptic Magazine, “"The Meaning of Life, the Universe, and Everything"”—Commencement Speech at Whittier College, 5/23/08 http://www.whittier.edu/News/Articles/2008CommencementSpeech.aspx

Purpose is personal, and there are countless activities people engage in to satisfy this deep-seated need.There are, however, a handful of powerful means by which we can bootstrap ourselves toward higher goals that have proven to be especially beneficial to both individuals and society. Science tells us that there are five things you can do to create meaning and purpose in your life. Here they are: 1. Love and family—the bonding and attachment to others increases one's sphere of moral inclusion to care about others as much as, if not more than, oneself. And here I shall take a moment to acknowledge the courage of the California State Supreme Court to increase the possibility of marital happiness to the tens of thousands of gays and lesbians in our state who wish to enjoy the same rights and liberties as everybody else. 2. Meaningful work and career—the sense of purpose derived from discovering one's passion for work drives people to achieve goals so far beyond the needs of themselves that they lift all of us to a higher plane, either directly through the benefits of the work, or indirectly through inspiration. And here let me shift my politics slightly rightward to tell you that not only is it okay to make a lot of money, it is a moral virtue to earn your way to wealth and prosperity, and that market capitalism—conjoined with liberal democracy—is the best hope for humanity's future that we have. 3. Recreation and play—it is vital to take time off from work, get away from the office, hang out with your friends, see new places, veg out, goof off, and explore new activities with no purpose other than their shear enjoyment. (In other words, build into your purpose no purpose at all.) 4. Social and political involvement—as a social primate species endowed by evolution with the moral emotions of guilt and pride, shame and joy, we have a social obligation to our local community and our larger society to participate in the process of determining how best we should live together, and a moral duty to reach out and help those in need. Research shows that those who do so are happier and more fulfilled people. 5. Transcendency and spirituality—a capacity unique to our species, as far as we can tell, that includes aesthetic appreciation, spiritual reflection, and transcendent contemplation through a variety of expressions such as art, music, dance, exercise, meditation, prayer, quiet contemplation, and religious revere, connecting us on the deepest level with that which is outside of ourselves.

incorporation affirms unavoidable use, but denies domination

Dreyfus, 06 (Professor of Philosophy at the University of California, Berkeley (Hubert, "Nihilism, Art, Technology, and Politics", the Cambridge Companion to Heidegger)

Heidegger, however, sees that "it would be foolish to attack technology blindly. It would be shortsighted to condemn it as the work of the devil. We depend on technical devices; they even challenge us to ever greater advances."(DOT 53, G 24) Instead, Heidegger suggests that there is a way we can keep our technological devices and yet remain true to ourselves as receivers of clearings: We can affirm the unavoidable use of technical devices**,** and also deny themthe right to dominate us, and so to warp, confuse, and lay waste our nature. (DOT 54, G 24-25) To understand how this might be possible, we need an illustration of Heidegger's important distinction between technology and the technological understanding of being. Again we can turn to Japan. In contemporary Japan traditional, nontechnological practices still exist alongside the most advanced high-tech production and consumption. The TV set and the household gods share the same shelf – the styrofoam cup co-exists with the porcelain tea cup. We thus see that the Japanese at least, can enjoy technology without taking over the technological understanding of being. For us to be able to make a similar dissociation, Heidegger holds, we must rethink the history of being in the West. Then we will see that although a technological understanding of being is our destiny, it is not our fate. That is, although our understanding of things and ourselves as resources to be ordered, enhanced, and used efficiently has been building up since Plato, we are not stuck with that understanding. Although the technological understanding of being governs the way things have to show up for us, we can hope for a transformation of our current cultural clearing. Only those who think of Heidegger as opposing technology will be surprised at his next point. Once we see that technology is our latest understanding of being, we will be grateful for it. This clearing is the cause of our distress, yet if it were not given to us to encounter things and ourselves as resources, nothing would show up as anything at all, and no possibilities for action would make sense. And once we realize -- in our practices, of course, not just as matter of reflection -- that we receive our technological understanding of being, we have stepped out of the technological understanding of being, for we then see that what is most important in our lives is not subject to efficient enhancement -- indeed, the drive to control everything is precisely what we do not control. This transformation in our sense of reality -- this overcoming of thinking in terms of values and calculation -- is precisely what Heideggerian thinking seeks to bring about. Heidegger seeks to make us see that our practices are needed as the place where an understanding of being can establish itself, so we can overcome our restricted modern clearing by acknowledging our essential receptivity to understandings of being.

#### Calculative thought inevitable – they’ve calculated how to use the K to win a ballot

#### And, the alt collapses politics and causes global destruction

Biskowski 95 [Lawrence J. professor of political theory and political economy at the University of Georgia, “Politics versus Aesthetics: Arendt's Critiques of Nietzsche and Heidegger”, The Review of Politics, Vol. 57, No. 1, Winter 1995, pg 59-89]

Although Arendt considered Heidegger to be perhaps the most important philosopher of the twentieth century, she always objected to the political dangers and deformations inherent in this emphasis on the self. Heidegger's philosophy led him away from the common, public world and directed his gaze inward toward the self.67 But this could not help but distort his political judgment, which must take its bearings from the public world. Instead, as we have seen, Heidegger associates the public world with inauthentic existence, a pernicious form of socialization, and a falling away from true Being. In fact, Arendt says, he dismisses all those modes of human existence which rest on the fact that Man lives together in the world with his fellows. To put it historically, Heidegger's Self is an ideal which has been working mischief in German philosophy and literature since Romanticism. In Heidegger this arrogant passion to be a self has contradicted itself; for never before was it so clear as in his philosophy that this is probably the one being which Man cannot be.6

Without the world as a source of political and moral orientation, the self and its death become Heidegger's central concern: Only in the realization of death, which will take him away from the world, has Man the certainty of being himself...in other words, the essential character of Man's Being is determined by what he is not, his nothingness...Death may indeed be the end of human reality; at the same time it is the guarantee that nothing matters but myself. With the experience of death as nothingness I have the chance of devoting myself exclusively to being a Self, and once and for all freeing myself from the surrounding world.69 For Arendt, on the contrary, authentic existence is never isolated in this egoistic way but rather exists only in acknowledgment of and communication with others. It can develop only in the togetherness of human beings in the common, public world. The sort of fascination with the self advocated by Heidegger leaves one disconnected from the multiform, multiperspectival reality of the political world. Among its consequences are a failure to comprehend political events, poor judgment, and a peculiar form of political irresponsibility. Arendt first develops this theme in Rahel Varnhagen where the not altogether different Romantic cult of interiority is criticized. The turn inward toward the self made Rahel and the intellectuals and artists in her circle blind to political reality.70 Similarly, in The Origins of Totalitarianism, Arendt sees romantic self-fascination as contributing to the general conditions which made the twentieth century mass movements and their horrors possible.71 A resurgent romanticism in intellectual life may be symptomatic of a general playfulness of modern thought in which almost any opinion can gain ground temporarily. No real thing, no historical event, no political idea was safe from the all-embracing and all-destroying mania by which these first literati could always find new and original opportunities for new and fascinating opinions.72 This playfulness, which certainly has its advocates among today's literati, is one manifestation of the general condition of world-alienation which appears as a persistent theme in much of Arendt's work. Whatever the undoubted aesthetic, agonistic, or expressivist aspects or moments of action (which Arendt recognizes and emphasizes, particularly in contradistinction to instrumental rationality and those philosophies and worldviews which tend to reduce history and human life to a mere process), she makes clear that action and politics cannot be reduced to or even thought of merely in terms of aesthetic self-expression: "Human plurality, the faceless 'They' from which the individual Self splits to be itself alone is divided into a great many units, and it is only as a member of such a unit, that is, of a community, that men are ready for action."73 These communities and their institutions depend for continued existence upon acting men; their conservation is achieved by the same means that brought them into being...[U]tter dependence upon further acts to keep it in existence marks the state as a product of action.74 Finally, Arendt tells us, "the inspiring principle of action is love of freedom, and this both in the negative sense of freedom from oppression and in the positive sense of the establishment of Freedom as a stable, tangible reality."75 Precisely this is the task of politics. But Heidegger's turn inward and away from the political world has a pedigree that goes beyond romanticism. Arendt consistently maintained that even though Heidegger rivals Nietzsche as a critic of the philosophical tradition, he too shares its general regard for "the incomprehensible triviality" of the common, public world, the only escape from which is withdrawal "into that solitude which philosophers since Parmenides and Plato have opposed to the political realm."76 Indeed, Heidegger no less than Plato personified to Arendt what might be called the professional thinker, and succumbed to the characteristic temptations of the profession.77 Arendt makes clear that all thinking requires some measure of aloofness, seclusion, and distance from the world,78 but this characteristic is amplified and expanded in Heidegger's philosophy. In Dasein, thinking and being alive fold in on one another and become one.79 Authentic existence requires thinking, which in turn requires distance from "the they" and everyday life. Immersion in everyday life constitutes and requires withdrawal from true Being. For Heidegger, not unlike Plato, thinking requires one to leave the cave of worldly affairs. But as we have seen, Arendt suggests that such a departure may result in a loss of moral-practical orientation.80 And this constitutes in the end perhaps the best explanation of why Heidegger's awesome ability to think did not prevent him from evil-doing in the form of his support for the Nazis.81 Heidegger eventually turned away from the emphasis on self-assertion and Dasein's "ownmost" state of being found in Being and Time.8 As Arendt tells the story, Heidegger's intense study of Nietzsche led him to see even his own previous philosophy as having been motivated by a form of will to power.83 Still concerned that instrumental rationality, science, and technology degraded Dasein by reducing everything to presence-at-hand, he came to see his own philosophy as "enframed" in the very same refusal to let beings be at the heart of the Western technological worldview he so detested. The new alternative Heidegger formulated was a Zen-like attitude or disposition of serene, gliding aloofness-Gelassenheit-in which state thinkers would refrain from attempting to impose their own will on beings (whether through technology or even through arguing for "ownmost" or "most authentic" modes of being). Thus, like Nietzsche, Heidegger eventually repudiates the will, a capacity Arendt sees as necessary for action and freedom. But more significantly, Heidegger's turn or reversal leaves him as alienated from politics and the common, public world as before. From the point of view of Arendtian politics, Heidegger has merely exchanged one form of world-alienation (glorification of self-assertion and extrication from "the they") for another (a regarding of the world simply as an object of contemplation). Arendt shares with the early Heidegger the notion that to be in the world is to be a locus of understanding, possibility, and freedom in the midst of a surrounding texture of meaning and significance. For the early Heidegger, however, the world serves primarily as a medium for the aesthetic expression of the self. After his Kehre, the world became something primarily to be regarded with serene, disinterested, contemplative wonder. This marked a return to the origins of philosophy in thaumazein. But philosophy and politics are not the same; the latter requires active engagement with the world, at least if the world is to be a fit home for mortal beings endowed with the capacity for action and the possibility of freedom.

#### DA to Mitchell Rejection of securitization causes the state to become more interventionist—turns the K

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The following section will briefly raise some questions about the rejection of the old security framework as it has been taken up by the most powerful institutions and states. Here we can begin to see the political limits to critical and emancipatory frameworks. In an international system which is marked by great power inequalities between states, the rejection of the old narrow national interest-based security framework by major international institutions, and the adoption of ostensibly emancipatory policies and policy rhetoric, has the consequence of **problematising weak or unstable states** and allowing international institutions or major states a more interventionary role, yet without establishing mechanisms by which the citizens of states being intervened in might have any control over the agents or agencies of their emancipation. Whatever the problems associated with the pluralist security framework **there were at least formal and clear demarcations**. This has the consequence of **entrenching international power inequalities** and allowing for a shift towards a hierarchical international order in which the citizens in weak or unstable states may arguably have even less freedom or power than before. Radical critics of contemporary security policies, such as human security and humanitarian intervention, argue that we see an assertion of Western power and the creation of liberal subjectivities in the developing world. For example, see Mark Duffield’s important and insightful contribution to the ongoing debates about contemporary international security and development. Duffield attempts to provide a coherent empirical engagement with, and theoretical explanation of, these shifts. Whilst these shifts, away from a focus on state security, and the so-called merging of security and development are often portrayed as positive and progressive shifts that have come about because of the end of the Cold War, Duffield argues convincingly that these shifts are highly problematic and unprogressive. For example, the rejection of sovereignty as formal international equality and a presumption of nonintervention has eroded the division between the international and domestic spheres and led to an international environment in which Western NGOs and powerful states have a major role in the governance of third world states. Whilst for supporters of humanitarian intervention this is a good development, Duffield points out the depoliticising implications, drawing on examples in Mozambique and Afghanistan. Duffield also draws out the problems of the retreat from modernisation that is represented by sustainable development. The Western world has moved away from the development policies of the Cold War, which aimed to develop third world states industrially. Duffield describes this in terms of a new division of human life into uninsured and insured life. Whilst we in the West are ‘insured’ – that is we no longer have to be entirely self-reliant, we have welfare systems, a modern division of labour and so on – sustainable development aims to teach populations in poor states how to survive in the absence of any of this. Third world populations must be taught to be self-reliant, they will remain uninsured. Self-reliance of course means **the condemnation of millions to** **a barbarous life of inhuman bare survival**. Ironically, although sustainable development is celebrated by many on the left today, by leaving people to fend for themselves rather than developing a society wide system which can support people, sustainable development actually leads to a less human and humane system than that developed in modern capitalist states. Duffield also describes how many of these problematic shifts are embodied in the contemporary concept of human security. For Duffield, we can understand these shifts in terms of Foucauldian biopolitical framework, which can be understood as a regulatory power that seeks to support life through intervening in the biological, social and economic processes that constitute a human population (2007: 16). Sustainable development and human security are for Duffield technologies of security which aim to *create* self-managing and self-reliant subjectivities in the third world, which can then survive in a situation of serious underdevelopment (or being uninsured as Duffield terms it) without causing security problems for the developed world. For Duffield this is all driven by a neoliberal project which seeks to control and manage uninsured populations globally. Radical critic Costas Douzinas (2007) also criticises new forms of cosmopolitanism such as human rights and interventions for human rights as a triumph of American hegemony. Whilst we are in agreement with critics such as Douzinas and Duffield that these new security frameworks cannot be empowering, and ultimately lead to more power for powerful sta**tes**, we need to understand why these frameworks have the effect that they do. We can understand that these frameworks have political limitations without having to look for a specific plan on the part of current powerful states. In new security frameworks such as human security we can see the political limits of the framework proposed by critical and emancipatory theoretical approaches.

**Instrumental rationality does not cause genocide**

Melvin **Dubnick**, Professor of Political Science and Director of the Masters of Public Administration Program at the University of New Hampshire. sept-oct **2k**. (Public Administration Review, Vol 60 No. 5 pp 469. “The Case for Administrative Evil: A Critique)

In brief, Adams and Balfour extended the interpretive historical logic of Hilberg, Arendt, and Bauman to meet the needs of their distinctive argument, In pursuing a logic close to Bauman's, however, they have subjected themselves to a criticism leveled at his approach. In an otherwise Sympathetic review of Bauman’s work, Todorov critiques his inability to make obvious conceptual and historical distinctions as he applied his argument. “Is it really possible to believe, if we take the word ‘rationality’ in its broad sense that our modem society is the only one endowed with reason?" And if we view modern rationality in a narrow sense, “is there really no difference between the thought processes of Einstein and those of Himmler?" Similarly, was there no between the rationality and technology driving the organization of German and American concentration camps? (Todorov 1990, 32). Todorov’s questions can apply as well to the presentation and analysis of historical evidence in UAE. As important, however, is what Adams and Balfour did not do to enhance the scholarly credibility of their work. The problematic nature of historical scholarship and the demands of scholarly credibility in argumentative contexts require much more of Adams and Balfour than merely citing authoritative sources. In fact, the contentious nature of scholarly debates within Holocaust studies makes it to designate any source as authoritative-a situation not unlike the general condition of most fields associated with “socio-historical” studies. Under such circumstances, any author asserting a history-based claim must put forth credible backing for its warrants. But this does not mean it is impossible to make controversial claims based on evidence culled from the Holocaust. Here the model to follow is provided by one of the most debated works on the Holocaust, Daniel Goldhagen's Hírlerk Willing Executíoners (1996). Realizing the Controversial nature of his argument, Goldhagen is careful to note competing perspectives and makes efforts to subject them to the same “empirical tests” he offers in support of his own contentions. He reasserts this position in a response to his critics issued just prior to publication of the book's German edition, arguing that the work “is not a polemic about German ‘national character’ or ‘collective guilt.' It is a scholarly investigation that offers a new interpretation of the Holocaust” (Goldhagen 1996, ch.l5). Goldhagen then faults many of his critics for not responding to the central issues he raises with “systematic counter-evidence and arguments” (Goldhagen l998!1996, 133). Regardless of one’s ultimate assessment of Goldhagen’s substantive claims, what he presents meets the standards of credible scholarship challengeable on its warrants and merits. The argument for administrative evil made by Adams and Balfour also requires such an approach, but the authors do not deliver. In relying on the Holocaust to support their claim regarding administrative evil, Adams and Balfour take note of two popular conceptual frameworks for understanding the role of public administrators in the Holocaust the “intentional” and “ŕunctiona1“ interpretations) and judge both lo be useful but insufficient for comprehending what really took place (56-60). They contend those frameworks downplay the role played by the administrative evil of technical rationality in making agency adaptation to the operational demands of the Holocaust so easy to achieve. [open quote] Understandably. history has focused on the brutality of the SS, the Gestapo, and the infamous concentration camp doctors and guards. Much less attention has been given to the thousands of public such as those in the Finance Ministry who engaged in confiscations, the armament inspectors who organized forced labor, or municipal authorities who helped create and maintain ghettos and death camps throughout Germany and Eastern Europe. The destruction of the Jews was procedurally indistinguishable from any other modern organizational process (66: emphasis added). Adams and Balfour face no problem in historical evidence to support their view. But they fail to deal with the alternative theories that compete, conflict, and even undermine their claims based on the same historical data. Breton and Winthrope (1986). for example, present a model that credits intrabureau and interagency competition as the driving force behind administrative involvement. Others stress the capacity of otherwise ordinary people to engage in the most vicious and inhumane acts against others. Sofsky (1996. 240), for example, is straightforward in his assumption about human nature: “Inhumanity is always a human possibility. For it to erupt. all that is required is absolute license over the other.” In Christopher Browning’s study of citizen-soldiers-turned-killers, social and psychological circumstances ruled, but these were not the product of some modem rationalistic culture. Instead, the members of that unit were men at W101’ subject to peer pressure, a siege mentality, and a constant barrage of patriotic and ideologica] call to arms, “If the men of Reserve Police Battalion 101 could become killers under such circumstances, what group of men cannot?” (Browning 1992, 189). In more direct conflict with the administrative evil claim is Godhagen’s argument that the key to understanding why ordinary Germans willingly engaged in the genocide is found in the unique history and culture of the German people. According to Goldhagen (1996), what drove the Holocaust was not some scientificanalytic mind-set, but a deeply rooted and vicious form of anti-Semitism that was waiting for someone like Hitler to unleash its destructive energy. Still another set of challenges to the administrative evil thesis emerges from several works raising questions about the assumed technical rationality of the Final Solution. A strong case can be made for the claim that the Holocaust was implemented within a context of antirationalism and irrationalism (Proctor 1988; Harrington 1996). It is not the logic of rationality, but the logic of psychosis that needs lo be emphasized. Summarizing the position of Holocaust historian Saul Friedländer, Glass contends: If the explanation of the Holocaust rests on theories of instrumental rationality, on bureaucratic processing or functionalism, it is difficult to see the instrumental properties in gas chambers and crematoria. Rationality and economic concems may describe some of the motives behind medical experiments and the use by German industry of slave labor. But the death of those who perished in gas chambers possessed no functional utility: no economic gains or rational self-interest could be ascribed to the genocide. Annihilation of Jews contributed nothing to the war effort; in fact. great resources, particularly railroad stock, was [sic] diverted from both fronts to transport Jews to the killing centers. Bodies that could have been instrumental in the war effort were gassed and incinerated. It makes no sense to attribute a rational component to these kinds of “special actions” (1997, 162).

#### And, it doesn’t come first – the alt is nihilism – internal link turns value to life

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That Heidegger transforms happiness, classically understood as the completion of human nature, into the anxiety of being-towards-death may be deduced from the fact that it is death which signifies Dasein's "authentic potentiality-for-being-a-whole," (45) **with the consequence that ethical virtue is replaced by Dasein's pure resolve in the face of nothing**. That Heidegger's conception of care may likewise be construed as an impoverished version of the Platonic doctrine of eros is plainly evident by its purely formal structure, which renders it devoid of any capacity to rank-order objects of desire. (46) By way of contrast, Platonic eros moves hierarchically between the human and the divine (that is to say, between the base and the noble), whereas Heideggerian care moves horizontally, we should even say "horizonally," in the sense that "the ontological meaning of care is temporality," and "the existential-temporal condition of the possibility of the world lies in the fact that temporality, as an ecstatical unity [of future, past, and, present], has something like a horizon." (47) That horizon is circumscribed by Dasein's thrownness into the future, and Dasein's ownmost future is, of course, its death. Hence we read, "The primary phenomenon of primordial and authentic temporality is the future," and "The ecstatical character of the primordial future lies precisely in the fact that the future closes one's potentiality-for-being." (48) It is therefore through Dasein's resolute anticipation of its death that the meaning of being reveals itself as the "temporalizing of temporality." (49) But temporality reduced to itself is stripped of all love, beauty, and value. **It means simply the opening up of one's future possibilities, which is to say that the authentic meaning of being is without value, and being without value is meaningless, which is finally to say that the meaning of being terminates in nihilism.** (50) Heideggerian fundamental ontology does not therefore escape from Nietzschean chaos. Rather, it returns us to it, only without the noble illusion that life requires us to make it lovable. (51) **And this remains the case no matter whether we prefer the early language of "resoluteness" or Heidegger's later "turn" into Gelassenheit or "releasement."** For insofar as Heidegger's turn (Kehre) is meant to free the meaning of being from its attachment to any notion of active or passive willing, for example, of the kind indicated by the language of resolution, it releases us ever deeper into the nullity within which the world comes to presence. (52)

So much for the meaning of being. Despite his revolutionary proclamations, Heidegger holds us in a double bind. On the one hand, the history of metaphysics (and its completion in the era of modern technology) (53) grips us in a nihilistic forgetting of the question of being. On the other hand, fundamental ontology empties the meaning of being of value, and this too is nihilism. (54) What matters in the last analysis, however, is not whether Heidegger is a nihilist, but whether his teaching is the true teaching. And if, as Leo Strauss once said, our capacity to evaluate Heidegger's teaching comes down to a question of competence, our measure of competence depends on our capacity for valuation, or more accurately, for prudential judgment or a capacity to discern what makes it right. (55) Yet, on the basis of Heidegger's existential analysis, there can be no such ground of legitimation apart from the pure instance of resolution (Entschluss). And this is because fundamental ontology cannot tell us on the basis of its questioning into being why such questioning should be desirable, or why we should want to invoke a spiritual revolution that founds itself on the abstract question of being. **Instead, there must be some more primordial notion of the good that first directs us to the question of being**--as Nietzsche would say, to the question of being as a value. In saying this, however, I do hot wish to suggest that there must be some objective or quasi-objective standard of the good that is somehow "out there" waiting to be discovered, as if it were a vein of gold embedded in the rock. Yet it is plainly evident that a more primordial access to the good must underlie any capacity for rank-ordering values or existential possibilities, and it is precisely this feature of human experience that fundamental ontology abandons or occludes by abstracting the question of being from the so-called ontic or inauthentic dimension of ordinary experience.

Stated simply, **there is no reason why the question of being should be foundational for the future of philosophy**. Yet it must be said that Heidegger never relinquished his revolutionary aspirations for bringing metaphysics to its end. For as clearly as the text of 1927 stated the need to put the future of philosophy on "new foundations" (neue Fundamente), (56) Heidegger persisted up to and through 1959 in the hope that the turn to the question of being would promise a "new ground and foundation" (neuen Grand und Boden) upon which it might be possible to confront the epoch of metaphysical nihilism. (57) Of course, it may be entirely true that our releasement into the mystery of being grants us "the possibility of dwelling in the world in a totally different way." (58) **The question is why this should be at all desirable, especially if the thinking of being expires in nihilism.** And it is here that we find Heidegger without argument. As we read in a relevant passage from the "Letter on Humanism" of 1949:

Whether the realm of the truth of being is a blind alley or whether

it is the free space in which freedom conserves its essence is

something each one may judge after he himself has tried to go the

designated way, or even better, after he has gone a better way,

that is, a way befitting the question. (59)

I note in passing that we shall also have to judge whether the essence of freedom is itself a blind alley. But this just affirms my larger point. Heidegger returns us to the question of competence. But since fundamental ontology cannot stand the question of competence, we are left simply with a decision that leaves the future of philosophy hanging on the angst-ridden resolve that affirms itself in the face of death. (60) And this is Cartesianism all over again, in the sense that Heidegger's subordination of ethics to ontology--the decisive severing of the human relation to the good from the foundations of philosophy--amounts to the most radical late modern expression of the Cartesian legacy. **Rather than saving us from our fall into modern decadence, Heidegger's thought results finally in a deepening of the modern crisis.**

#### And, the alt fails – thought is too engrained

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\*\* Gestell (or sometimes Ge-stell) is a [German](http://en.wikipedia.org/wiki/German_language) word used by twentieth century German [philosopher](http://en.wikipedia.org/wiki/Philosophy) [Martin Heidegger](http://en.wikipedia.org/wiki/Martin_Heidegger) to describe what lies behind or beneath modern [technology](http://en.wikipedia.org/wiki/Technology).[[1]](http://en.wikipedia.org/wiki/Gestell#cite_note-0)

Moreover, Heidegger maintains: ‘‘Readiness-to-hand is the way in which entities as they are ‘in themselves’ are defined ontologico-categorially.’’47 According to Heidegger’s fundamental phenomenology, which he unfolds in detail in Being and Time and reaffirms a decisive part of in ‘‘The Question Concerning Technology,’’ nature is ‘‘primally’’ revealed in its ‘‘usability’’ and ‘‘serviceability-for-;’’ that is to say, **‘‘**nature’’ is a resource long before the actual rise of modern and ancient technology, namely simultaneously with the very origin of human beings. That something is primordially revealed in its ‘‘usability’’ and ‘‘serviceability-for-’’ does not imply that it is actually used or serves accordingly, but that it is revealed as standing ready to be utilized in the corresponding context. As such, it is revealed as ‘‘standing-reserve.’’ This, for example, also corresponds to the empirical fact that prehistoric humans settled close to woods and rivers. In these areas they always had stockpiles of timber, power for transportation, and easy access to drinking water. Based on ‘‘The Question Concerning Technology’’ and completed through references to Being and Time, we now have an interpretation of the origin of the essence of modern technology, which traces back the characteristic revealing of das Gestell to the beginning of humankind.48 This does not imply that prehistoric technology is identical with contemporary technology; rather the third genealogy of the rule of das Gestell suggests that when ‘‘we still more primally’’ try to consider the origin of the challenging revealing characterizing the rule of das Gestell, we in fact rediscover that it is connected to being human. The rule of das Gestell has challenged humans as long as they have existed. In this sense, humans first and foremost exist under the rule of das Gestell.49 This also entails a revision and precision of Heidegger’s renowned formula characterizing the world-connectedness of human existence: being-in-the-world. Based on the comparison of ‘‘The Question Concerning Technology’’ and Being and Time, human existence is better described as being-under-the-spell-of-das-Gestell. Trying to understand the various more-or-less explicit accounts of the origin of the rule of das Gestell in ‘‘The Question Concerning Technology’’ and the resulting ambiguity is not just an exercise, nor only a way to criticize Heidegger. Rather, it is a way to better understand the nuances and layers in Heidegger’s thinking concerning technology and to warn against a short-sighted ‘‘saving’’ from an alleged danger. If the challenging revealing of nature, which characterizes the rule of das Gestell is taken seriously, then we cannot avoid it just by revolutionizing our technology, instead, we must revise our very human existence.

#### And, their ontology is totalizing – causes totalitarianism

Gauthier 04 (David, Phd Candidate in Poly Sci @ Lousiana State, "MARTIN HEIDEGGER, EMMANUEL LEVINAS, AND THE POLITICS OF DWELLING," http://etd.lsu.edu/docs/available/etd-11052004-163310/unrestricted/Gauthier\_dis.pdf)

As this chapter has noted, Levinas’s emphasis on “the reality of persecuted people in the daily history of the world” informs his critique of Heidegger. Levinas’s critique of Heideggerian ontology identifies how the ontological, anti-humanistic, and pagan cast of the latter’s thought is inherently **totalizing**. This can be viewed as the first of Levinas’s two principal objections to fundamental ontology. The second major objection, which I have ignored until now, relates to its political consequences. In sum, **fundamental ontology necessarily leads to tyranny**: “Even though it opposes the technological passion issued forth from the forgetting of Being hidden by the existent, Heideggerian ontology, which subordinates the relationship with the Other to the relationship with Being in general, remains under obedience to the anonymous and **leads inevitably to another power, to imperialist domination, to tyranny**.” 62 Viewed from the perspective of Levinas’ critique of the Occidental ontological tradition, such a conclusion is to be expected. For Levinas, Heideggerian Being represents merely the latest arche utilized by Western ontologists to eliminate the alterity of the Other and promote the freedom of the self. As the political manifestation of the totalization of the Other that ontology perpetrates in the realm of thought, **tyranny represents the diluted essence of ontological politics**. Much as ontological thought facilitates the domination of the other person by the autonomous ego, so too does it enable the state to totalize its “Other”– its subjects – in a comparatively comprehensive manner: “For the philosophical tradition the conflicts between the same and the other are resolved by theory whereby the other is reduced to the same – or, concretely, by the community of the state where by anonymous power, though it be intelligible, the I rediscovers war in the tyrannic oppression it undergoes from the totality.” 63 In this light, the tyrannical rule of the modern state extends into the political realm the violent, thematizing tendencies that characterize ontology generally. Nor is this conclusion shocking in light of the anti-humanistic cast of Heidegger’s thought. In the nineteenth and twentieth centuries, anti-humanistic thinkers often posited grandiose schemes designed to put an end to the alienation supposedly engendered by subjective humanism. Much like earlier theoretical anti-humanists such as Marx and Nietzsche, Heidegger accuses past humanisms of contributing to modern estrangement by overlooking a pivotal aspect of the human condition. 64 A key difference between Heidegger and his anti-humanistic forebears lies in the fact that, for him, it is metaphysical inquiry into the Being of beings that engenders modern alienation rather than philosophical idealism or slave-morality. Nonetheless, the comparison remains instructive: like Marx, Heidegger anticipates a future historical epoch in which man will finally recover his original ontological unity free from the obfuscating effect of past philosophical distortions. And like Marx and Nietzsche, Heidegger provides an ample supply of metaphysical pathos that **unwittingly complements the violent political objectives of totalitarian political movements**. In this sense, Heidegger’s rectorship merely repeats the Marxist tragedy as farce.

#### And, abandoning empiricsm causes them to foreget being

Latour 2 – Professor, Paris Institute of Political Studies (Bruno, Environmentalism, ed Direk, p 303)

Who has forgotten Being? No one, no one ever has, otherwise Nature would be truly available as a pure 'stock'. Look around you: scientific objects are circulating simultaneously as subjects objects and discourse. Networks are full of Being. As for machines, they are laden with subjects and collectives. How could a being lose its difference, its incompleteness, its mark, its trace of Being? This is never in anyone's power; otherwise we should have to imagine that we have truly been modern, we should be taken in by the upper half of the modern Constitution. Has someone, however, actually forgotten Being? Yes: anyone who really thinks that Being has really been forgotten. As Levi-Strauss says, 'the barbarian is first and foremost the man who believe in barbarism.' (Levi-Strauss, [1952] 1987. p. 12). Those who have failed to undertake empirical studies of sciences, technologies, law, politics, economics, religion or fiction have lost the traces of Being that are distributed everywhere among beings. If, scorning empiricism, you opt out of the exact sciences, then the human sciences, then traditional philosophy, then the sciences of language, and you hunker down in your forest -- then you will indeed feel a tragic loss. But what is missing is you yourself, not the world! Heidegger's epigones have converted that glaring weakness into a strength. 'We don't know anything empirical, but that doesn't matter, since your world is empty of Being. We are keeping the little flame of Being safe from everything, and you, who have all the rest, have nothing.' On the contrary: we have everything, since we have Being, and beings, and we have never lost track of the difference between Being and beings. We are carrying out the impossible project undertaken by Heidegger, who believed what the modern Constitution said about itself without understanding that what is at issue there is only half of a larger mechanism which has never abandoned the old anthropological matrix. **No one can forget Being, since there has never been a modern world**, or, by the same token, metaphysics. We have always remained pre-Socratic, pre-Cartesian, pre-Kantian, pre-Nietzschean. No radical revolution can separate us from these pasts, so there is no need for reactionary counter-revolutions to lead us back to what has never been abandoned. Yes, Heraclitus is a surer guide than Heidegger: 'Einai gar kai entautha theous.'

#### Focus on deterrence and democracy is key to averting crisis escalation – reject infinite root causes that debilitate action

**Moore 4** – Professor of Law at the University of Virginia. He formerly served as the first Chairman of the Board of the United States Institute of Peace and as the Counselor on International Law to the Department of State. (John Norton, Winter, “Beyond the Democratic Peace: Solving the War Puzzle”, 44 Va. J. Int'l L. 341, Lexis Law)

If major interstate war is predominantly a product of a synergy between a potential nondemocratic aggressor and an absence of effective deterrence, what is the role of the many traditional "causes" of war? Past, and many contemporary, theories of war have focused on the role of specific disputes between nations, ethnic and religious differences, arms races, poverty and social injustice, competition for resources, incidents and accidents, greed, fear, perceptions of "honor," and many other factors. Such factors may well play a role in motivating aggression or generating fear and manipulating public opinion. The reality, however, is that while some of these factors may have more potential to contribute to war than others, there may well be an infinite set of motivating factors, or human wants, motivating aggression. It is not the independent existence of such motivating factors for war but rather the circumstances permitting or encouraging high-risk decisions leading to war that is the key to more effectively controlling armed conflict. And the same may also be true of democide. The early focus in the Rwanda slaughter on "ethnic conflict," as though Hutus and Tutsis had begun to slaughter each other through spontaneous combustion, distracted our attention from the reality that a nondemocratic Hutu regime had carefully planned and orchestrated a genocide against Rwandan Tutsis as well as its Hutu opponents. n158 Certainly if we were able to press a button and end poverty, racism, religious intolerance, injustice, and endless disputes, we would want to do so. Indeed, democratic governments must remain committed to policies that will produce a better world by all measures of human progress. The broader achievement of democracy and the rule of law will itself assist in this progress. No one, however, has yet been able to demonstrate the kind of robust correlation with any of these "traditional" causes of war that is reflected in the "democratic peace." Further, given the difficulties in overcoming many of these social problems, an approach to war exclusively dependent on their solution may doom us to war for generations to come.

 [\*394]  A useful framework for thinking about the war puzzle is provided in the Kenneth Waltz classic Man, the State and War, n159 first published in 1954 for the Institute of War and Peace Studies, in which he notes that previous thinkers about the causes of war have tended to assign responsibility at one of the three levels of individual psychology, the nature of the state, or the nature of the international system. This tripartite level of analysis has subsequently been widely copied in the study of international relations. We might summarize my analysis in this classical construct by suggesting that the most critical variables are the second and third levels, or "images," of analysis. Government structures, at the second level, seem to play a central role in levels of aggressiveness in high-risk behavior leading to major war. In this, the "democratic peace" is an essential insight. The third level of analysis, the international system, or totality of external incentives influencing the decision to go to war, is also critical when government structures do not restrain such high-risk behavior on their own. Indeed, nondemocratic systems may not only fail to constrain inappropriate aggressive behavior, they may even massively enable it by placing the resources of the state at the disposal of a ruthless regime elite. It is not that the first level of analysis, the individual, is unimportant - I have already argued that it is important in elite perceptions about the permissibility and feasibility of force and resultant necessary levels of deterrence. It is, instead, that the second level of analysis, government structures, may be a powerful proxy for settings bringing to power those who are disposed to aggressive military adventures and in creating incentive structures predisposed to high-risk behavior. We might also want to keep open the possibility that a war/peace model focused on democracy and deterrence might be further usefully refined by adding psychological profiles of particular leaders as we assess the likelihood of aggression and levels of necessary deterrence. Nondemocracies' leaders can have different perceptions of the necessity or usefulness of force and, as Marcus Aurelius should remind us, not all absolute leaders are Caligulas or Neros. Further, the history of ancient Egypt reminds us that not all Pharaohs were disposed to make war on their neighbors. Despite the importance of individual leaders, however, the key to war avoidance is understanding that major international war is critically an interaction, or synergy, of certain characteristics at levels two and three - specifically an absence of  [\*395]  democracy and an absence of effective deterrence.

Yet another way to conceptualize the importance of democracy and deterrence in war avoidance is to note that each in its own way internalizes the costs to decision elites of engaging in high-risk aggressive behavior. Democracy internalizes these costs in a variety of ways including displeasure of the electorate at having war imposed upon it by its own government. And deterrence either prevents achievement of the objective altogether or imposes punishing costs making the gamble not worth the risk. n160

III. Testing the Hypothesis  
Hypotheses, or paradigms, are useful if they reflect the real world better than previously held paradigms. In the complex world of foreign affairs and the war puzzle, perfection is unlikely. No general construct will fit all cases even in the restricted category of "major interstate war;" there are simply too many variables. We should insist, however, on testing against the real world and on results that suggest enhanced usefulness over other constructs. In testing the hypothesis, we can test it for consistency with major wars. That is, in looking, for example, at the principal interstate wars in the twentieth century, did they present both a nondemocratic aggressor and an absence of effective deterrence? n161 And although it, by itself, does not prove causation, we might also want to test the hypothesis against settings of potential wars that did not occur. That is, in non-war settings, was there an absence of at least one element of the synergy? We might also ask questions about the effect of changes on the international system in either element of the synergy. That is, what, in general, happens when a totalitarian state makes a transition to stable democracy or vice versa? And what, in general, happens when levels of deterrence are dramatically increased or decreased?

## 1ar

### 1ar solvency/bottlenecks

#### Manufacturing capability will develop as the industry expands.

Howard, ‘7

[Angie, Vice President -- NEI, 2-15, “Achieving Excellence in Human Performance: Nuclear Energy Training and Education,” http://nei.org/newsandevents/speechesandtestimony/2007/americannuclearsociety/]

Finally, we are seeing the first signs of revival in the supply chain for new nuclear plant construction. In manufacturing, for instance, Babcock & Wilcox recently renewed its federal accreditation for manufacturing nuclear-grade components. And there is manufacturing capability overseas in Japan and France. U.S. nuclear companies have already placed orders with Japanese companies for long-lead, heavy-forgings for reactor components. The supply chain will respond as market demand dictates. The more it looks like new nuclear plants will be built, the more U.S. capability will be developed. Today, 14 companies and consortia have announced that they are preparing to submit license applications to the Nuclear Regulatory Commission to build up to 32 new reactors. These companies are selecting technologies from two NRC-certified reactor designs, and two more designs that are under review by the NRC. These application submittals are expected beginning in 2007. Every major nuclear fleet operator is involved in some way, as well as some newcomers to the industry. Different companies are moving at different speeds, but the momentum is real.

#### The plan solves -- building new nuclear plants attracts labor.

Howard, ‘7

[Angie, Vice President -- Nuclear Energy Institute, 2-5, “Achieving Excellence in Human Performance: Nuclear Energy Training and Education”, <http://www.nei.org/newsandevents/speechesandtestimony/2007/americannuclearsocietyextended>]

Yes, we do have a looming workforce crisis. The average age of employees in the industry is 48 years—one of the oldest of any major industries in the country. Retirement and attrition will create the need to essentially re-staff the existing fleet over the next 10 years. We need to get the younger generation into the industry. But the industry is hiring, and we have employment opportunities that are attractive to talented young people, both in the craft and in the professional engineering and management fields. Research among college engineering students has shown that the prospect of building new plants is the single most important factor in attracting new talent to the nuclear energy industry. Social responsibility, creativity, learning opportunities, compensation—these are the other priorities when young people look for in a career today.

### 1ar util

#### Every study of credible social theories concludes consequentialism is good---Scientific studies of biology, evolution, and psychology prove that deontological proclivities are only illogical layovers from evolution

**Greene 2010** – Joshua, Associate Professor of Social science in the Department of Psychology at Harvard University (The Secret Joke of Kant’s Soul published in Moral Psychology: Historical and Contemporary Readings, accessed: www.fed.cuhk.edu.hk/~lchang/material/Evolutionary/Developmental/Greene-KantSoul.pdf)

What turn-of-the-millennium science is telling us is that human moral judgment is not a pristine rational enterprise, that our moral judgments are driven by a hodgepodge of emotional dispositions, which themselves were shaped by a hodgepodge of evolutionary forces, both biological and cultural. Because of this, it is exceedingly unlikely that there is any rationally coherent normative moral theory that can accommodate our moral intuitions. Moreover, anyone who claims to have such a theory, or even part of one, almost certainly doesn't. Instead, what that person probably has is a moral rationalization. It seems then, that we have somehow crossed the infamous "is"-"ought" divide. How did this happen? Didn't Hume (Hume, 1978) and Moore (Moore, 1966) warn us against trying to derive an "ought" from and "is?" How did we go from descriptive scientific theories concerning moral psychology to skepticism about a whole class of normative moral theories? The answer is that we did not, as Hume and Moore anticipated, attempt to derive an "ought" from and "is." That is, our method has been inductive rather than deductive. We have inferred on the basis of the available evidence that the phenomenon of rationalist deontological philosophy is best explained as a rationalization of evolved emotional intuition (Harman, 1977). Missing the Deontological Point I suspect that rationalist deontologists will remain unmoved by the arguments presented here. Instead, I suspect, they will insist that I have simply misunderstood what Kant and like-minded deontologists are all about. Deontology, they will say, isn't about this intuition or that intuition. It's not defined by its normative differences with consequentialism. Rather, deontology is about taking humanity seriously. Above all else, it's about respect for persons. It's about treating others as fellow rational creatures rather than as mere objects, about acting for reasons rational beings can share. And so on (Korsgaard, 1996a; Korsgaard, 1996b). This is, no doubt, how many deontologists see deontology. But this insider's view, as I've suggested, may be misleading. The problem, more specifically, is that it defines deontology in terms of values that are not distinctively deontological, though they may appear to be from the inside. Consider the following analogy with religion. When one asks a religious person to explain the essence of his religion, one often gets an answer like this: "It's about love, really. It's about looking out for other people, looking beyond oneself. It's about community, being part of something larger than oneself." This sort of answer accurately captures the phenomenology of many people's religion, but it's nevertheless inadequate for distinguishing religion from other things. This is because many, if not most, non-religious people aspire to love deeply, look out for other people, avoid self-absorption, have a sense of a community, and be connected to things larger than themselves. In other words, secular humanists and atheists can assent to most of what many religious people think religion is all about. From a secular humanist's point of view, in contrast, what's distinctive about religion is its commitment to the existence of supernatural entities as well as formal religious institutions and doctrines. And they're right. These things really do distinguish religious from non-religious practices, though they may appear to be secondary to many people operating from within a religious point of view. In the same way, I believe that most of the standard deontological/Kantian self-characterizatons fail to distinguish deontology from other approaches to ethics. (See also Kagan (Kagan, 1997, pp. 70-78.) on the difficulty of defining deontology.) It seems to me that consequentialists, as much as anyone else, have respect for persons, are against treating people as mere objects, wish to act for reasons that rational creatures can share, etc. A consequentialist respects other persons, and refrains from treating them as mere objects, by counting every person's well-being in the decision-making process. Likewise, a consequentialist attempts to act according to reasons that rational creatures can share by acting according to principles that give equal weight to everyone's interests, i.e. that are impartial. This is not to say that consequentialists and deontologists don't differ. They do. It's just that the real differences may not be what deontologists often take them to be. What, then, distinguishes deontology from other kinds of moral thought? A good strategy for answering this question is to start with concrete disagreements between deontologists and others (such as consequentialists) and then work backward in search of deeper principles. This is what I've attempted to do with the trolley and footbridge cases, and other instances in which deontologists and consequentialists disagree. If you ask a deontologically-minded person why it's wrong to push someone in front of speeding trolley in order to save five others, you will get characteristically deontological answers. Some will be tautological: "Because it's murder!" Others will be more sophisticated: "The ends don't justify the means." "You have to respect people's rights." But, as we know, these answers don't really explain anything, because if you give the same people (on different occasions) the trolley case or the loop case (See above), they'll make the opposite judgment, even though their initial explanation concerning the footbridge case applies equally well to one or both of these cases. Talk about rights, respect for persons, and reasons we can share are natural attempts to explain, in "cognitive" terms, what we feel when we find ourselves having emotionally driven intuitions that are odds with the cold calculus of consequentialism. Although these explanations are inevitably incomplete, there seems to be "something deeply right" about them because they give voice to powerful moral emotions. But, as with many religious people's accounts of what's essential to religion, they don't really explain what's distinctive about the philosophy in question.

#### They can't solve anthro

**Werth 1998** – department of philosophy at Cleveland State University (Lee F., Journal of Applied Philosophy, Volume 15 No. 1, “The Anthropocentric Predicament and the Search for Extra- terrestrial Intelligence (The Universe as Seen Through Our Eyes Darkly)”, pages 83-4, WEA)

Those who study comparative psychology are aware of the perils of anthropomorphism, particularly with respect to primates closely related to us. Do chimpanzees truly understand and use language? If an orangutan looks into a mirror and sees a reflection of herself with a spot of red paint on her forehead, and then attempts to remove the paint by wiping her brow, does this entail a concept of self or at least the knowledge that the reflected image is her reflection?[1] Monkeys seem unable to recognise `their' reflections, unlike orangutans. Clearly, we are unable to understand the consciousness of another species except by generalising from human experience. Empathic understanding, even when grounded in empirical data as in the mirror experiment, has limited utility. **We are permanently stuck in an anthropocentric predicament.**

#### Humans are morally distinct

Linker, ‘5 – Damon, Animal Rights: Contemporary Issues (Compilation), Thompson-Gale, p. 23-25.

That such arguments have found an audience at this particular cultural moment is not so hard to explain. Our popular and elite media are saturated with scientific and quasi-scientific reports claiming to prove the basic thesis of the animal-rights movement. Having once believed ourselves to be made in the image of God, we now learnfrom the human genome project, the speculations of evolutionary psychologists, and numerous other sources-that humankind, too, is determined by genetic predispositions and the drive to reproduce. We are cleverer than other animals, to be sure, but the difference is one of degree, not of kind. As Verlyn Klinkenborg wrote on the editorial page of the New York Times, "Again and again, after starting from an ancient premise of radical differences between humans and other creatures, scientists have discovered profound similarities." But have they? Genetics and evolutionary biology may be, indeed, extremely effective at identifying the traits we share with other species. But chemistry, for its part, can tell us about the ways in which we resemble chunks of charcoal, and physics can point to fundamental similarities between a man and all the matter in the universe. The problem with these observations is not that they are untrue. It is that they shed no light whatsoever on, or rather they are designed to obfuscate, what makes humanity unique as a species-the point on which an answer to the likes of Peter Singer and Steven Wise must hinge. For his part, Singer commits the same error that John Stuart Mill found in the system of Jeremy Bentham: he makes no distinction among kinds of pleasure and pain. That animals feel emotions can hardly be doubted; but human beings experience life, even at its most "animalistic" level, in a way that fundamentally differs from other creatures. Thus, Singer can account for the pain that humans and animals alike experience when they are hungry and the pleasure they feel when they eat, but he cannot explain, for example, a person's choice to starve himself for a cause. He understands that human beings, like animals, derive pleasure from sex and sometimes endure pangs of longing when they are deprived of it, but he cannot explain how or why, unlike animals, some choose to embrace celibacy for the sake of its noble purity. He is certainly attuned to the tendency we share with animals to fear and avoid pain and bodily harm, but he is incapable of understanding a man's willingness to face certain death on the battlefield when called upon to do so by his country. Still less can he explain why stories of such sacrifice sometimes move us to tears. In much the same way, the evidence adduced by Steven Wise to suggest that primates are capable of forming rudimentary plans and expectations fails to demonstrate they are equal to human beings in any significant sense. Men and women use their "autonomy" in a world defined not by the simple imperatives of survival but by ideas of virtue and vice, beauty and ugliness, right and wrong. Modern scientific methods, including those of evolutionary psychology, have so far proved incapable of detecting and measuring this world, but that does not make any less real the experience that takes place within it. Western civilization has tended to regard animals as resembling things more than human beings precisely because, like jnanimate objects, and unlike the authors of the real Magna Carta, animals have no perception of morality. Until the day when a single animal stands up and, led by a love of justice and a sense of self-worth, insists that the world recognize and respect its dignity, all the philosophical gyrations of the activists will remain so much sophistry. Putting Human Interests First **None of this**, of course, **exempts human beings from behaving decently toward animals**, but it does provide a foundation, when necessary, for giving pride of place to the interests of human beings. This has particular relevance for biomedical research. Among the most vociferous critics of the USDA's capitulation to the animal-rights movement were the nation's leading centers of medical science. The National Association for BiOlnedical Research estimated that the new regulations would cost universities alone as much as $280 million a year. Nor is the issue simply one of dollars. As Estelle Fishbein, counsel for Johns Hopkins University, recently argued in the SHOULD ANIMALS HAVE THE SAME STATUS AS PEOPLE? Journal of the American Medical Association, Genetic research promises to bring new therapies to alleviate human suffering from the acquired immunodeficiency syndrome, Parkinson's disease and other neurological diseases, and virtually all other human and animal diseases. However, the promise of this new era of medical research is highly dependent on the ready availability of mice, rats, and birds. 2S Far from being a mere administrative hassle, she concluded, the new regulations would "divert scarce grant funds from actual research use, distract researchers from their scientific work, and overload them with documentation requirements. II Serious as this threat is, a still more troubling one is the effect that the arguments of animal-rights proponents may have, in the long term, on our regard for human life itself. Peter Singer's apPOintment at Princeton caused a stir not because of his writings about animals but because of his endorsement of euthanasia, unrestricted abortion, and, in some instances, infanticide. But all of his views, as he himself maintains, are of a piece. The idea that "human infants and retarded adults II are superior to animaLs can only be based, he writes, on "a bare-faced-and morally indefensible-prejudice for members of our own species. II In much the same way, Steven Wise urges us to reject absolute demarcations between species and instead focus on the capacities of individual humans and individual apes. If we do that, we will find that many adult chimpanzees and bonobos are far more "human" than newborn and mentally disabled human beings, and thus just as worthy of being recognized as IIpersons." Though Wise's inference is the opposite of Singer's-he does not wish to deprive underdeveloped humans of rights so much as to extend those rights to primates-he is playing the same game of baitand- switch: in this case projecting the noblest human attributes onto animals while quietly limiting his sample of human beings to newborns and the mentally disabled. When raising animals to our level proves to be impossible, as it inevitably must, equal consideration can only be won by attempting to lower us to theirs.

# octos aff v wake bm

## 2ac

### 2ac a2 china

No lashout – CCP knows it would be suicide and PLA wouldn’t support it

Bruce Gilley, former contributing editor at the Far Eastern Economic Review, M.A. Oxford, 2004

China’s Democratic Future, p. 114

**Yet** the risks, even to a dying regime, may be too high. An unprovoked attack on Taiwan would almost certainly bring the U.S. and its allies to the island's rescue. Those forces **would not stop at Taiwan but** might march on Beijing and oust the CCP, or attempt to do so through stiff sanctions, callingit a threat to regional and world peace**. Such** an attack might also face the opposition of the peoples of Fujian,who would be expected to provide logis­tical support and possibly bear the worst burdens of war. They, like much of coastal China, look to Taiwan for investment and culture and have a close affinity with the island. As a result, there are doubts about whether such a plan could be put into action.A failed war would prompt a Taiwan declaration of independence and a further backlash against the CCP at home**,** just as the May Fourth students of 1919 berated the Republican government for weakness in the face of foreign powers. Failed wars brought down authoritarian regimes in Greece and Por­tugal in 1974 and in Argentina in 1983. Even if CCP leaders wanted war, it is unlikely that the PLA would oblige. Top officers would see the disastrous implications of attacking Taiwan.Mili­tary caution would also guard against the **even** wilder scenario of the use of nuclear weaponsagainst Japan or the U.S.47 At the height of the Tiananmen protests it appears there was consideration given to the use of nuclear weapons in case the battle to suppress the protestors drew in outside countries.48 But even then, thethreats did not appear to gain even minimal support. In an atmosphere in which the military is thinking about its future, the resort to nuclear confrontation would not make sense.

### 2ac solvency

#### R and D directly ensures LFTR development

Lollis, 11 [October 10th, Ms. Tina, Funding for Liquid-Fluoride Thorium Reactor, Online Petition Request to the Obama Administration done via an independent third party, <http://www.thepetitionsite.com/2/Green-Energy/>]

We the undersigned petition you, the Obama Administration for a cleaner, more stable and sustainable energy source. During the years of the Johnson Administration they experimented with Molten-Salt Reactors using the natural element of Thorium, which we have have an abundance of buried in the Nevada desert. With use of the Liquid-Fluoride Thorium Reactors (LFTR), you will not only provide a cleaner, sustainable energy source to the United States, but to the world, as well. Using thorium has many advantages: -Research has already been conducted (reactor active from 1965-1969 Molten Salt Reactor Experiment). -One hundred grams of Thorium meets the current US citizen's lifetime energy needs. -LFTR 'burns' nearly all of its fuel. -Current Light Water Reactors burn only 3.4% of fuel, the rest is introduced into the waste stream. -LFTR generates much less waste. -LFTR burns existing nuclear waste as a fuel source. -The Thorium decay chain produces medical isotopes including Bi-213 (Distributed Cancers). -Thorium is abundant enough in the United States to achieve Energy Independence. -LFTR is passively safe, in a full power loss, LFTR cools naturally (No chance of meltdown via power-loss/natural disaster). -LFTR is perfect for Desalinization. -LFTR could completely replace fossil fuels as our grids energy source. -Thorium is 120x more abundant naturally than fissile uranium. -Known US Thorium reserves represent well over 500 years our current TOTAL power consumption. -Thorium fuel cycles does NOT produce weapons grade waste. -Kirk Sorenson has been invited to speak to Google about this tech multiple times. -Energy Independence has massive implications on our federal budget deficit. This, and many other benefits could be found by funding further research and development of a Thorium LFTR reactors. China, France, and other countries are currently working on this technology. It would be a great travesty to allow technology we developed 50 years ago, to be commercialized by the other great nations on this earth and fall behind with a 50 year head start. Thorium LFTR technology, is Green and Sustainable Technology. The resource is sufficiently large to be inexhaustible on a large scale time frame (500-5000 years in proven reserves per current energy usage). The resource is Green because of its lack of airborne greenhouse gasses, along with its ability to completely replace dirty fossil fuels. Kirk Sorenson projects 2-5 years for a prototype, 300-400million dollars, 5-10 years for commercial production.

#### And, the plan accelerates development

Barton, ‘9

[Charles, retired counselor, writes for Energy From Thorium, “The Liquid Fluoride Thorium Paradigm,” http://www.theoildrum.com/node/4971/]

The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under "business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables?

#### The tech is realistic – basis is robust

Frye 8 [Copyright (c) 2008 Energy Bar Association Energy Law Journal 2008 Energy Law Journal 29 Energy L. J. 279 LENGTH: 54433 words ARTICLE: THE CURRENT "NUCLEAR RENAISSANCE" IN THE UNITED STATES, ITS UNDERLYING REASONS, AND ITS POTENTIAL PITFALLS NAME: Roland M. Frye, Jr.\* BIO: \* Mr. Frye has practiced in the field of federal energy regulation for thirty-one years, in both the public and private sectors, and has served for the last sixteen years as the Senior Attorney in the Office of Commission Appellate Adjudication of the United States Nuclear Regulatory Commission (NRC), p. lexis]

Other scientists have been exploring thorium as a possible fuel for nuclear reactors, and have made major strides in designing such a reactor. According to a recent reports, such a thorium-fueled reactor would not suffer a meltdown, would generate spent fuel which would remain radioactive for only about 500 years, would create either no weapons-grade byproducts at all or would create material that (due to intense gamma radiation) would be very difficult for bomb-makers to handle, would actually incinerate any plutonium that was added to the fuel mix (helping to dispose of high-level spent fuel from both nuclear reactor fuel and decommissioned nuclear weapons) - oh, and it also would generate cheap electricity. [n338](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n338) The idea of a thorium reactor is not mere pie-in-the-sky scientific theory - one American company, Thorium Power Ltd., is devoted solely to the development and promotion of thorium as a fuel for nuclear power plants, with [\*328] fuel specifically designed both to be proliferation-resistant and to reduce spent-fuel volume. Moreover, for plants seeking to burn off excess plutonium, the plutonium seed in the thorium fuel assembly burns "about three times faster and at somewhere between a third and half the cost of the mixed-oxide process" according to the company's Ernie Kennedy. [n339](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n339) Further, the company is not trying to develop an entirely new reactor design, but just a new fuel element that can be retrofitted into existing conventional nuclear power plants. In fact, Thorium Power expects its technology to be used in a commercial Russian VVER-1000 reactor as early as 2010, and to be "commercially proven" by 2013. [n340](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n340) Thorium Power is hardly a fly-by-night company. It has existed for sixteen years; Hans Blix (former head of the IAEA and UN weapons inspector) is one of its advisors; its executive chairman is Tom Graham (one of the world's leading non-proliferation experts); and the United Arab Emirates has recently appointed it as a consultant. Nor is Thorium Power the only American player in the thorium game. Northamerican Group Corporation has created a new division whose purpose is to develop thorium-based nuclear power generation facilities: The new division would undertake research, and develop both Thorium-based nuclear power generation facilities, and Thorium-based power cells. The company noted that... three top nuclear scientists, who are experts in the use of thorium and uranium in power generating plants, have agreed to join Northamerican's energy group. The scientists would lead the research and development of Thorium-based nuclear reactor... facilities that would help to ease the crunch on natural gas and fossil fuel electric generating facilities. [n341](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n341) In addition, a group of British scientists has "re-discovered" a salt-based thorium reactor design (originally constructed at Oak Ridge, Tennessee, in 1964) and that is now also being revisited by scientists in France, Germany, the Czech Republic, the Netherlands, Norway, Turkey, and Canada. [n342](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n342) This reactor design also has the advantages of being capable of breeding fuel, making hydrogen, and refueling without a reactor shutdown - plus its advocates claim that it is incapable of meltdown. [n343](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n343) India, which has ample thorium reserves, [n344](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n344) is seriously considering the construction of thorium-powered nuclear power [\*329] plants, [n345](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n345) and tentatively plans to build a 300-MW thorium-fueled reactor by 2020. [n346](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1346077134128&returnToKey=20_T15391597731&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.518165.5373389078#n346)

#### Loan guarantees attract private capital – increases are key

**Peskoe 12** [Ari Peskoe, associate in the law firm of McDermott Will and Emery LLP and focuses his practice on regulatory, legislative, compliance, and transactional issues related to energy markets, 4-20-2012, "A Solution Looking For a Problem: Building More Nuclear Reactors after Vogtle," The Electricty Journal, vol 25 issue 3, Science Direct]

Given the checkered history of reactor construction projects,56 private lenders are understandably skittish about lending billions of dollars to develop a new reactor. Construction of the Vogtle and SCANA reactors will be a critical test, and significant cost overruns on these two projects could doom the prospects for construction of additional reactors. Even if the construction of Vogtle and SCANA are on budget, it will likely still be difficult for future project developers to raise enough debt financing without government support.57 Federal loan guarantees shift “a large part of the learning costs and construction risks” from private lenders to the federal government by ensuring that lenders receive payment in the event that the developer defaults on repayments.58 Appropriations for the guarantees authorized by the Energy Policy Act of 2005 will soon run out, so future guarantees will require congressional action.59¶ Loan guarantees cost the federal government little or nothing unless there is an event of default.60 Creating a long-term guarantee program would be entirely consistent with the government's historic role in accepting risks and liabilities of nuclear power. Although it has not been implemented effectively, the Nuclear Waste Policy Act (NWPA) of 1982 requires the DOE to transport nuclear waste from privately owned reactors to permanent government storage facilities.61 Concerned about a “cloud of bankruptcy” hanging over its operations,62 the nascent nuclear industry pushed Congress to pass the Price-Anderson Act in 1957, which indemnifies the industry against claims arising from a nuclear incident. Both the NWPA and the Price-Anderson Act socialize costs of nuclear energy. In the case of the NWPA, the industry pays the DOE a tenth of a penny for each kilowatt-hour of nuclear energy sold to fund waste disposal activities.63 The Price-Anderson Act also requires generators to contribute to a fund, but the federal treasury would likely cover much of the liabilities associate with a nuclear disaster.64

#### Even with adverse selection or moral hazards imposed by loan guarantees, comprehensive studies show it’s the only way o garner investment

**Congressional Budget Office 11** [“Federal Loan Guarantees for the Construction of Nuclear Power Plants, august 3, 2011, khirn]

Among the goals often posited for federal energy policy are to enhance energy security by diminishing the nation's reliance on foreign oil, to meet a growing demand for electricity, and to reduce greenhouse gas emissions by encouraging investment in clean energy production and technologies. To help further such objectives, the Energy Policy Act of 2005 (Public Law 109-58) established incentives to encourage private investment in innovative technologies, including advanced nuclear energy facilities. Much of the support for such investment is provided under title XVII of that legislation, which offers federal loan guarantees for the construction of nuclear power plants and other types of "alternative" energy facilities. Administered by the Department of Energy (DOE), the loan guarantee program encourages private investment in nuclear energy by lowering the cost of borrowing and possibly increasing the availability of credit for project sponsors—usually an individual utility, a consortium of utilities, or a merchant power producer. In exchange for providing a loan guarantee, DOE is authorized to charge sponsors a fee that is meant to recover the guarantee's estimated budgetary cost. However, budgetary cost estimates—which are calculated as required under the Federal Credit Reform Act of 1990 (FCRA)—are not a comprehensive measure of the cost to taxpayers of those guarantee commitments. Specifically, FCRA estimates do not recognize that the government's assumption of financial risk has costs for taxpayers that exceed the average amount of losses that would be expected from defaults; those additional costs arise because a borrower is most likely to default on a loan and fail to make the promised payments of principal and interest during times of economic stress, when the losses are especially painful for taxpayers. Consequently, the estimated budgetary cost of a guarantee is generally lower than its estimated "fair-value" cost, which approximates the market price that a private guarantor would charge for an obligation with similar risk and expected returns. Because budgetary cost estimates are not a comprehensive measure of the taxpayer resources committed, and because of concerns about the accuracy of the methods and assumptions that DOE uses to forecast default rates and recovery values, some commentators have suggested that federal loan guarantees for the construction of nuclear power plants are being systematically underpriced, whereas others believe they are being overpriced. For this study, the Congressional Budget Office (CBO) reviewed the many factors that can influence the cost to the government of guaranteeing loans for the construction of advanced nuclear facilities; developed a model to estimate guarantee costs for a representative loan using both FCRA-based and fair-value methodologies; performed a sensitivity analysis of those estimated costs to changes in assumptions about key drivers of cost; and explored the challenges inherent in attempting to charge borrowers the full cost of a loan guarantee. CBO's findings are as follows: The expected cost to the federal government of guaranteeing a nuclear construction loan will vary greatly depending on a project's characteristics and on the economic and regulatory environment in which the project will operate. Important considerations include capital structure (the mix of debt and equity used to finance the project); ownership structure (whether it is a stand-alone project or part of a diversified company); whether construction costs may be passed on to utility ratepayers or local taxpayers; the regulatory environment; the degree of uncertainty about construction costs; the cost of competing generation technologies; and the demand for electricity. Although a serious nuclear accident could entail extremely large costs to investors and society, that risk has a small effect on the direct cost to the government of providing a guarantee because liability under the guarantee is limited to the amount of the debt, and the probability that such an accident will occur is low. Default rates and recovery rates are likely to vary considerably, both across projects and over the lifetime of a given project. CBO does not have enough information to independently estimate an average recovery rate for nuclear construction loans. However, assigning a similar expected recovery rate as a starting point for all projects—which is DOE's current practice—does not appear to make full use of the information available to DOE through its detailed project assessment process. For example, when sponsors of stand-alone projects cannot pass on construction costs to rate-payers, very low recoveries may result if bankruptcy occurs during the construction phase. By contrast, recovery rates may be considerably higher once projects become operational. Using a single recovery rate tends to increase the variability of estimated guarantee costs relative to their true values, which increases the government's exposure to a phenomenon known as adverse selection. Adverse selection occurs when borrowers are better able than the government to assess the value of a guarantee offer and take advantage of their superior information at the government's expense. For nuclear construction loans, borrowers will tend to turn down a guarantee if they believe the fee set by DOE is too high but go forward if they consider it fair or underpriced, which increases the likelihood that DOE's portfolio will include more projects for which the subsidy fee has been underestimated than overestimated. When credit ratings are used to assess default probabilities, cost estimates will vary widely with the assigned ratings category, the assumed recovery rate, and whether Treasury interest rates or estimated market interest rates are used for discounting. CBO relied on the information in historical credit ratings to impute default probabilities (as does DOE) and considered a range of recovery rates that might apply to different projects depending on their characteristics. As required under FCRA, budgetary estimates use Treasury interest rates for discounting future cash flows; fair-value estimates rely on estimates of the applicable market interest rates for discounting. Budgetary estimates of guarantee costs are significantly lower than the corresponding fair-value estimates, which provide a more comprehensive measure of the cost to taxpayers. CBO used the credit rating associated with a project to derive the discount rate the market would most likely assign to the loan cash flows. For example, if the risks associated with a guaranteed loan are in the range of those posed by bonds rated A (less risky) and bonds rated BB (riskier), and if 55 percent of the amount owed is expected to be recovered in the event of a default, the budgetary cost, measured on a FCRA basis, ranges from 1 percent to 6 percent of the principal loaned. In contrast, the fair value of the guarantee ranges from 9 percent to 21 percent of the principal loaned. Because of the high degree of uncertainty involved, it may not be possible to charge borrowers the full cost of a loan guarantee. When adverse selection is severe, attempts to offset expected lo**sses with an increase in fees can backfire because the higher fees drive away creditworthy borrowers**, **making it impossible to provide a loan guarantee that does not involve a subsidy.** CBO relied on a credit-ratings-based approach to evaluate the probability of default rather than on the historical experience of the nuclear industry, for which not enough data exist to draw quantitative inferences. However, historical experience suggests that investing in nuclear generating capacity engenders considerable risk. One study found that of the 117 privately owned plants in the United States that were started in the 1960s and 1970s and for which data were available, 48 were canceled, and almost all of them experienced significant cost overruns. As a consequence, most of the utilities that undertook nuclear projects suffered ratings downgrades—sometimes several downgrades—during the construction phase.

### 2ac counterplan

#### Federal guarantees are vital to getting investors on board – superior credit rating

**Sullivan and Walsh, 8 -** Mary Anne Sullivan, partner in Hogan & Hartson's energy practice, has more than 25 years of experience as an energy lawyer. She previously served as general counsel of the U.S. Department of Energy and as deputy general counsel for environment and nuclear programs. Sam Walsh is an associate at Hogan & Hartson (“Federal Loan Guarantees,” Electric Light and Power, Mar/April, ABI Inform)

In their rulemaking comments, Wall Street firms emphasized that a loan guarantee must represent the unconditional commitment of the full faith and credit of the United States if the program is to succeed in attracting affordable private investment to innovative technologies. The final rule seems to have calmed concerns that the guarantees might be conditioned in a way that would preclude the "AAA" rating for the federally guaranteed debt that the program was designed to assure. The guarantees will be absolute, absent fraud or material misrepresentation by the holder of a guaranteed obligation.

#### State incentives fail – federal loan guarantees attract substantially more investment capital

**NEI, 11** – Nuclear Energy Institute “Issues in Focus Loan Guarantees For Clean Energy Development” http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjAB&url=http%3A%2F%2Fwww.nei.org%2Ffilefolder%2Floanguaranteefastfacts.pdf&ei=PCJsUNTiJKbA2gXymYAg&usg=AFQjCNEzvSlK0TiMZStFOzXeQDIf76vQBw)

State governments are doing their part. Many of the states where new nuclear plants are planned – including Florida, Virginia, Texas, Louisiana, Mississippi, North Carolina and South Carolina – have passed legislation or implemented new regulations to encourage construction of new nuclear power plants by providing financing support and/or assurance of investment recovery.

By itself, this state support is not sufficient. The federal government must also provide financing support for deployment of clean energy technologies in the numbers necessary to address growing U.S. electricity needs and reduce carbon emissions. The clean energy loan guarantee program authorized by the Energy Policy Act of 2005 is equally important.

Although tax stimulus – either in the form of tax credits or more favorable depreciation terms – can play an important role in encouraging investment, loan guarantees are a very efficient way to mobilize private capital. Tax benefits have a direct, dollar-for-dollar impact on the federal budget. Even if the credit subsidy cost associated with a loan guarantee is appropriated, loan guarantees provide substantial leverage. Tens of millions of dollars in appropriations to support a loan guarantee program can leverage tens of billions of dollars in private sector investment.

#### Certainty is essential – only effective method of catalyzing investment

**Trembath, 11** [2/4/11, [Nuclear Power and the Future of Post-Partisan Energy Policy](http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/), Alex Trembath is a policy associate in the Energy and Climate Program at Breakthrough. He is the lead or co-author of several Breakthrough publications, including the 2012 report "Beyond Boom and Bust: Putting Clean Tech on a Path to Subsidy Independence" and "Where the Shale Gas Revolution Came From." Alex is a graduate of University of California at Berkeley, <http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/>]

If there is one field of the energy sector for which certainty of political will and government policy is essential, it is nuclear power. High up front costs for the private industry, extreme regulatory oversight and public wariness necessitate a committed government partner for private firms investing in nuclear technology. In a new [report](http://www.thirdway.org/publications/370) on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy. The report, “The Future of Nuclear Energy,” makes the case for political certainty: “It is difficult for energy producers and users to estimate the relative price for nuclear-generated energy compared to fossil fuel alternatives (e.g. natural gas)–an essential consideration in making the major capital investment decision necessary for new energy production that will be in place for decades.” Are our politicians willing to match the level of certainty that the nuclear industry demands? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to [supply-side “push” policies](http://leadenergy.org/2010/09/supply-demand-energy-innovation/), or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power. One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill [included](http://www.huffingtonpost.com/2010/05/12/american-power-act-photos_n_573643.html#s90041&title=undefined) provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship. But that was last year. The changing of the guard in Congress makes this a whole different game, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times [piece](http://www.nytimes.com/2010/11/17/business/energy-environment/17NUCLEAR.html) in the aftermath of the elections forecast a difficult road ahead for nuclear energy policy, but did note Republican support for programs like a waste disposal site and loan guarantees. Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably [Lindsey Graham](http://washingtonindependent.com/99171/graham-circulating-clean-energy-standard) and [Richard Lugar](http://www.plattsenergyweektv.com/story.aspx?storyid=132784&catid=293), would throw their support behind a clean energy standard that includes nuclear and CCS. Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined [“innovation hawks,”](http://leadenergy.org/2011/01/the-rise-of-innovation-hawks/) among them Steven Hayward, David Brooks and George Will. Will has been [particularly outspoken](http://www.newsweek.com/2010/04/08/this-nuclear-option-is-nuclear.html) in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.” The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post [reports](http://www.huffingtonpost.com/2011/02/01/sen-jeff-bingaman-backs-n_n_816864.html) that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct [Section 48C](http://leadenergy.org/2010/12/clean-energy-financing-first-steps-towards-post-partisan-effort/#more-3320) of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing. Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what nuclear energy needs moving forward. It will require an agressive push from the White House, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one. The politician with perhaps the single greatest leverage over the future of nuclear energy is President Obama, and his rhetoric matches the challenge posed by our aging and poisonous energy infrastructure. “This is our generation’s Sputnik moment,” announced Obama recently. Echoing the calls of presidents past, the President used his [State of the Union](http://www.slate.com/id/2281847/) podium to signal a newly invigorated industrialism in the United States. He advocated broadly for renewed investment in infrastructure, education, and technological innovation. And he did so in a room with many more members of the opposition party than at any point during the first half of his term. The eagerness of the President to combine left and right agendas can hopefully match the hyper-partisan bitterness that dominates our political culture, and nuclear power maybe one sector of our economy to benefit from his political leadership.

#### Federal preemption is key to preventing state jury verdicts that will destroy the industry

**Jose & Garza, 7** – Managing partner of Jose & Associates and J.D. @ Georgetown

(Donald E and Michael A, “The Complete Federal Preemption of Nuclear Safety Should Prevent Scientifically Irrational Jury Verdicts in Radiation Litigation,” 26 Temp. J. Sci. Tech. & Envtl. L. 1, Spring 2007)Federal law preempts radiation safety. n53 Unfortunately, the Cook judge and jury disregarded federal regulations of radiation safety. There are currently 104 NRC licensed operating nuclear reactors in the United States. n54 They provide 20% of the **[\*10]** nation's electricity. n55 In addition, there are 18 nuclear facilities associated with nuclear weapons production, one of which was Rocky Flats. n56 Finally, there are many nuclear fuel cycle sites where some work is done with radioactive material. n57 At some point each of these sites will be decommissioned, as Rocky Flats was, and the land transferred to other uses. The NRC allows the land upon which a nuclear power plant once stood to be decommissioned and transferred to private ownership for unrestricted uses as long as the residual radioactivity on the land (i.e. the "contamination" remaining after clean-up) would not cause a dose to a resident of the land exceeding 25 millirem per year. n58 The EPA agrees with the 25 millirem standard. n59 Yet, the Cook jury assessed half a billion dollars damages for a dose 10 times less.

Obviously, a severe conflict exists between the federal regulation of nuclear safety and the Cook jury verdict. Either the federal agency with expertise backed by complete federal preemption controls the extent of decontamination required, or a lay jury can assert control through the damages they assess. Both the judgment of the federal agency and the judgment of the jury cannot be right and they **cannot co-exist**. One must be subjugated to the other. Either the federal agency with expertise in nuclear safety regulates clean-up to acceptable levels or the latest lay jury award effectively regulates through monetary damages, and perhaps **destroys** n60 **the nuclear industry**.

#### State jurisdiction kills nuclear power and ends civilization

**Jose & Garza, 7** – Managing partner of Jose & Associates and J.D. @ Georgetown

(Donald E and Michael A, “The Complete Federal Preemption of Nuclear Safety Should Prevent Scientifically Irrational Jury Verdicts in Radiation Litigation,” 26 Temp. J. Sci. Tech. & Envtl. L. 1, Spring 2007)//markoff

The Cook decision, if affirmed on appeal, has implications far beyond negating the complete federal preemption of nuclear safety. If a nuclear utility cannot rely upon the federal safety standards as a defense against suits for trivial doses, they may well revert to the position they took prior to the passage of the Price-Anderson Act: **no nuclear power plants. n126** They may elect to shut down the 104 nuclear power plants producing 20% of this nation's electricity and thereby **plague the country with blackouts**: "Spokesmen for the private sector informed Congress that they would be forced to withdraw from the field if their liability were not limited by appropriate legislation." n127 If the Cook rationale were to be adopted in cases of allegedly "contaminated" water or air, compliance with the federal safety standards would not provide any protection for a municipal water district. n128 They could be subject to millions of dollars in damages, as assessed by a lay jury, even though the contaminants in question constituted less than 1/100th of the amounts the EPA deems to be adequately safe. Likewise, municipalities could be liable for failure to reduce man-made air contaminants to zero. Allowing juries to award damages for any levels of contamination above zero would essentially **destroy our civilization** since no municipality could accept the potential liability attendant in providing a public water supply or in allowing internal combustion engines or furnaces within the municipal limits. **Americans would have to revert to a horse and buggy rural lifestyle** that existed two hundred and fifty years ago. Allowing lay juries to regulate potentially harmful substances and adopt a contamination standard of zero **opens Pandora's Box.**

**Terrorists rely on the internet too much to attack it**

**Kohlmann 06** (Evan F. Kohlmann, Foreign Affairs, “The Real Online Terrorist Threat” http://www.foreignaffairs.org/20060901faessay85510/evan-f-kohlmann/the-real-online-terrorist-threat.html)

In truth, although catastrophic computer attacks are not entirely inconceivable, the prospect that militants will be able to execute them anytime soon has been overblown. Fears of such science-fiction scenarios, moreover, have led policymakers to overlook the fact that terrorists currently use the Internet as a cheap and efficient way of communicating and organizing. These militants are now dedicated to waging an innovative, low-intensity military campaign against the United States. Jihadists are typically organized in small, widely dispersed units and coordinate their activities online, obviating the need for a central command. Al Qaeda and similar groups rely on the Internet to contact potential recruits and donors, sway public opinion, instruct would-be terrorists, pool tactics and knowledge, and organize attacks. The RAND Corporation's David Ronfeldt and John Arquilla have called this phenomenon "netwar," which they define as a form of conflict marked by the use of "network forms of organization and related doctrines, strategies, and technologies." In many ways, such groups use the Internet in the same way that peaceful political organizations do; what makes terrorists' activity threatening is their intent.

### 2ac other cp

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#### No green bubble and it doesn’t apply to nuclear

**Hamilton 12** [Clean Break, Tyler Hamilton is editor-in-chief of Corporate Knights magazine and a business columnist for the Toronto Star, “Clean energy technologies? No bubble bursting there. Future is growth, growth, growth”, 8/6/2012]

That usually means cleaning it up, making it smarter and more reliable, and investing in clean technologies — from Canada, perhaps — that make it more robust and efficient.¶ There are some commentators out there who like to point to very specific events as evidence that the clean energy and technology boom has gone bust. They point to the exaggerated Solyndra “scandal,” which saw the bankruptcy of the solar manufacturing start-up after it received — and had already burned through — funding that was secured via a $535 million (U.S.) loan guarantee from the U.S. Department of Energy.¶ It makes for great politics, but the reality is that companies do sometimes fail and the public does often have flesh in the game. It’s not unique to clean energy. The loan guarantee program, after all, was designed for high-risk bets. Looked at objectively, the program has actually outperformed expectations. Solyndra and a handful of others are falling stars in a galaxy of promise.¶ But Solyndra is just the start. Clean energy skeptics point to company closures and the collapse of many solar, wind and other cleantech-themed stocks. They cite how U.S. government stimulus spending for clean energy projects is coming to an end. They flag how several jurisdictions in Europe, which is dealing with unrelated economic problems, are reducing subsidies for renewable energy projects.¶ The green dream is dead — or dying. It’s the message you get when listening to those, mostly living in a North American bubble, who doubted the vision in the first place.¶ This cacophony ignores the incredible needs of countries like India, which is already among the top spenders in the world on clean-energy projects, having spent $10.2 billion on renewable energy in 2011. As the blackout suggests, the need to accelerate that spending has grown more urgent.¶ Japan, meanwhile, is embracing renewable energy in a big way in the aftermath of the nuclear disaster at Fukushima. It just launched its own feed-in-tariff program —similar to the one in Ontario —aimed at aggressively spurring solar, wind and geothermal development to help reduce the country’s dependence on nuclear power.¶ Bloomberg New Energy Finance reported this month that global investment in clean energy surged to $57 billion in the second quarter of 2012, up 24 per cent from the first quarter and carried largely by a stunning 92 per cent spending increase out of China. Investment is still down year-over- year —2011 wasn’t a great year generally, right? —but it’s on the upswing in 2012, hardly the sign of collapse.¶ That boost from China is expected to continue, particularly in solar. As part of its 12th five-year economic plan, released in 2011, China originally expected to increase solar installations 20-fold by 2020. Last month it decided to draw forward that target to 2015, when it hopes to have 21 gigawatts of solar power capacity in place —enough to supply all of Ontario on a sunny spring day.¶ Why is China moving in this direction? Economically, it carries long-term strategic importance. But China’s citizens are also growing fed up with unbearable air, water and soil pollution, so much so that there is a rise in violent protests breaking out across the country.¶ The reason why clean energy isn’t a fad or a bursting bubble is that global problems such as climate change, pollution, poverty, food scarcity, crumbling legacy infrastructure, and access to clean water aren’t going away anytime soon. Renewable energy and other clean technologies may not be the only solution, but they are a big and growing part of it.¶ Will nuclear help out? Maybe, but don’t count on it. Jeff Immelt, chief executive of General Electric, a big supplier of nuclear technology, told the Financial Times this week that it’s “really hard” these days to justify the cost of nuclear. “I think some combination of gas, and either wind or solar … that’s where we see most countries around the world going.”¶ Ontario may want to reconsider plans for new nukes at Darlington.¶ Fact is, renewable energy costs are falling fast, and that’s part of the reason there are layoffs, profit warnings, bankruptcies and falling share prices in the industry. Subsidies are supposed to gradually fade away, something the fossil fuel industry hasn’t learned after 100 years of handouts.¶ There was oversupply in clean energy equipment. Weak companies are struggling and some are failing. Those intent on surviving figure out how to innovate, adjust, enter new geographic markets and come out stronger – the cycle is not unique to clean energy.¶ “Any emerging market will experience growth problems and will have winners and losers. And the losers’ problems do not necessarily indicate the absence of a long-term market,” says Craig Tighe, a partner with global law firm DLA Piper. “Were that the case, the loss of Palm and Handspring would mean that the smart phone market is not sustainable, which is manifestly not the case.”¶ Growth in clean energy is happening. What’s changing is the pace of that growth and the players who get to benefit.¶ There’s no bubble bursting here.

#### No econ impact

Robert Jervis 11, Professor in the Department of Political Science and School of International and Public Affairs at Columbia University, December 2011, “Force in Our Times,” Survival, Vol. 25, No. 4, p. 403-425

Even if war is still seen as evil, the security community could be dissolved if severe conflicts of interest were to arise. Could the more peaceful world generate new interests that would bring the members of the community into sharp disputes? 45 A zero-sum sense of status would be one example, perhaps linked to a steep rise in nationalism. More likely would be a worsening of the current economic difficulties, which could itself produce greater nationalism, undermine democracy and bring back old-fashioned beggar-my-neighbor economic policies. While these dangers are real, it is hard to believe that the conflicts could be great enough to lead the members of the community to contemplate fighting each other. It is not so much that economic interdependence has proceeded to the point where it could not be reversed – states that were more internally interdependent than anything seen internationally have fought bloody civil wars. Rather it is that even if the more extreme versions of free trade and economic liberalism become discredited, it is hard to see how without building on a preexisting high level of political conflict leaders and mass opinion would come to believe that their countries could prosper by impoverishing or even attacking others. Is it possible that problems will not only become severe, but that people will entertain the thought that they have to be solved by war? While a pessimist could note that this argument does not appear as outlandish as it did before the financial crisis, an optimist could reply (correctly, in my view) that the very fact that we have seen such a sharp economic down-turn without anyone suggesting that force of arms is the solution shows that even if bad times bring about greater economic conflict, it will not make war thinkable.

### 2ac Obama Good – Top Level

**Spacemil inevitable but no impact**

**USA TODAY 6-13-05 lexis**

We've seen it before, nations reacting not to threats but to illusory phantoms, or to badly reasoned deductions. Russia is particularly vulnerable to such manipulation, from the major defensive weapons systems it fielded to counter U.S. armaments that appeared only on the pages of Aviation Week, to scary space hardware it actually built to combat what it saw as "soldier-astronauts" aboard militarized Gemini, Apollo and space shuttle vehicles. In recent years, historians have revealed that Soviet Premier Leonid Brezhnev bankrupted his country's space program by demanding that his engineers build a copy of NASA's space shuttle because his advisers persuaded him that the United States wanted to use it for bombing Moscow. Aside from the waste, building such hardware created new hazards to everyone involved. Now come the newest stories that echo down the interconnected corridors of the American mainstream media, about "killer satellites" and "death stars" and "Rods from God" bombardment systems — as if the Hollywoodized terminology wasn't a clue that most of the subject matter was equally imaginary. Take the opening paragraph of a recent Christian Science Monitor editorial that denounced what it portrayed as "the possible first-ever overt deployment of weapons where heretofore only satellites and astronauts have gone." But history reveals an entirely different reality. Weapons have occasionally been deployed in space for decades, without sparking mass arms races or hair-trigger tensions. These are not just systems that send warheads through space, such as intercontinental missiles or the proposed global bomber. These are systems that put the weapons into stable orbits, circling Earth, based in space. And these systems were all Russian ones, by the way, most of them predating President Reagan's "Strategic Defense Initiative" to develop an anti-missile system.

#### Obama will win, it’s too late to alter swing state dynamics and most voters have already decided

**Downie, 10/4/12 –** Washington Post Opinion writer, James, Obama lost the first debate, but he will still win the election, Washington Post, http://www.washingtonpost.com/blogs/post-partisan/post/obama-lost-the-first-debate-but-he-will-still-win-the-election/2012/10/04/9c3b7eb8-0deb-11e2-bd1a-b868e65d57eb\_blog.html)

And yet, the president’s supporters would be wrong to wring their hands. Fundamentally, Obama’s loss will not matter. At most, Wednesday night was a case of “too little, too late” for Romney. Yes, the polls will probably move a point or two in Romney’s direction after the first debate. But all the evidence suggests that for Romney, whether or not you believe he should be president, closing the gap and beating Obama is a bridge too far.

Consider the task facing Romney going into Wednesday’s debate: Nationally, RealClearPolitics’s poll average had him down three points; Nate Silver’s model had him down four. He had held a lead in a major poll exactly once since the end of August. The electoral college looked even worse for him: RealClear’s map gave Obama 269 electoral votes safe or leaning to Romney’s 181 (with 88 in toss-up states); HuffPost Pollster gave Obama a 290-191 lead; and Nate Silver’s model had Obama winning an average of 319 electoral votes to Romney’s 218, a comfortable margin. Even Karl Rove had 277 votes safe or leaning to Obama, with another 70 as toss-ups.

“Ah,” you say, “that may be true, but surely the gap is small enough to close? And wouldn’t the first debate be enough to bring this race back to a dead heat?” In a word, no.

Let’s start with the second question. Incumbent presidents almost always have a poor first debate: George W. Bush lost to John Kerry in 2004, for example, and Walter Mondale beat Ronald Reagan so badly in 1984 that there was a spate of articles asking if the incumbent was too old for the presidency. Yet never has a challenger’s strong first debate performance closed as large a national polling gap as Romney faced going into last night’s debate. Furthermore, most post-debate polling bumps come from previously undecided voters, of which there is a historically small amount in this campaign, thus making it even less likely that Romney could exceed past norms. And Romney would need to outdo history by quite a distance — only Harry Truman has come back from a national deficit as large or larger than Romney’s at this point in the campaign.

If Romney would have to pull off a miracle to close the gap in national polling, he has no shot at matching the president in the electoral college. As mentioned above, forecasters commonly predict that Obama already has a big lead of safe and leaning states. If we assume Romney will improve in the polls, there would be around nine “swing states”: Colorado, Florida, Iowa, North Carolina, New Hampshire, Nevada, Ohio, Virginia and Wisconsin. There’s one problem here for Romney: He is trailing, and has been consistently trailing, in all but two — North Carolina, where he’s held a small lead, and Florida, this election’s closest thing to a 50-50 state. Romney doesn’t need to win two out of those nine; in almost every scenario, he will need six or seven out of those nine to win, including at least two or three states where he is behind by several points more than he is nationally.

All of which brings me to the final point: Given the state of the race before last night’s debate, even most Romney backers would agree that a Romney victory would require a flawless campaign the rest of the way from Romney and a blunder or two from Obama. After six years of both these men running for and/or being president of the United States, is there really anyone out there who thinks Mitt Romney can go a month without making a single mistake? Who thinks Barack Obama, who has been playing it safe for at least several months now, will suddenly make a reckless error, as opposed to a merely lackluster performance? (Or, if you’re Sean Hannity and co., do you believe the lamestream media will suddenly forget their liberal bias and stop protecting the president while assaulting Mitt Romney?)

Seriously, does anyone believe that?

The fact is that, come October, presidential elections cannot permanently change course over a few days or hours (unlike, say, media narratives). The majority of voters have already made their decision, and the debates won’t provide enough of a boost to alter the contest’s trajectory. Sadly for Romney, the path the race is stuck on ends with his defeat.

#### Energy won’t switch votes

**Farnam, 12** (T.W. Washington Post, Energy ads flood TV in swing states, 6/27, <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.

And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.

The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.

Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”

Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.

In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.

When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

#### Huge laundy list of nuclear incentives and construction now

**Johnson ’12** (US Campaign Trail: is nuclear in the equation? By John Johnson on Apr 25, 2012, nuclear energy expert and analyst, Nuclear Energy Insider, Nuclear Business Intelligence <http://analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation>

Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019.

#### No Romney traction – even if voters hate Obama’s energy policy they won’t shift to Romney

Lewis, 10/1/12 - senior contributor to The Daily Caller (Matt, The Daily Caller, “Mitt Romney’s struggle to win blue collar Ohio voters”

This sounds trivial, but it matters greatly — especially in places like Ohio.

The Atlantic’s Molly Ball is consistently a “must read,” and her latest column reinforces a point I’ve been making for a long time — that Mitt Romney is in danger of under-performing with working-class whites in key states like the Buckeye state. (Ball’s teaser says it all: “In Appalachian coal country, Romney is now viewed with nearly as much suspicion as Obama — and that may be the story of the 2012 election.”)

There is at least one substantive reason for these voters to be skeptical of Romney. While interviewing Ohio voters, Ball stumbled over an interesting blast from the past:

It turns out Romney, as governor of Massachusetts in 2003, held a press conference in front of a coal-fired power plant. “I will not create jobs or hold jobs that kill people,” he said, and then, gesturing at the facility behind him: “That plant, that plant kills people.” You can see the footage in an Obama campaign ad that’s been airing heavily here. It seems to have made an impression.

The notion that Romney would be worse for coal than Obama seems absurd. Still, Obama is using the line to effectively muddy the waters. All he really needs is for voters to conclude, “they’re both bad,” and Obama can consider that a victory. Ball sums it up thusly,

I heard it over and over again from Ohioans — the idea that Romney stands for the wealthy and not for them. Obama’s depiction of his rival as an out-of-touch rich guy, which has gotten no little assistance from Romney himself, has made a deep and effective impression with these self-consciously working-class voters.

#### Plan happens after the election

Ramsey Cox (writer for The Hill) September 24, 2012 “Congress to hold pro forma sessions until November” http://thehill.com/blogs/floor-action/senate/251313-congress-to-hold-pro-forma-sessions-until-november

Rather than being in recess for more than five weeks, both the Senate and the House decided to hold pro forma sessions until after the November elections. Both chambers will gavel in Tuesday morning for a brief session; typically, legislative business doesn't take place in pro forma sessions. At most members ask to be recognized for a speech, but rarely do. It is unclear if the legislative branch was afraid of recess appointments by the White House, yet both sides took a formal recess in August. The Senate will hold a pro forma session every Tuesday and Friday until Nov. 13 at 2 p.m. when they’ll continue work on S. 3525, the Sportsmen Act, which would increase access to federal land for hunters and fishers while also supporting conservation measures.

#### Plan wouldn’t affect states that make the difference in the election

Joel Kotkin 3-30-2012; executive editor of NewGeography.com and is a distinguished presidential fellow in urban futures at Chapman University, and contributing editor to the City Journal in New York. He is author of The City: A Global History. His newest book is The Next Hundred Million: America in 2050, released in February, 2010. Is Energy the Last Good Issue for Republicans? <http://www.newgeography.com/content/002698-is-energy-last-good-issue-republicans>

In the short run, Obama’s political exposure in the energy wars is somewhat limited. Most of the big-producing states—Oklahoma, Wyoming, Utah, Texas, Louisiana, Alaska, and North Dakota—are unlikely to vote for him anyway. Nor does he have to worry about too much pressure from inside his party; Democratic ranks in Congress from energy-producing states have thinned considerably in recent years, removing contrary voices inside the party.

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

**Nuclear power popular**

Brown ’12 (Dave Brown — Exclusive to Uranium Investing News, “United States Still Favors Nuclear Power”, <http://uraniuminvestingnews.com/11008/united-states-still-favors-nuclear-power.html>, March 28, 2012, LEQ)

According to the results of Gallup’s annual Environment survey, conducted earlier this month, the majority of Americans continue to favor nuclear energy as a source of electricity for the United States. The survey indicated that 57 percent of participants were in favor of nuclear power this year, the same amount as in 1994, the first year for the survey. This year’s results also demonstrate an equal level of support among participants as last year, just prior to the Japanese earthquake and tsunami. Support for the nuclear industry as measured by the survey has ranged from a low of 46 percent in 2001 to a high of 62 percent in 2010. These results are of significance to investors as the US is the largest consumer of uranium in the world, with 104 operational nuclear reactors. Continued public support and confidence from the country should guide future political decisions and foster economic interest in domestic and international uranium resources as well as in nuclear industry stakeholders.

#### Too late to change the election- ideology

Helling ’12 (DAVE HELLING, McClatchy Newspapers Miami Herald 7-22-12 "Is the race for president already over?"

But **a growing number** of **political scientists and campaign consultants** - backed by the **latest polling data** - think the daily campaign back-and-forth **is having no significant effect on voters.** Most Americans have **locked in** their presidential decisions, polls released Thursday suggested, and the already small number of persuadable voters **shrinks by the hour**. Put another way: America could vote for president next week, and the outcome would probably be the same as it will be in November. "That's accurate, barring some really big, big event or change in the political environment," said Alan Abramowitz, a political science professor at Emory University in Atlanta, who has studied presidential voting patterns. Kenneth Warren, a political science professor at St. Louis University, agreed. "Most people have decided who they're going to vote for early on," he said. Recent polls show those who have decided are split almost evenly between Obama and Romney. In a CBS/New York Times poll, Romney led by 1 point. In a Fox News poll, he trailed Obama by 4 points. A National Public Radio poll found Obama leading by 2 points. A Gallup tracking poll over the same time period showed the race dead even. The average of polls puts the Obama advantage at 1.2 percent, according to Real Clear Politics, a political aggregation website. The incumbent has led Romney in that average by a one- to two-point margin since last October. Political scientists and consultants said there were several reasons for early presidential decision-making. In an Internet-cable-TV age, **voters are pounded with political messages daily, helping them make up their minds far in advance** of the election. An incumbent in the race makes at least one of the candidates a known quantity. And American **voters are deeply divided, further cementing their choices.**

#### Eurozone action will outweigh the plan

**Weisenthal, 9/26**/12 - Prior to joining Business Insider in October 2008, Joe was a correspondent for paidContent.org, as well as the Opening Bell editor at Dealbreaker.com. He previously was a writer and analyst for Techdirt.com, and before that worked as an analyst for money management firm Prentiss Smith & Co (Joe, “We're Getting A Glimpse Of Barack Obama's Worst Nightmare” Business Insider, http://www.businessinsider.com/obamas-worst-nightmare-2012-9#ixzz289W0KygN)

This doesn't necessarily seem likely, but the latest turns and twists of the global economy open up a scenario whereby markets could get really ugly between now and the election.

Basically, we present a plausible scenario in which things get bad on two fronts. The scenario is based on developments over the last several days.

Here's how it could go:

First, Europe really stalls out.

Thanks to the political crisis in Spain, suddenly it's not clear if the ECB's powerful bond buying program will ever get off the ground.

Remember, the ECB has announced a plan to backstop government bonds, but it needs the countries to request aid and submit to outside fiscal supervision. Because of mass protests, and a burgeoning secession movement in Catalonia, Spanish PM Mariano Rajoy is very reluctant to ask for a bailout unless it's absolutely necessary. He'd like to delay the request as long as possible.

In addition, you have heightening squabbles over what will be done with Greece (raising the specter that it will leave the Eurozone). There are more and more reports about HUGE holds in the government's budget, and the various creditor parties are fighting about who will take the hit. The specter of Greece leaving the Eurozone is rising.

This could then start hitting markets in the US. Actually that already seems to be happening. The market's dropping. And now we no longer have an implied "put" from the Fed, since it's already blown its wad (or so it seems) with the announcement of open-ended QE.

Already, the market has been weak since QE3 was announced, and in particular, the oil & gas/basic materials stocks that people associate with reflation have been weak.

Those two sectors, which are supposed to rise on successful reflation, make up 2 out of 3 of the worst performing S&P sectors today.

This could be a nothing blip, but a series of weeks like this one (riots in Europe, which inevitably remind people about government

debt) and markets in the US reacting badly could be the "October Surprise" that Romney needs to win.

#### Jobs and gas prices ensure public support---SMRs aren’t an election issue but if they were, links non U

Johnson 12 John, Nuclear Energy Insider, April 25, "US Campaign Trail: is nuclear in the equation?", analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation

In the next Presidential election, American voters will be voting with their pockets. We look at how the campaign so far has revealed which candidate will support nuclear R&D, nuclear new-build projects and ultimately preserve and create nuclear sector jobs. As the U.S. Presidential election draws closer, Americans are most concerned about job creation and how the candidates plan to boost the U.S. economy. Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions. Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019. “There is certainly political consensus in support of clean generation, and large scale cultural consensus as well,” said Keeley. Political benefits of nuclear support As gas prices in the U.S. continue to soar, it’s possible that the tide will turn more in favor of nuclear and other clean energy sources, especially as electric cars take a stronger foothold. In addition, the job creation benefits from nuclear could work their way into the political landscape as well. The two new Vogtle nuclear plants are expected to create approximately 5,000 on-site jobs during the peak of construction, with 800 high paying jobs remaining over the life of the plant.

### 2ac shipping add on

#### The plan is key to the shipping industry

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

LFTR can power commercial ships. Powering ocean cargo vessels with LFTR electric power will eliminate global oil demand of 7 million barrels per day and eliminate 4% of man-made greenhouse gas emissions. Nuclear power is successfully used today to power navy submarines, ice breakers, and aircraft carriers. The first ever use of nuclear power was to power the submarine USS Nautilus on and in the ocean. Since 1955 the US Navy has accumulated 5,400 reactor years of accident-free experience with its nuclear power plants. Nuclear- powered commercial shipping is a low-hanging-fruit opportunity. Reducing the cargo space occupied by tanks for 380 tons of fuel for every day at sea will increase paying cargo. LFTR energy cheaper than coal is also cheaper than from the asphalt-like refinery residues burned for fuel, reducing operational costs. The elimination of frequent refueling not only ends refueling delays but also allows ships to plan shipping routes without refueling port constraints. The largest container ship in operation in 2012 has a 90 MW power plant, close to the 100 MW size of the small modular LFTR example. The largest, Nimitz-class super-carrier has a 200 MW nuclear power plant. Just as the shipping industry changed from coal power to oil power, it can change from oil power to LFTR power.

#### Key to naval power

**Alberto, et al., 5** (Lieutenant Colonel Ronald P., U.S. Army, Colonel Michael G. Archuleta, U.S. Air Force, Lieutenant Colonel Steven H. Bills, U.S. Air Force, Commander William A. Bransom, U.S. Navy, Mr. Kenneth Cohen, Department of State, Commander William A. Ebbs, U.S. Navy, George Manjgaladze, Ministry of Defense, Republic of Georgia, Commander Elizabeth B. Myhre, U.S. Navy, Audrea M. Nelson, DA, Robert L. Riddick, Department of Defense, Colonel Christopher M. Ross, U.S. Army, Julia N. Ruhnke, DA, Lieutenant Colonel Gregory M. Ryan, U.S. Marine Corps, Colonel David D. Thompson, U.S. Air Force, Commander Hugh D. Wetherald, U.S. Navy, Dr. Mark Montroll, faculty at the Industrial College of the Armed Forces, Dr. Michael Farbman, USAID, faculty at the Industrial College of the Armed Forces, Captain David B. Hill, U.S. Coast Guard, faculty at the Industrial College of the Armed Forces, “SHIPBUILDING”, The Industrial College of the Armed Forces, National Defense University, 2005, http://www.ndu.edu/icaf/programs/academic/industry/reports/2005/pdf/icaf-is-report-shipbuilding-2005.pdf, Deech)

In conclusion, our study found that the tremendous advantage the US enjoys in naval power directly supports our national security through global power projection and maintaining freedom of the seas. Our ability to build large, highly capable naval ships is a vital part of our naval superiority and is therefore inexorably linked to our national security. The US must maintain it lead in naval power by protecting its domestic shipbuilding industry. It is our conclusion that the number one issue facing the American military shipbuilder today is the uncertainty in future orders for ship construction. The year to year fluctuation in the projected naval order book adds uncertainty for the shipbuilder wanting to invest in capital and labor improvement, and adds cost to the vessels actually being delivered. This fluctuation is exacerbated when the US Navy cancels entire ship classes or severely limits procurement of vessels that have been programs of record, programs which the shipbuilders have used to make labor and capital investment decisions. We feel it is imperative for the Navy to identify the force of the future and commit to a stable procurement plan to implement that force. The concept of Seabasing must mature at least to the point where the major yards can invest in the infrastructure necessary to build the force. In this area, we also conclude that the requirement for full funding of naval vessels in the year of authorization hampers the ability of the Navy and the industry to maintain a steady shipbuilding plan. It is apparent to us that the US Navy shipbuilding program is often used as a “bill payer” for other DoD priorities. In addition to the reality that the money is not obligated in the year of funding, the temptation to use the US Navy shipbuilding account to pay current year expenses is greater if significant procurement dollars are available to pay the full cost of individual ships. While we are convinced the nation must maintain sufficient shipbuilding capacity to allow for surge in national emergencies, we feel that the current and projected naval order book does not support the capacity being carried by the six largest shipyards. Restructuring of the industrial base is necessary. This restructuring may entail the politically difficult decision to allow some yards to close, but if the naval order book does not increase and the restructuring does not occur, unit cost will continue to skyrocket out of proportion to the value to the nation of the vessel.

#### Great power war

**Conway et al 7** [James T., General, U.S. Marine Corps, Gary Roughead, Admiral, U.S. Navy, Thad W. Allen, Admiral, U.S. Coast Guard, “A Cooperative Strategy for 21st Century Seapower,” October, http://www.navy.mil/maritime/MaritimeStrategy.pdf]

Deter major power war**.** No other disruption is as potentially disastrous to global stability as war among major powers. Maintenance and extension of this Nation’s comparative seapower advantage is a key component of **deterring major power war**. While war with another great power strikes many as improbable, the near-certainty of its ruinous effects demands that it be actively deterred using all elements of national power. The expeditionary character of maritime forces—our lethality, global reach, speed, endurance, ability to overcome barriers to access, and operational agility—provide the joint commander with a range of deterrent options. We will pursue an approach to deterrence that includes a credible and scalable ability to retaliate against aggressors conventionally, unconventionally, and with nuclear forces.

**Win our Nation’s wars.** In times of war, our ability to impose local sea control, overcome challenges to access, force entry, and project and sustain power ashore, makes our maritime forces an **indispensable element** of the joint or combined force. This expeditionary advantage must be maintained because it provides joint and combined force commanders with freedom of maneuver. Reinforced by a robust sealift capability that can concentrate and sustain forces, sea control and power projection enable extended campaigns ashore.

## 1ar

### solvency block

#### CX proves that Martin is just playing devil’s advocate- the plan takes forever and is too costly and risky for the market – we already read this card in CX

**Martin ‘12** [Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, “SuperFuel: Thorium, the Green Energy Source for the Future,” May 8, ISBN 978—0»230-116474]

**Several thorium supporters have calculated the “overnight costs” for a LFTR plant-** the actual cost to build and start up a plant, excluding the interest paid to finance the project- **and they came up with a range of $2,258 per kilowatt of capacity**, plus or minus 30 percent. Thus, a one-megawatt prototype plant would cost $2.2 million in overnight costs, while a commercial thousand-megawatt plant would cost $2.2 billion. Other estimators have come up with costs as low as $1, 400 per kilowatt- which, if true, would make the cost of new LFTRs roughly equivalent to that of new natural gas plants. (According to the U.S. Energy Information Administration, the overnight cost per kilowatt for new conventional nuclear plants is $5,335. For conventional natural gas, without carbon-capture and sequestration [CCS] capability, it’s less than $1,000; with CCS natural gas is $2,060.) **Much of this is pure speculation.** **Just getting dramatically new designs through the licensing process of the** Nuclear Regulatory Commission (**NRC**) **could take a decade or two and a half billion dollars, which makes building the first LFTRs in the U**nited **S**tates **an unlikely prospect. For the purposes of this discussion, I will assume that it’s possible**. At any rate, LFTRs have plenty of characteristics that will make them less expensive to build and operate than conventional nuclear plants- and should make them easier to license, too.

#### Bubble key to avert depression

**Janzen 2k8** [http://www.harpers.org/archive/2008/02/0081908, “next bubble: Priming the markets for tomorrow's big crash” By Eric Janszen, Angel investor and iTulip.com founder]

The next bubble must be large enough to recover the losses from the housing bubble collapse. How bad will it be? Some rough calculations7: the gross market value of all enterprises needed to develop hydroelectric power, geothermal energy, nuclear energy, wind farms, solar power, and hydrogen-powered fuel-cell technology—and the infrastructure to support it—is somewhere between $2 trillion and $4 trillion. The assuming the bubble can get started, the hyperinflated fictitious value could add another $12 trillion. In a hyperinflation, infrastructure upgrades will accelerate, with plenty of opportunity for big government contractors fleeing the declining market in Iraq. Thus, we can expect to see the creation of another $8 trillion in fictitious value, which gives us an estimate of $20 trillion in speculative wealth, money that inevitably will be employed to increase share prices rather than to deliver “energy security.” When the bubble finally bursts, we will be left to mop up after yet another devastated industry. FIRE, meanwhile, will already be engineering its next opportunity. **Given the current state of our economy, the only thing worse than a new bubble would be its absence.**

#### Turn - Investments in alternative energy are key to the economy – bubble is our only way out

**Wired 08** [Wired Tech Magazine, <http://www.wired.com/science/planetearth/news/2008/03/cleantech_bubble>, Interview with Eric Janzen, http://www.wired.com/science/planetearth/news/2008/03/cleantech\_bubble]

Neither a clean-tech skeptic nor a booster, he wrote, "Given the current state of our economy, the only thing worse than a new bubble would be its absence." Wired.com recently spoke with Janszen to discuss the state of the economy, his plan to pay for alternative energy with a tariff on oil, and how running fiber to your home is good energy policy. Wired: Though you focus on clean tech, you are making a broader argument about the U.S. economy and its reliance on the finance industry. How is the economy now bubble-based? Eric Janszen: The elevator pitch is that we've gone through a series of asset-price inflations that started back in 1995. What really kicked the whole series off were some changes that the Feds made to the U.S. banking system to get us out of the recession that we were in during the early 1990s. That facilitated the beginnings of a growth in credit that supported the two bubbles: internet and real estate. Wired: And you argue that the next step is a clean-tech bubble that could create $20 trillion of fictitious wealth? Janszen: It's not really a bubble. I think of it as a legitimate use of the way that our economy works and [how] our financial markets function now. The alternative title for the Harper's piece was "The Good Bubble." Clean tech could be an extremely efficient use of capital. My editors over at Harper's wanted to make this thing as controversial as possible. My forthcoming book goes deeper into the issue of how we're going into the period of time where the FIRE -- finance, insurance and real estate -- economy is in a steep decline. Within a year or so, it's going to be very obvious that resuscitating it in its old form will be impossible. What's going to be necessary are some structural changes to the economy that are longer-term and somewhat more painful. Wired: What kind of structural changes are you talking about? Janszen: Reduction of dependency on debt financing to stimulate the economy. Over the last seven years, every new job that has been created has resulted in $1.8 million of new public- and private-sector debt. That's obviously not sustainable. That's way too inefficient. It used to be about 50 cents of new debt was required to generate $1 in gross-domestic-product growth. Now it's $9 for $1 of GDP growth. Wired: How bad do you think the U.S. economy is going to get? Janszen: It's going to surprise people. The impact that housing is having on our credit system is just starting to be felt. It's not clear, in the absence of the concerted effort to make investments in the clean-tech sector, what geographies or sectors are going to pull the U.S. out of the recession. What tends to happen is that policymakers survey this scene and say: "What are we going to do to get people working?" The focus on one sector of the economy can drag us out.

#### No Green Bubble

**Yarow 9** [Jay, “The Green Bubble That Won't Take Shape”, B.A. Economics University of Delaware, M.A. New York University, Business Insider, March 4, 2009]

The billions he's pouring into the new energy programs will help lift, and in some cases, create whole new industries. But will his programs replace one problem with another, turning the housing bubble into a "green" bubble? We don't think so.¶ Yesterday [in the FT](http://www.businessinsider.com/the-market-is-mispricing-the-atmosphere-2009-3), Joseph Stiglitz and economist Nicholas Stern wrote:The financial crisis originated from the housing market bubble and was preceded by the dotcom boom. We cannot replace these with yet another bubble. The investments necessary to convert our society to a low-carbon economy – investments that can change the way we live and work – would drive growth over the next two or three decades. They would ensure that growth, with accompanying improvements in standards of living, was sustainable. The path that we have been on is not. They go on to say that investment in green will increase efficiency providing both short term and long term stimulus for the country, but they never really address why we couldn't see another green bubble. The hype we hear around green investment, would lead us to think it's possible, if not inevitable. After all, Merrill Lynch cleantech analyst Steven Milunovich strategist [said](http://www.greentechmedia.com/articles/the-coming-of-the-cleantech-era-5540.html), the "sixth revolution will be the Age of Cleantech and Biotech," in an editorial for Greentech Media. (Previous revolutions: Industrial Revolution, Age of Steam and Railways, Age of Steel, Electricity, and Heavy Engineering, Age of Oil, Automobiles, and Mass Production, Age of Information and Telecommunications.) That's the kind of stuff that makes great cold-calling script material. A revolution would imply that there is going to be a frenzy of activity that could inflate asset values. In our current bust, any technology that can promise returns would be nice. We, however, don't think there will be a bubble this time around.¶ Even though the most recent housing bubble blew up and *blew up* on the heels of a internet bubble, it's unlikely to think the nation, the globe, will have lost its taste for bubbles. So, while we'd hope there would be prudence, we know that's not really our style, so our amnesia-prone minds would induce us to blow up a green bubble.¶ Where our memory fails us, economics shold kick in, though. The slow thaw of credit will slow investment, which will prevent gobs of money from going to alternative energy projects the way it flowed into ill-fated real estate speculation and construction projects. And, while the billions from the government will act as a gap for a few years, the one thing we can be sure of is that it cash won't come swiftly no matter the rhetoric. Take all that into account, the capital influx into green projects is likely to be more orderly and less so a bubble-inducing grab bag.

### 1ar space

#### Space colonization is impossible --- humans can’t adjust

Theunis **Piersma 10**, professor of animal ecology at the University of Groningen in the Netherlands and senior research scientist at the Royal Netherlands Institute for Sea Research in Den Burg, “Why space is the impossible frontier,” NewScientist, 11-16-10, <http://www.newscientist.com/article/mg20827860.100-why-space-is-the-impossible-frontier.html>

Hawking, Obama and other proponents of long-term space travel are making a grave error. Humans cannot leave Earth for the several years that it takes to travel to Mars and back, for the simple reason that **our biology is intimately connected to Earth.**

To function properly, we need gravity. Without it, the environment is less demanding on the human body in several ways, and this shows upon the return to Earth. Remember the sight of weakened astronauts emerging after the Apollo missions? That is as nothing compared with what would happen to astronauts returning from Mars.

One of the first things to be affected is the heart, which shrinks by as much as a quarter after just one week in orbit (The New England Journal of Medicine, vol 358, p 1370). Heart atrophy leads to decreases in blood pressure and the amount of blood pushed out by the heart. In this way heart atrophy leads to reduced exercise capacity. Astronauts returning to Earth after several months in the International Space Station experience dizziness and blackouts because blood does not reach their brains in sufficient quantities.

Six weeks in bed leads to about as much atrophy of the heart as one week in space, suggesting that the atrophy is caused by both weightlessness and the concomitant reduction in exercise.

Other muscle tissue suffers too. The effects of weightlessness on the muscles of the limbs are easy to verify experimentally. Because they bear the body's weight, the "anti-gravity" muscles of the thighs and calves degenerate significantly when they are made redundant during space flight.

Despite the best attempts to give replacement exercise to crew members on the International Space Station, after six months they had still lost 13 per cent of their calf muscle volume and 32 per cent of the maximum power that their leg muscles could deliver (Journal of Applied Physiology, vol 106, p 1159).

Various metabolic changes also occur, including a decreased capacity for fat oxidation, which can lead to the build-up of fat in atrophied muscle. Space travellers also suffer deterioration of immune function both during and after their missions (Aviation, Space, and Environmental Medicine, vol 79, p 835).

Arguably the most fearsome effect on bodies is bone loss (The Lancet, vol 355, p 1569). Although the hardness and strength of bone, and the relative ease with which it fossilises, give it an appearance of permanence, bone is actually a living and remarkably flexible tissue. In the late 19th century, the German anatomist Julius Wolff discovered that bones adjust to the loads that they are placed under. A decrease in load leads to the loss of bone material, while an increase leads to thicker bone.

It is no surprise, then, that in the microgravity of space bones demineralise, especially those which normally bear the greatest load. Cosmonauts who spent half a year in space lost up to a quarter of the material in their shin bones, despite intensive exercise (The Lancet, vol 355, p 1607). Although experiments on chicken embryos on the International Space Station have established that bone formation does continue in microgravity, formation rates are overtaken by bone loss.

What is of greatest concern here is that, unlike muscle loss which levels off with time, bone loss seems to continue at a steady rate of 1 to 2 per cent for every month of weightlessness. During a three-year mission to Mars, space travellers could lose around 50 per cent of their bone material, which would make it extremely difficult to return to Earth and its gravitational forces. Bone loss during space travel certainly brings home the maxim "use it or lose it".

Bone loss is not permanent. Within six months of their return to Earth, those cosmonauts who spent half a year in space did show partial recovery of bone mass. However, even after a year of recovery, men who had been experimentally exposed to three months of total bed rest had not fully regained all the lost bone, though their calf muscles had recovered much earlier (Bone, vol 44, p 214).

Space agencies will have to become very creative in addressing the issue of bone loss during flights to Mars. There are concepts in development for spacecraft with artificial gravity, but nobody even knows what gravitational force is needed to avoid the problems. So far, boneless creatures such as jellyfish are much more likely than people to be able to return safely to Earth after multi-year space trips. For humans, gravity is a Mars bar.

The impossibility of an escape to space is just one of many examples of how our bodies, and those of our fellow organisms, are inseparable from the environments in which we live. In our futuristic ambitions we should not forget that our minds and bodies are connected to Earth as by an umbilical cord.

#### Gridlock inevitable with any election outcome

Curry, 9/11/12 - NBC News national affairs writer (Tom, NBC Politics, “Romney election could create new scenario for EPA and coal,” <http://nbcpolitics.nbcnews.com/_news/2012/09/11/13807749-romney-election-could-create-new-scenario-for-epa-and-coal?lite>)

Whether Mitt Romney or Barack Obama wins the presidential election, a congressional impasse in 2013 seems likely. That’s because under most conceivable election scenarios – with Romney or Obama in the White House, and with either Democrats maintaining their Senate majority, or the Republicans taking it – the minority party could use the filibuster threat to block proposals it opposed.

#### Special session is abnormal means.

**C-SPAN Glossary, no date** (C-SPAN Congressional Glossary, “Special Session” no date, google)

A Special Session of Congress may be convened after that Congress has already adjourned sine die. The Constitution gives the president the authority to recall Congress for special sessions. Since the first Congress, 27 special sessions have been held. The last was called by Pres. Truman in 1948.

#### Should doesn’t express certainty

**Green, 89 – US District Judge (**EMERSON EMORY, Captain, USNR (Ret.), Plaintiff v. SECRETARY OF THE NAVY, Defendant Civil Action No. 83-2494 UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA 708 F. Supp. 1335; 1989 U.S. Dist. LEXIS 2993; 49 Fair Empl. Prac. Cas. (BNA) 677; 51 Empl. Prac. Dec. (CCH) P39,276 March 22, 1989, Decided March 22, 1989, Filed, lexis)

Defendant argues that the "should" and "also desired" is "plainly permissive," [5](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1304195469571&returnToKey=20_T11858051186&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.871370.3788639477" \l "fnote5) while plaintiff points out that "should" is a past tense of "shall." While "shall" denotes a mandatory action when used in statutes and contracts, "should" does not ordinarily  [\*\*10]  express such certainty. [6](http://www.lexisnexis.com.proxy.lib.umich.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1304195469571&returnToKey=20_T11858051186&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.871370.3788639477" \l "fnote6) By examining the context in which "should" is used within the policy statements, this Court concludes that it is not used in a mandatory manner. In setting out the requirements of board membership at that time, the Navy consistently used "will" or "must." The subsection addressing minority officers was the only one in this memorandum that used "should," instead of "will" or "must."

#### OR resolved

Webster’s Guide to Grammar and Writing – 2000

[http://ccc.commnet.edu/grammar/marks/colon.htm]

Use of a colon before a list or an explanation that is preceded by a clause that can stand by itself. Think of the colon as a gate, inviting one to go on… If the introductory phrase preceding the colon is very brief and the clause following the colon represents the real business of the sentence, begin the clause after the colon with a capital letter.

### 1ar no turn out

#### The plan doesn’t reduce turnout

Neil Munro 8-30-2011; Daily Caller “Obama still has green energy vote for 2012” <http://dailycaller.com/2011/08/30/obama-still-has-green-energy-vote-for-2012/>

Environmentalists are staging a two-week oil-pipeline protest outside the White House to boost their importance to President Barack Obama’s political calculations in the 2012 election season. But there’s little evidence so far that progressives’ disappointment with Obama’s environmental policies threatens to reduce their turnout on election day, or that it pressures White House officials to make additional concessions to environmentalists during a political season dominated by the public’s demand for additional jobs. Monday’s colorful, TV-ready protests against the Keystone XL pipeline from Canada’s oil fields to U.S consumers took place in Lafayette Park, in front of the White House. The day’s events included 100 peaceful arrests of environmentalists and celebrities, a multi-faith spiritual event in Lafayette Park, press club speeches by environmental leaders, and numerous suggestions that approval of the pipeline by Obama will cost his campaign votes, volunteers and donations. Hundreds of others have already been arrested, and numerous environmental groups have contributed to two weeks of protest. If Obama approves the pipeline, environmental activist Andrew Driscoll predicted he would not vote to re-elect him. “He hasn’t done anything to earn our vote yet,” said the Massachusetts activist. “The fate of humanity, the fate of the planet” will be determined by Obama’s pipeline decision, he said. “If he approves it, it will be a huge blow, not only for our future, but also for this administration,” said Elijah Zarlin, a campaign manager at CREDO Action, an Atlanta-based progressive group. The protesters “are the people who are maybe going to vote for Obama, and are the people Barack will lose” if he approves the pipeline, he added. However, the leadership of the green movement isn’t threatening to break with Obama over this one decision. (RELATED: Gore: Global warming skeptics are this generation’s racists)

#### No impact to reduced turnout

Cohn, 10/1/12 [ New Republic Election Expert, Part-Time Georgetown Coach -- his articles go through a TNR editing process and are available for all on his blog, he has been profiled on New York Magazine and MSNBC, “Obama’s College Voter Trump Card, [www.tnr.com/blog/electionate/107974/obamas-college-voter-trump-card](http://www.tnr.com/blog/electionate/107974/obamas-college-voter-trump-card)]

Even if turnout among these voters is down 18 percent—and that’s beneath 2004, by the way—the total number of young, disproportionately non-white, and Obama-friendly voters actually increases from 23.5 to 25.7 million.¶ Even in this relatively low-turnout scenario, 6.5 million new 18-22 year olds will enter the electorate and they can go a long way toward helping Obama compensate for declining turnout among ’08 voters or an increase in conservative turnout. If they vote 63-37 for Obama, the president would net-1.7 million voters.¶ If non-white or young voters turned out at ’08-levels in 2012, demographics would actually ensure that Obama does even better than he did four years ago. These same demographic trends give Democrats a bit of breathing room to withstand modest declines in enthusiasm among young voters without actually falling far behind where they stood four years ago. ¶ With this in mind, it’s no surprise that Obama opened his campaign at Ohio State University, or that Michelle Obama is holding rallies on college campuses across the battleground states. Today’s college students didn’t vote four years ago, and even an underwhelming turnout from America's most diverse age group could help the Obama campaign make up for losses among voters who have abandoned their cause since 2008.

### ohio

#### Romney will win- their polling methodology is flawed

**Weston ‘9-26** (Op-Ed: Publicized polls are often misleading Published 6:25 p.m., Wednesday, September 26, 2012 Barry Weston, of Stamford, is a retired CEO and CFO of a number of companies and a former CPA. Read more: http://www.stamfordadvocate.com/opinion/article/Op-Ed-Publicized-polls-are-often-misleading-3896960.php#ixzz285xyENsb

The media reports on a daily basis that President Obama is building a meaningful lead in the polls, particularly in the swing states, and that Gov. Romney's campaign is falling into decline. The Real Clear Politics average, which weights all polls equally -- irrespective of qualitative polling issues -- currently shows Obama up about 3 1/2 points. They also report an Obama lead in the 2-8 point range in almost all swing states (double digits in Michigan and Pennsylvania). **These numbers are highly questionable**. **There are only two reputable polls that do significant polling daily and report daily tracking results**. They are Gallup and Rasmussen -- both of which have, for the most part, fluctuated for the past two months between a 2-point lead for Romney and a 2-point lead for Obama -- except for the brief period following the conventions during which temporary and historically normal "bounces" occurred and then quickly disappeared. This suggests that the race has been and remains more or less a statistical tie for the past two months. The Rasmussen poll in particular has been the most accurate poll nationally for the past two presidential elections and even picked up the last-minute swing towards Gore in the 2000 poll. Gallup and Rasmussen, in addition to polling daily, poll far more voters nationally per week than any of the other occasional polls that receive so much publicity. Wednesday's Rasmussen poll showed Obama and Romney tied at 46 points each -- and **Romney with a 2-point lead when leaners were included**. A separate Rasmussen daily sample of 11 swing states showed Obama up by 1 point with double-digit leads in polls of Pennsylvania and Michigan. Mathematically, this means that Romney MUST hold a 2- to 3-point lead in the other swing states, which include Florida, Ohio, Virginia, North Carolina, Virginia, Colorado, Nevada and New Hampshire. Another important thing to know about the Rasmussen poll is that it polls only likely voters, whereas most of the polls given high visibility in the press poll "registered" voters, including those who rarely -- if ever -- vote. My review of historical Gallup polling data shows that the Republican candidate generally does about 3 points better with likely voters than with registered voters. This is confirmed by my analysis of actual election results compared to Gallup polls taken about a week prior to Election Day. Since the 1952 election, this data has shown an average actual election result 3.4 percent better for the GOP candidate than the late October Gallup polls of registered voters indicated. Seen another way, the GOP candidate did better on Election Day compared to the late October Gallup poll 11 out of 15 times, including a double-digit shift to the Republican three times. A significant point of interest is the 1980 election in which Carter was leading by 8 points in the late October Gallup poll whereas Reagan won by 10 points in the actual election. A final point of interest is that the highly publicized media polls often **oversample Democrats** and undersample Republicans **compared to historical turnout patterns**. When one **adjusts many of these polls to a historically more realistic ratio** between Democrats and Republicans in the sample, **large leads for Obama often turn into meaningful leads for Romney.**

#### Romney winning now – most qualified models.

Caughey and Kelly 10-4. [Peter, David, CU-Boulder media relations, "Updated election forecasting model still points to Romney win, University of Colorado study says" University of Colorado Boulder Press Release -- www.colorado.edu/news/releases/2012/10/04/updated-election-forecasting-model-still-points-romney-win-university]

An update to an election forecasting model announced by two University of Colorado professors in August continues to project that Mitt Romney will win the 2012 presidential election.¶ According to their updated analysis, Romney is projected to receive 330 of the total 538 Electoral College votes. President Barack Obama is expected to receive 208 votes -- down five votes from their initial prediction -- and short of the 270 needed to win.¶ The new forecast by political science professors Kenneth Bickers of CU-Boulder and Michael Berry of CU Denver is based on more recent economic data than their original Aug. 22 prediction. The model itself did not change.¶ “We continue to show that the economic conditions favor Romney even though many polls show the president in the lead,” Bickers said. “Other published models point to the same result, but they looked at the national popular vote, while we stress state-level economic data.”¶ While many election forecast models are based on the popular vote, the model developed by Bickers and Berry is based on the Electoral College and is the only one of its type to include more than one state-level measure of economic conditions. They included economic data from all 50 states and the District of Columbia.¶ Their original prediction model was one of 13 published in August in PS: Political Science & Politics, a peer-reviewed journal of the American Political Science Association. The journal has published collections of presidential election models every four years since 1996, but this year the models showed the widest split in outcomes, Berry said. Five predicted an Obama win, five forecast a Romney win, and three rated the 2012 race as a toss-up.¶ The Bickers and Berry model includes both state and national unemployment figures as well as changes in real per capita income, among other factors. The new analysis includes unemployment rates from August rather than May, and changes in per capita income from the end of June rather than March. It is the last update they will release before the election.¶ Of the 13 battleground states identified in the model, the only one to change in the update was New Mexico -- now seen as a narrow victory for Romney. The model foresees Romney carrying New Mexico, North Carolina, Virginia, Iowa, New Hampshire, Colorado, Wisconsin, Minnesota, Pennsylvania, Ohio and Florida. Obama is predicted to win Michigan and Nevada.¶ In Colorado, which Obama won in 2008, the model predicts that Romney will receive 53.3 percent of the vote to Obama’s 46.7 percent, with only the two major parties considered.¶ While national polls continue to show the president in the lead, “the president seems to be reaching a ceiling at or below 50 percent in many of these states,” Bickers said. “Polls typically tighten up in October as people start paying attention and there are fewer undecided voters.”¶ The state-by-state economic data used in their model have been available since 1980. When these data were applied retroactively to each election year, the model correctly classifies all presidential election winners, including the two years when independent candidates ran strongly: 1980 and 1992. It also correctly estimates the outcome in 2000, when Al Gore won the popular vote but George W. Bush won the election through the Electoral College.

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## 2ac

### 2ac china

#### Concedes heg is key to solve great power war

**Monteiro 11** \*Nuno P. Monteiro is Assistant Professor of Political Science at Yale University [<http://www.mitpressjournals.org/doi/pdf/10.1162/ISEC_a_00064>, “Unrest Assured: Why Unipolarity is not Peaceful”]

In addition, Wohlforth claims that wars among major powers are unlikely, because the unipole will prevent conflict from erupting among important states. He writes, “The sole pole’s power advantages matter only to the degree that it is engaged, and it is most likely to be engaged in politics among the other major powers. 44 **I agree** that if the unipole were to pursue a strategy of defensive dominance, major power wars would be unlikely. Yet, there is no compelling reason to expect that it will always follow such a course. Should the unipole decide to disengage, as Wohlforth implies, **major power wars would be possible**

### 2ac topicality

#### Production is transformation

Batelle (the world’s largest nonprofit research and development organization, specializing in global science and technology) 1980 “An Analysis of Federal Incentives Used to Stimulate Energy Production” p 22 http://www.scribd.com/doc/67538352/Federal-Incentives-for-Energy-Production-1980

Discussing governmental actions in a field that lacks consistent Policy is difficult, since boundaries defining energy actions are unclear. All governmental actions probably have at least some indirect relevance to energy. if a consistent Policy did exist, the discussion could focus on those actions that are part of the planned and consistent program. For this analysis, however, boundaries must be somewhat arbitrarily defined. First, this discussion will include only those actions taken by the Federal Government; relevant actions of state and local governments are not considered. Second, the discussion covers only those Federal Government actions In which major causes include to influence energy or major effects included some Influence on energy. Within those limits, the discussion considers actions related to both production arid consumption, although production receives the most emphasis. It also includes actions relating to both increases and decreases in energy consumption or production. Energy production is defined as the transformation of natural resources into commonly used forms of energy such as heat, light, and electricity. By this definition, the shining of the sun or the running of a river are not examples of energy production, but the installation of solar panels or the construction of a hydroelectric dam are. Energy consumption is defined is the use of one of these common, manufactured forms of energy. Under this definition sunbathing Is not energy consumption, but heating water by means of a solar panel is In both definitions, the crucial ingredient is the application of technology and resources to change a natural resource into a useful energy form.

#### They exclude all new reactor types massive aff ground

MIT ’11 (“The Future of Nuclear Power”, Chapter 4 – Fuel Cycles, 2011, <http://web.mit.edu/nuclearpower/pdf/nuclearpower-ch4-9.pdf>)

The description of a possible global growth scenario for nuclear power with 1000 or so GWe deployed worldwide must begin with some specification of the nuclear fuel cycles that will be in operation. The nuclear fuel cycle refers to all activities that occur in the production of nuclear energy. It is important to emphasize that producing nuclear energy requires more than a nuclear reactor steam supply system and the associated turbine-generator equipment required to produce electricity from the heat created by nuclear fission. The process includes ore mining, enrichment, fuel fabrication, waste management and disposal, and finally decontamination and decommissioning of facilities. All steps in the process must be specified, because each involves different technical, economic, safety, and environmental consequences. A vast number of different fuel cycles appear in the literature, and many have been utilized to one degree or another. We review the operating characteristics of a number of these fuel cycles, summarized in Appendix 4. In this report, our concern is not with the description of the technical details of each fuel cycle. Rather, we stress the importance of aligning the different fuel cycle options with the global growth scenario criteria that we have specified in the last section: cost, safety, nonproliferation, and waste. This is by no means an easy task, because objective quantitative measures are not obvious, there are great uncertainties, and it is difficult to harmonize technical and institutional features. Moreover, different fuel cycles will meet the four different objectives differently, and therefore the selection of one over the other will inevitably be a matter of judgment. All too often, advocates of a particular reactor type or fuel cycle are selective in emphasizing criteria that have led them to propose a particular candidate. We believe that detailed and thorough analysis is needed to properly evaluate the many fuel cycle alternatives. We do not believe that a new technical configuration exists that meets all the criteria we have set forth, e.g. there is not a technical ‘silver bullet’ that will satisfy each of the criteria. Accordingly, the choice of the best technical path requires a judgment balancing the characteristics of a particular fuel cycle against how well it meets the criteria we have adopted. Our analysis separates fuel cycles into two classes: “open” and “closed.” In the open or once-through fuel cycle, the spent fuel discharged from the reactor is treated as waste. See Figure 4.1. In the closed fuel cycle today, the spent fuel discharged from the reactor is reprocessed, and the products are partitioned into uranium (U) and plutonium (Pu) suitable for fabrication into oxide fuel or mixed oxide fuel (MOX) for recycle back into a reactor. See Figure 4.2. The rest of the spent fuel is treated as high-level waste (HLW). In the future, closed fuel cycles could include use of a dedicated reactor that would be used to transmute selected isotopes that have been separated from spent fuel. See Figure 4.3. The dedicated reactor also may be used as a breeder to produce new fissile fuel by neutron absorption at a rate that exceeds the consumption of fissile fuel by the neutron chain reaction.2 In such fuel cycles the waste stream will contain less actinides,3 which will significantly reduce the long-term radioactivity of the nuclear waste.4

#### And, thorium is part of that

Rees, 11 [“Don't believe the spin on thorium being a greener nuclear option [Ecologist](http://www.theecologist.org/): It produces less radioactive waste and more power but it remains unproven on a commercial scale”, Eifion, Ecologist, <http://www.guardian.co.uk/environment/2011/jun/23/thorium-nuclear-uranium>]

All other issues aside, thorium is still nuclear energy, say environmentalists, its reactors disgorging the same toxic byproducts and fissile waste with the same millennial half-lives. Oliver Tickell, author of Kyoto2, says the fission materials produced from thorium are of a different spectrum to those from uranium-235, but 'include many dangerous-to-health alpha and beta emitters'.

### 2ac states cp

#### Federal guarantees are vital to getting investors on board – superior credit rating

**Sullivan and Walsh, 8 -** Mary Anne Sullivan, partner in Hogan & Hartson's energy practice, has more than 25 years of experience as an energy lawyer. She previously served as general counsel of the U.S. Department of Energy and as deputy general counsel for environment and nuclear programs. Sam Walsh is an associate at Hogan & Hartson (“Federal Loan Guarantees,” Electric Light and Power, Mar/April, ABI Inform)

In their rulemaking comments, Wall Street firms emphasized that a loan guarantee must represent the unconditional commitment of the full faith and credit of the United States if the program is to succeed in attracting affordable private investment to innovative technologies. The final rule seems to have calmed concerns that the guarantees might be conditioned in a way that would preclude the "AAA" rating for the federally guaranteed debt that the program was designed to assure. The guarantees will be absolute, absent fraud or material misrepresentation by the holder of a guaranteed obligation.

#### State incentives fail – federal loan guarantees attract substantially more investment capital

**NEI, 11** – Nuclear Energy Institute “Issues in Focus Loan Guarantees For Clean Energy Development” http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCkQFjAB&url=http%3A%2F%2Fwww.nei.org%2Ffilefolder%2Floanguaranteefastfacts.pdf&ei=PCJsUNTiJKbA2gXymYAg&usg=AFQjCNEzvSlK0TiMZStFOzXeQDIf76vQBw)

State governments are doing their part. Many of the states where new nuclear plants are planned – including Florida, Virginia, Texas, Louisiana, Mississippi, North Carolina and South Carolina – have passed legislation or implemented new regulations to encourage construction of new nuclear power plants by providing financing support and/or assurance of investment recovery.

By itself, this state support is not sufficient. The federal government must also provide financing support for deployment of clean energy technologies in the numbers necessary to address growing U.S. electricity needs and reduce carbon emissions. The clean energy loan guarantee program authorized by the Energy Policy Act of 2005 is equally important.

Although tax stimulus – either in the form of tax credits or more favorable depreciation terms – can play an important role in encouraging investment, loan guarantees are a very efficient way to mobilize private capital. Tax benefits have a direct, dollar-for-dollar impact on the federal budget. Even if the credit subsidy cost associated with a loan guarantee is appropriated, loan guarantees provide substantial leverage. Tens of millions of dollars in appropriations to support a loan guarantee program can leverage tens of billions of dollars in private sector investment.

#### States don’t solve federal coordination is key

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

The 50 US states have 50 additional energy policies. In the US, states have been active in changing electric power generation rules and prices. The proffered reason for most changes is to check global warming by reducing C02 emission, even though a single state’s small reductions, or even all of the states’ reductions, can’t make a dent in the global problem. The motivation seems to be to assuage pollution guilt or exhibit leadership in combating climate change, expecting others to follow suit. People feel good about taking any steps, however insignificant. The national result is a mishmash of confusing and changing rules about electric power, which crosses state boundaries and should be managed with national scope. The Regional Greenhouse Gas Initiative is a cap-and-trade market for limiting CO2 emissions, started in 2008. Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island and Vermont cooperate by requiring utilities to bid for capped rights to emit CO2 when generating power. The objective is to reduce CO2 emissions 10% by 2018. The states require power generating utilities to pay for the CO 2 emitted; the market price in 2012 is roughly $ 2/ton. This will likely rise as the cap will decrease 2.5% per year beginning in 2014. The cap was set about 20% higher than actual emissions, so CO2 reductions from this are nil. Quarterly auctions net about $40 million dollars; total to date is about $1 billion. The proceeds are divided among the participating states. The money is intended to be used for CO2- reducing projects such as improving energy efficiency, but states are free to spend the money on other purposes. New Jersey has left RGGI and New Hampshire is debating leaving. The small cost of $2/ton of CO2 has little effect on behavior; it is paid for by increased charges for electric power. Investment tax credits for renewable energy projects exist at the state level as well as the federal level. In Vermont this was 30%, but this particular tax credit has been eliminated. Feed-in tariffs are requirements forcing electric utilities to buy specified renewable-sourced power at above-market rates. In the US most states have a deregulated electric power market, where electric utilities buy power from independent companies - merchant generators. The utilities have responsibility for power transmission, distribution, and customer service. They buy power in a competitive marketplace from merchant generators who offer the lowest prices. Feed-in tariffs supersede this process in a market where price competition settles out at roughly 5 cents/kWh for hydro, nuclear, and natural gas generated electricity. For example, in Vermont, the feed-in tariff for PV solar power was 30 cents/kWh when the first plants were built. The 2012 law now sets prices, not on CO2 abatement, but on the cost of generating each type of renewable energy, for example (in cents/kWh): solar (27), hydro (12), farm methane (14), wind (11), small wind (25), biomass (12). Guaranteeing profitable prices reduces producer cost-reduction incentives. Feed-in tariffs also apply in states of the US where utilities generate power. Feed-in tariffs are common in Europe. Germany has reduced solar rates in 2012 to 23 to 30 cents/kWh. Greece pays up to 63 cents/kWh. Sunny Spain pays 27 cents/kWh. UK plans to reduce its home- scale solar feed-in tariff to 25 cents/kWh. Production tax credits are paid to power producers for actual generation of power. In addition to the federal 2.2 cent/kWh program, Iowa pays at least 1 cent/kWh to wind power producers. Arizona, New Mexico, Oklahoma, and Maryland offer production tax credits. Renewable energy certificates (RECs) represent a property right created by generating 1 MWh of C02-free electricity (except from nuclear power). Generating companies can sell the energy and certificates separately. Utilities can meet requirements for renewable energy by generating it or buying RECs in an open market. RECs are classified by energy source: wind, solar, biomass, etc. Massachusetts specifies a minimum price of 5.5 cents/kWh; elsewhere the auction market prices range from 0.1 to cents/kWh. Companies seeking to reduce their advertised net carbon footprint can buy RECs; Intel bought 2.5 billion kWh of RECs in 2011 to offset over 85% of their electricity use. Renewable -portfolio standards (RPSs) are mandates that require electric utilities to obtain certain fractions of their power from specified renewable energy sources. Every state has different rules, requiring from 10% to 40% of electricity be obtained from various renewable sources by deadlines ranging from 2015 to 2030. Some states allow meeting RPS requirements by purchasing RECs. The US Congress is considering a federal RPS law. Carbon taxes are taxes on CO2 emitted to produce power. Small carbon taxes are enacted in Colorado (0.5 cents/kWh), California (4.4 cents/ton CO2), and Maryland ($5/ton CO2). Administration of the mishmash of policies is expensive. The rules, exceptions, allowances, auctions, audits, and labor are very complex and volatile. Only clever business people can make use of the rats’ nest of regulations. One solar power project in Vermont was able to be profitable because of a 30% federal investment tax credit, a 30% state investment tax credit, accelerated depreciation, a feed-in tariff guaranteeing sales at 30 cents/kWh, and opportunities to sell RECs. Existing energy policies are failing. Carbon dioxide emissions are still rising. In 2011 global CO2 emissions rose 3.2% to 31.6 Gt, led by China and India. US emissions dropped 1.7% due to a mild winter and power generators switching from coal to natural gas. EU emissions dropped 1.9% due to a warm winter and industrial recession. Japan emissions rose 2.8% from shutting down nuclear power plants. Reducing US CO2 emissions can do little to check global warming, because the US represents just 17% of the problem. The DOE EIA projects 0.3% annual growth in US CO2 emissions. 1.3% for the world, and 2.6% for China and India. Germany is shutting down nuclear power plants, burning more coal, building 17 new coal plants, and burning natural gas from Russia. The rising price of electricity has already bankrupted an aluminum company there. Energy policy recommendations I recommend that the goals of US energy policy should be: Stopping global warming. Protecting the environment. Protecting human health and safety. Ensuring a sustainable world. Ending energy poverty. Furthering economic growth. Assuring energy security. recommend that the agents of this pursuit be the federal government of the United States, enabling corporations to develop innovative energy sources, with leadership from politicians, philanthropists, and entrepreneurs. Lead energy policy at the federal level, not the state level. Energy flows across state lines, as do EPA-regulated emissions and DOT-regulated trucks. NRC continues strong effective control over all nuclear plants. Energy policy seems largely ceded to the states, which conceive and implement feed-in tariffs, RECs, RPSs, tax credits, etc in 50 different ways. There is a Federal Energy Regulatory Commission, but it is silent on these matters.

#### Substantial federal loan guarantees are critical to accessing investor perception and capital – assures investors of long term federal support

**Lyash 7**, president and CEO, Progress Energy Florida (Jeffrey, “DEPARTMENT OF ENERGY OFFICE OF THE CHIEF FINANCIAL OFFICER HOLDS A MEETING TO PROPOSE POLICIES AND PROCEDURES APPLICABLE TO THE DEPARTMENT OF ENERGY'S LOAN GUARANTEE PROGRAM AUTHORIZED BY TITLE XVII OF THE ENERGY POLICY ACT OF 2005,” Political Transcript Wire, June 19, L/n, rday)

In my comments today**, I want to emphasize the critical importance of having a workable** federal **Loan** Guarantee **Program for new nuclear power projects and for the** D**epartment** o**f Energy to send a** strong**,** clear signal **that the federal government supports commercial nuclear operations as a part of our solution**. Given the growth our region faces and the obligation our utilities have to provide for future power needs of the population, I feel a keen sense of urgency on this topic. So do many of our state and federal policy-makers. And Wall Street is watching very closely. Progress Energy is a member of the Nuclear Energy Institute, which has already made comments this morning. And we fully support the seven principles that NEI calls for to guide in the design of the energy Loan Guarantee Program. As NEI states in its comments, this loan program is the most important part of the Energy Policy Act incentives to address the major challenge facing nuclear power expansion, that is the challenge of construction financing for these very large and long lead-time capital projects. Progress Energy has been safely operating nuclear power plants for more than 35 years. Much of my own career has been in the nuclear field. We now have five nuclear reactors currently in operation and we are working on license applications for two more nuclear projects, two units each, one project in Florida and one in North Carolina. In fact, for our Florida project, we've selected a site and a technology. We're I the process of developing the necessary permitting and license applications. And we are driving toward 2016 in-service date for that first unit. This is an active project. I want to make three points. First, population and economic growth are driving the demand for electricity and forcing utilities and states to make near-term decisions about how to meet that growth. At Progress Energy Florida alone, we are adding 40,000 new customers each year. And we project that will continue and that the demand for electricity will grow by 25 percent in the next 10 years in our service territory. Second, in our state and nation, nuclear power is an essential part of a balanced solution to meeting these growing energy needs in a way that is environmentally responsible. The issues of climate change and energy security reinforce the case for increased nuclear-powered generation. That was true when Congress enacted the Energy Policy Act of 2005. And it is even more true today. At Progress Energy, our balanced approach to growth includes increased energy efficiency, alternative and renewable energy, but they're not enough. So is includes construction of state-of-the-art power plants. Regarding that last element, our company, as I said, is actively pursuing the possibility of building two nuclear projects. The first unit for Florida nuclear project would need to be in service around 2016. And what that means is that we must make decisions in the next year or so about whether to go forward If we cannot prudently proceed with a nuclear unit, we will need to change course. And that course will be back toward fossil-based generation -- gas or coal. Several folks have pointed out the policy and energy security implications of continuation of that trend. That leads me to my third point, the one most important for the matter at hand. While I am encouraged by the momentum that is building in favor of new nuclear plants in this country, especially in Florida, a critical missing piece is having a realistic, workable Loan Guarantee Program, one that is large enough and structured in a commercially reasonable way such that it will make a difference. Absent that tangible support, it will be difficult for the new nuclear plants now being considered to go forward because of the financial strain on the companies involved. Congress did its part in 2005 by establishing the broad framework for U.S. energy policy, with nuclear power as an important element. Concerned about fuel diversity and price stability, the Florida legislature and the governor did their part last year by approving legislation specifically and directly supportive of new nuclear plants, including greater assurance of cost recovery. Then, earlier this year, the Florida Public Service Commission also did its part by adopting the implementation rules in support of that legislation. Also, week by week, we are seeing more and more support for nuclear energy from community leaders, the news media and others throughout Florida and beyond. Moreover, just last week in Florida, the Public Service Commission took action that discouraged new pulverized coal plants while reinforcing the need for new nuclear plants to increase the state's fuel diversity. All of that positive momentum for nuclear expansion is good. It's very good, but it is not sufficient. The magnitude of these nuclear capital projects is such that it requires a workable federal Loan Guarantee Program, especially for the initial plants. The $9 billion being considered for the entire energy loan program is hardly enough, much less the $4 billion of that set aside for nuclear projects. Consider that the cost of one nuclear project would be 30 percent to 40 percent of the total market capitalization of Progress Energy, one, and would roughly double the size of the utility assets we own in Progress Energy Florida. You can begin to see the significant financial risk involved and the reason there's such a strong need for a federal Loan Guarantee Program. On behalf of Progress Energy, I'd like to ask the Department of Energy to do its part to support commercial nuclear expansion as one element of a balanced approach to meeting our nation's energy future. The demand for energy is driving the need for new generation and near-term decisions. Nuclear power is an essential part of a diverse energy mix. And **a realistic federal Loan Guarantee Program is a** critical missing piece **we need as soon as possible.**

### 2ac kritik

#### Human suffering is immoral -- we should take action to prevent it -- even if human systems of morality are arbitrary, we can recognize the potential for undesirable outcomes when we see them

Paul **Santilli**, Siena College, **2003** “Radical Evil, Subjection, and Alain Badiou’s Ethics of the Truth Event,” *World Congress of The International Society for Universal Dialogue* inPyrgos, Greece

on May 18-22, 2003 http://www.isud.org/papers/pdfs/Santilli.pdf

One would like to reverse this with a blunt assertion: The annihilation of people *is* evil; the crushing of children’s bodies *is* evil; the ravages of diseases like Aids or cancer *are* evil. Evil does not reside solely in the twisted wills of the Nazis or of any other killer beings; it exists in the evil bearers, the done-to, and the subjected. Men, of course, bring about evil, but its evilness is not that they did it. Its evilness is due to pain, humiliation, destruction, and silence. Indeed, the attention we pay the sources of evil too often deflects attention from standing misery, whose presence may in fact have no simple causes. 15 In what follows, I would like to propose a different way of looking at radical evil, to examine it and ethical response to it from the standpoint of the one to whom evil is done, whom we could call, "the subject bearer of evil." The basic moral question, from this standpoint, would be, not why men do evil or even what is to be done about the evildoer, but rather, what is to be done about evil? The basic moral act would derive not from duty or virtue, but from a response to evil in the world, wherever it comes from, God, man, the devil, free will, or animal instincts. *Toward an Ethics of Subjection* It is well known that the sight of evil fascinates while the sight of suffering repels. The demonic possibilities of the free will in the acting subject and not the repulsive effects of the act on the subjected intrigue us. Perhaps this is proper. It makes sense to take seriously imperatives that command us to universalize maxims, to maintain fidelity to truth and to act differently than a Nazi. But what would it mean to say, “Do not cause suffering like that experienced by the Jews”? Suffering *like that* is an abyss, which no reason can comprehend, from which prayers and lamentations may arise, but into which no speech can enter. And yet, if we did not understand suffering, how would presume to address evil. Is not evil, evil because it causes suffering? Without the subjection to that which harms and mutilates we could not recognize evil at all, not even in the most grotesque perversions of reason and the will. Typically, there really is nothing radical or deep about criminals, their henchmen or their bosses. Sad, stupid, sick, perverse, retarded-- bad men do not have Miltonic qualities and philosophy should not waste its efforts at reflection by pondering their natures. Hannah Arendt commenting on her famous phrase, the "banality of evil," said evil is "thought defying" "because thought tries to reach some depth, to go to the roots, and the moment it concerns itself with evil, it is frustrated because there is nothing. That is its banality.” 16 This is I think correct, but, and this was what disturbed people about her characterization of Eichmann as "banal," the risk is that once one looks into the heart and mind of evil doers and finds boring, trivial idiots, that is people like us, who are us at times, evil itself will tend to fade, as though it could only absorb us by being identified with extraordinary monsters. But for the one who suffers, evil it is everything; it is the abyss; it is the horror and the depth that we cannot understand and yet must address. The chasm in which infants are swallowed should hold us and not the poor pathetic woman who killed her children. The monster is real and is a monster not because of the creator but because of the victims it devours. The lack of metaphysical depth in the evildoers should not allow evil itself to disappear. In the subject bearers of suffering, evil is radical and of infinite depth. And in this depth there are no categories to help us understand or empathize, but there is an imperative to help. What, then, is the ground of moral duty with respect to suffering? The response to horrible suffering should not be empathetic feeling but a rational decision to do one’s duty. Kant is right about this. For Kant that decision springs spontaneously from the subject’s pure practical reason. But unless there is recognition of the horror in the first place, unless one recognizes a call to action in the phenomenon of evil perceived, then the formal procedures for deliberation would not even be set in motion. One needs an imperative from the other, some signal that says, “This is worth your attention. This is cruel. This is worth the exercise of practical reason.” There is a non-spontaneous, passive moment in the exercise of moral reason binding it to suffering or the collapse of happiness and joy in human beings. Although we cannot know what is going on with the person in and for itself, we have to recognize the signs of the void in the tears, the broken bodies, the cries, and all the other *symptoms* of that void. Kant rejects the pathology of suffering as a condition for moral judgment because, being pathological, it will be dependent on feelings and sensibilities and, therefore, disqualified for universal and autonomous judgments. Only a moral law, purified of all content and material substance, withdrawn from the circuit of natural bodies, desires, and contingencies, could have the force of a standard to which all rational beings are subjected. Nevertheless, even Kant recognizes that to apply the moral law practically one needs to think of it typologically or imagine it as regulating nature and natural bodies.17

#### Wu Wei is an insufficient model for decisionmaking – we shouldn’t follow it in every instance – risk analysis is comparatively better for deciding action – also the perm solves

**Crane 11 –**Professor of Political Science at Williams College

(Sam, “OK, shooting someone in the head is not a Taoist policy…”, <http://uselesstree.typepad.com/useless_tree/2011/05/ok-shooting-someone-in-the-head-is-not-a-taoist-foreign-policy.html>, dml) **\*\*\*We reject gendered language**

What can we expect of Taosim in the world today? I think about this a fair amount when I talk with my students about the notion of wuwei - 无为 - which we might crudely translate as "do nothing" or "do nothing coercive" or "do nothing beyond the natural unfolding of things." It suggests a certain virtue in non-action or, at least, less action than might otherwise seem appropriate. My students, most of them, tend to resist this idea. And that is understandable: they are young, active, can-do, academically successful Americans. They believe in the efficacy of carefully planned human action. Instrumental rationality works. It has gotten them to where they are today. Taoist skepticism strikes them as droll or irrelevant, not really useful in the real world. I push them, arguing that we should not take wuwei too literally. After all, if a Taoist were standing in a road and a bus speeding toward him, he could, while still adhering to wuwei, step out of the way. Wuwei does not tell us to do absolutely nothing. We can eat and clothe ourselves and drink (think of Li Bai!). Rather, wuwei is a cautionary ideal. It is telling us not to attach ourselves too closely with our careful plans and calculations. Be open to unexpected twists and turns of circumstance. Accept variant possibilities. And don't press too hard against what conditions allow. Admittedly, even with that more modest interpretation, wuwei cannot guide all of our human actions. At times we will have to do more than seems possible in a moment. At times we will need to follow a plan and not just react to immediate circumstances. But wuwei is not irrelevant. It is a reminder that we do not have as much control over our environment as we think. We need to be humble and open. At times we need to follow to lead, while at other times we might need to do more than a stricter wuwei would suggest.

#### Taoism can’t inform policy – the nature of the Tao can’t be translated into policy action means the K’s predictions should be rejected

**Meng 4 –**Doctoral Candidate at the University of Singapore

(Jude, E’ntrepreneurial-Discovery, Policy and the Tao (Way) of Economic Efficacy: Updating the Wang Bi commentary on the Tao te-Ching,” <http://mises.org/journals/scholar/Meng4.pdf>, dml) **\*\*\*We reject gendered language**

There is one staring problem with this. This is that, supposing one can detail the traits of the Tao, there is **no accurate way** of explaining how exactly the sage should analogously imitate these traits in his governmental policies. The Tao is said to be metaphysically wu-wei (not interventionist), wu-ming (nameless), wu-xing (formless; invisible) , ziran (spontaneous). But to infer any kind of policy from these descriptions would be **fallaciously non-sequitur**. How is the sage to be non-interventionist? In what, and to what measure? How is he to be nameless, or formless, or spontaneous—in what sense is he to be all these things? How is the sage to be invisible, if he cannot be ontologically invisible, as the Tao is? One can almost infer anything and nothing. If public policy is inferred like that then it is as good as an arbitrary guessing game. 6 Correlative Taoism **cannot work as a basis for public policy.**

#### Taoism cannot possibly justify a negative ballot because it can't justify anything. This is a dictionary definition of the critique linking to itself and it certainly doesn't preclude acting to alleviate suffering

**Seymour – No Date** (Richard, “Tao and morality,” Taoism.net, *The Supplement*.

[Online] http://sites.google.com/site/taoismnet/home/supplement/tao-and-morality) Accessed 09.16.11 jfs

But what is Taoism’s position? **Taoism doesn’t have a position on anything, exactly. There are many schools of thought within Taoism and they don’t all agree. We are all, though, familiar with the Tao Te Ching, so let’s look there**.

It is true that chapter two tells us that when the world sees beauty as beauty, ugliness arises and that when it sees good, evil arises. What it is not saying is that by recognising good as good, bad things are made to happen; or that when bad things happen, we should not consider them so.

**If we see a man attacking a woman in a street, her suffering is very real. It does not take us to create it as a concept before what is happening to her becomes wrong. By not passing judgment we are not disallowing a neutral situation to escalate. The fear and pain she feels is real. Not real only in comparison to their opposite states, but real as a natural consequence of what is happening to her**.

The first of Lao Tzu’s three treasures, which he talks about in chapter sixty-seven, is compassion. We feel compassion for any living thing we sense is suffering. We have evolved empathy as a very powerful tool and for the vast majority of us who possess it we cannot help but feel, in some way, the pain of another. That is how our ancestors knew to help another and how, when they needed help, there were those able to recognise that fact and reach out a hand.

**But even when we recognise the suffering of another, what does it say in the Tao Te Ching that we should do? Does the idea of non-interference**, which the Tao Te Ching promotes, **guide us to do nothing?**

**Some would have you believe it does. But non-interference, when spoken of by Lao Tzu, clearly does not mean do nothing. I say ‘clearly’ because he suggests non-interference as a way to ‘take the world’. And in chapter seven he says that it is through selflessness that sages achieve their goals**.

**Very obviously, Lao Tzu is not against us doing things. He does, though, have advice about how to go about it**. In chapter thirty-eight he outlines a hierarchy of enlightened action. At the very top is high virtue, which, he says, is not virtuous. That is, those who possess the highest form of virtue are not trying to be virtuous. High virtue, he says, takes no contrived action and acts without agenda.

In the case of our woman who is being attacked, ideally, we should help her because she needs help, not because helping her is a good thing to do. We ought to act without contrivance or agenda. Of course, contriving to help and having our own agenda for doing so is still good for the woman, but for Lao Tzu this is righteousness on our part and we should be aiming higher.

The moral question becomes more tricky when we examine other belief systems and cultures. In some cultures, if a girl is raped, her father, rather than seek to comfort her, make her feel safe and seek justice, will, instead, kill her for bringing shame upon her family.

Do we have the right to say this is wrong? Moreover, is it for us to try to stop it? We’re used to other cultures having different morals. Mostly, we respect them and leave them to it. But what does it say to us as human beings that someone, essentially the same as our sisters and daughters, is being made to suffer in this way when our empathy is triggered? And what does it say to us as Taoists when we feel compassion for the girl’s situation?

Perhaps we should ask not what right we have to interfere, but, rather, what right do we have to not? Does compassion stop at boundaries of culture and religion? Or does it just recognise human suffering when it sees it?

**As Taoists, we have to ask ourselves is it right for us to say we are right? Are notions of right and wrong so blurred in Taoism that we cannot ever be sure which is which?**

**Lao Tzu did not give us a list of good things and bad things. He told us only that sages just know. We are not sages, but if we do as he says and not contrive to interfere but, instead, listen to our hearts and act accordingly then we can do no more**.

By remembering that the Tao is the protection of the unkind person as well as the treasure of the kind; by taking the watercourse way; by being selfless, **we can emulate the sages**. The same sages who themselves took their cue from the Tao; who would give food to a hungry man, not because it was the good thing to do, but because he was hungry, and moved on; **who would help someone who was suffering because the suffering of others struck at their humanity**.

**Ultimately it is up to each of us to decide matters of right and wrong and how to respond to the suffering of others. Taoism won’t tell us what to do, but nor does it provide excuses for us to do nothing**.

#### Their refusal to address possible catastrophes in the world is more of an attempt of escaping from realities --- it’s more productive to work to remove the causes of fear and suffering

Geshe Kelsang Gyatso, Internationally renowned teacher and author of 19 books on spirituality, 2003

Tharpa Publications, http://www.tharpa.com/uk/background/dealing-with-fear.htm

According to [Buddhism](http://www.tharpa.com/uk/background/about-buddhism.htm), there is unhealthy fear and healthy fear. For example, when we are afraid of something that cannot actually harm us - such as spiders - or something we can do nothing to avoid - such as old age or being struck down with smallpox or being run over by a truck - then our fear is unhealthy, for it serves only to make us unhappy and paralyze our will. On the other hand, when someone gives up smoking because they are afraid of developing lung cancer, this is a healthy fear because the danger is real and there are constructive steps they can take to avoid it. IT CONTINUES However, right now we need the healthy fear that arises from taking stock of our present situation so that we can resolve to do something about it. For example, there is no point in a smoker being scared of dying of lung cancer unless there is something that he or she can or will do about it, i.e. stop smoking. If a smoker has a sufficient fear of dying of lung cancer, he or she will take steps to kick the habit. If he [or she] prefers to ignore the danger of lung cancer, he [or she] will continue to create the causes of future suffering, living in denial and effectively giving up control. Just as a smoker is vulnerable to lung cancer due to cigarettes, it is true that at the moment we are vulnerable to danger and harm, we are vulnerable to ageing, sickness, and eventually death, all due to our being trapped in samsara — the state of uncontrolled existence that is a reflection of our own uncontrolled minds. We are vulnerable to all the mental and physical pain that arises from an uncontrolled mind-such as the pains that come from the delusions of attachment, anger, and ignorance. We can choose to live in denial of this and thereby give up what control we have, or we can choose to recognize this vulnerability, recognize that awe are in danger, and then find a way to avert the danger by **removing the actual causes** of all fear (the equivalent of the cigarettes) - the delusions and negative, unskillful actions motivated by those delusions. In this way we gain control, and if we are in control we have no cause for fear. A balanced fear of our delusions and the suffering to which they inevitably give rise is therefore healthy because it serves to **motivate constructive action to avoid a real danger**. We only need fear as an impetus until we have removed the causes of our vulnerability through finding spiritual, inner refuge and gradually training the mind.

### 2ac a2 india da

**No interest in fighting on either side—empirically proven**

**Ali 2005** – Balsillie Fellow at the Centre for International Governance Innovation (11/13, Asim, with The Record, Centre for International Governance Innovation, "India goes soft on Pakistan to please the U.S.", http://www.cigionline.org/articles/2005/11/india-goes-soft-pakistan-please-us, WEA)

After a series of co-ordinated bomb blasts in New Delhi that killed 62 people and injured hundreds, India has restrained from blaming its arch-rival Pakistan.

The attacks came at a particularly sensitive moment as India and Pakistan hashed out an unprecedented agreement to partially open the heavily militarized frontier that divides the disputed territory of Kashmir to speed relief to victims of the region's Oct. 8 earthquake.

Western diplomats say this would have been unthinkable three years ago, when India and Pakistan nearly went to war following a terrorist attack on the main parliament building in New Delhi.

The diplomats said this reflected progress in the peace process.

#### The plan solves resource wars

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

Increasing population stresses natural resources. The world population is growing to an estimated 9 billion people, all competing for diminishing natural resources - fresh water, oil, agricultural land, and food. The largest population growth is in the most impoverished countries, where people die young from starvation, disease, and war; and bear more children. Yet affordable, reliable electricity is a key to economic prosperity in the developing nations, which suffer from energy poverty. Basic electric power allows modest economic prosperity, with time for women to learn, work, become independent, and make reproductive choices, leading to a sustainable population. Cheap oil is ending. World economies depend on oil for transportation fuels. As conventional petroleum resources dwindle, supplies are being extended by drilling deeper, in more hostile environments, refining heavy crude, and mining tar sands, at ever higher costs and ever higher CO2 emissions. Yet powering small vehicles with electricity from nuclear power plants will reduce oil dependency. And high temperature heat from advanced nuclear reactors can synthesize substitute liquid fuels. Air pollution kills millions. Soot from burning coal causes respiratory illness and annually kills tens of thousands of people in the US, hundreds of thousands in China, and a million worldwide. Yet nuclear electric power plants emit no soot. Energy insecurity leads to conflict. Nations lack energy security for stability and peace. Japan depends on imported liquefied natural gas for energy; the US on petroleum; France on uranium. Supply disruptions can wreck national economies. Yet domestic thorium energy resources are sufficient for every nation to attain energy security.

#### Goes nuclear

**Wooldridge 9** – political writer and former lecturer at Cornell University (Frosty, “Humanity galloping toward its greatest crisis in the 21st century”

http://www.australia.to/index.php?option=com\_content&view=article&id=10042:humanity-galloping-toward-its-greatest-crisis-in-the-21st-century&catid=125:frosty-wooldridge&Itemid=244)

It is clear that most politicians and most citizens do not recognize that returning to “more of the same” is a recipe for promoting the first collapse of a global civilization. The required changes in energy technology, which would benefit not only the environment but also national security, public health, and the economy, would demand a World War II type mobilization -- and even that might not prevent a global climate disaster. Without transitioning away from use of fossil fuels, humanity will move further into an era of resource wars (remember, Africom has been added to the Pentagon’s structure -- and China has noticed), clearly with intent to protect US “interests” in petroleum reserves. The consequences of more resource wars, many likely triggered over water supplies stressed by climate disruption, are likely to include increased unrest in poor nations, a proliferation of weapons of mass destruction, widening inequity within and between nations, and in the worst (and not unlikely) case, a nuclear war ending civilization.

### 2ac a2 elections

#### No impact – Romney will copy Obama on foreign policy

Aaron David Miller, 5-23-2012; distinguished scholar at the Woodrow Wilson International Center for Scholars; Barack O'Romney http://www.foreignpolicy.com/articles/2012/05/23/barack\_oromney

And that brings up an extraordinary fact. What has emerged in the second decade after 9/11 is a remarkable consensus among Democrats and Republicans on a core approach to the nation's foreign policy. It's certainly not a perfect alignment. But rarely since the end of the Cold War has there been this level of consensus. Indeed, while Americans may be divided, polarized and dysfunctional about issues closer to home, we are really quite united in how we see the world and what we should do about it. Ever wondered why foreign policy hasn't figured all that prominently in the 2012 election campaign? Sure, the country is focused on the economy and domestic priorities. And yes, Obama has so far avoided the kind of foreign-policy disasters that would give the Republicans easy free shots. But there's more to it than that: Romney has had a hard time identifying Obama's foreign-policy vulnerabilities because there's just not that much difference between the two. A post 9/11 consensus is emerging that has bridged the ideological divide of the Bush 43 years. And it's going to be pretty durable. Paradoxically, both George W. Bush's successes and failures helped to create this new consensus. His tough and largely successful approach to counterterrorism -- specifically, keeping the homeland safe and keeping al Qaeda and its affiliates at bay through use of special forces, drone attacks, aggressive use of intelligence, and more effective cooperation among agencies now forms a virtually unassailable bipartisan consensus. As shown through his stepped-up drone campaign, Barack Obama has become George W. Bush on steroids. And Bush 43's failed policies -- a discretionary war in Iraq and a mismanaged one in Afghanistan -- have had an equally profound effect. These adventures created a counter-reaction against ill-advised military campaigns that is now bipartisan theology as well. To be sure, there are some differences between Romney and Obama. But with the exception of Republicans taking a softer line on Israel and a tougher one on Russia -- both stances that are unlikely to matter much in terms of actual policy implementation -- there's a much greater convergence.

#### Gridlock inevitable with any election outcome

Curry, 9/11/12 - NBC News national affairs writer (Tom, NBC Politics, “Romney election could create new scenario for EPA and coal,” <http://nbcpolitics.nbcnews.com/_news/2012/09/11/13807749-romney-election-could-create-new-scenario-for-epa-and-coal?lite>)

Whether Mitt Romney or Barack Obama wins the presidential election, a congressional impasse in 2013 seems likely. That’s because under most conceivable election scenarios – with Romney or Obama in the White House, and with either Democrats maintaining their Senate majority, or the Republicans taking it – the minority party could use the filibuster threat to block proposals it opposed.

#### Energy won’t switch votes

**Farnam, 12** (T.W. Washington Post, Energy ads flood TV in swing states, 6/27, <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.¶ And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.¶ The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.¶ Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”¶ Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.¶ In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.¶ When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

#### Plan happens after the election - prefer the least restrictive means of fiat

Ramsey Cox (writer for The Hill) September 24, 2012 “Congress to hold pro forma sessions until November” http://thehill.com/blogs/floor-action/senate/251313-congress-to-hold-pro-forma-sessions-until-november

Rather than being in recess for more than five weeks, both the Senate and the House decided to hold pro forma sessions until after the November elections. Both chambers will gavel in Tuesday morning for a brief session; typically, legislative business doesn't take place in pro forma sessions. At most members ask to be recognized for a speech, but rarely do. It is unclear if the legislative branch was afraid of recess appointments by the White House, yet both sides took a formal recess in August. The Senate will hold a pro forma session every Tuesday and Friday until Nov. 13 at 2 p.m. when they’ll continue work on S. 3525, the Sportsmen Act, which would increase access to federal land for hunters and fishers while also supporting conservation measures.

#### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

**Nuclear power popular**

Brown ’12 (Dave Brown — Exclusive to Uranium Investing News, “United States Still Favors Nuclear Power”, <http://uraniuminvestingnews.com/11008/united-states-still-favors-nuclear-power.html>, March 28, 2012, LEQ)

According to the results of Gallup’s annual Environment survey, conducted earlier this month, the majority of Americans continue to favor nuclear energy as a source of electricity for the United States. The survey indicated that 57 percent of participants were in favor of nuclear power this year, the same amount as in 1994, the first year for the survey. This year’s results also demonstrate an equal level of support among participants as last year, just prior to the Japanese earthquake and tsunami. Support for the nuclear industry as measured by the survey has ranged from a low of 46 percent in 2001 to a high of 62 percent in 2010. These results are of significance to investors as the US is the largest consumer of uranium in the world, with 104 operational nuclear reactors. Continued public support and confidence from the country should guide future political decisions and foster economic interest in domestic and international uranium resources as well as in nuclear industry stakeholders.

#### Obama win inevitable

**Downie, 10/4/12 –** Washington Post Opinion writer, James, Obama lost the first debate, but he will still win the election, Washington Post, http://www.washingtonpost.com/blogs/post-partisan/post/obama-lost-the-first-debate-but-he-will-still-win-the-election/2012/10/04/9c3b7eb8-0deb-11e2-bd1a-b868e65d57eb\_blog.html)

And yet, the president’s supporters would be wrong to wring their hands. Fundamentally, Obama’s loss will not matter. At most, Wednesday night was a case of “too little, too late” for Romney. Yes, the polls will probably move a point or two in Romney’s direction after the first debate. But all the evidence suggests that for Romney, whether or not you believe he should be president, closing the gap and beating Obama is a bridge too far.¶ Consider the task facing Romney going into Wednesday’s debate: Nationally, RealClearPolitics’s poll average had him down three points; Nate Silver’s model had him down four. He had held a lead in a major poll exactly once since the end of August. The electoral college looked even worse for him: RealClear’s map gave Obama 269 electoral votes safe or leaning to Romney’s 181 (with 88 in toss-up states); HuffPost Pollster gave Obama a 290-191 lead; and Nate Silver’s model had Obama winning an average of 319 electoral votes to Romney’s 218, a comfortable margin. Even Karl Rove had 277 votes safe or leaning to Obama, with another 70 as toss-ups.¶ “Ah,” you say, “that may be true, but surely the gap is small enough to close? And wouldn’t the first debate be enough to bring this race back to a dead heat?” In a word, no.¶ Let’s start with the second question. Incumbent presidents almost always have a poor first debate: George W. Bush lost to John Kerry in 2004, for example, and Walter Mondale beat Ronald Reagan so badly in 1984 that there was a spate of articles asking if the incumbent was too old for the presidency. Yet never has a challenger’s strong first debate performance closed as large a national polling gap as Romney faced going into last night’s debate. Furthermore, most post-debate polling bumps come from previously undecided voters, of which there is a historically small amount in this campaign, thus making it even less likely that Romney could exceed past norms. And Romney would need to outdo history by quite a distance — only Harry Truman has come back from a national deficit as large or larger than Romney’s at this point in the campaign.¶ If Romney would have to pull off a miracle to close the gap in national polling, he has no shot at matching the president in the electoral college. As mentioned above, forecasters commonly predict that Obama already has a big lead of safe and leaning states. If we assume Romney will improve in the polls, there would be around nine “swing states”: Colorado, Florida, Iowa, North Carolina, New Hampshire, Nevada, Ohio, Virginia and Wisconsin. There’s one problem here for Romney: He is trailing, and has been consistently trailing, in all but two — North Carolina, where he’s held a small lead, and Florida, this election’s closest thing to a 50-50 state. Romney doesn’t need to win two out of those nine; in almost every scenario, he will need six or seven out of those nine to win, including at least two or three states where he is behind by several points more than he is nationally.¶ All of which brings me to the final point: Given the state of the race before last night’s debate, even most Romney backers would agree that a Romney victory would require a flawless campaign the rest of the way from Romney and a blunder or two from Obama. After six years of both these men running for and/or being president of the United States, is there really anyone out there who thinks Mitt Romney can go a month without making a single mistake? Who thinks Barack Obama, who has been playing it safe for at least several months now, will suddenly make a reckless error, as opposed to a merely lackluster performance? (Or, if you’re Sean Hannity and co., do you believe the lamestream media will suddenly forget their liberal bias and stop protecting the president while assaulting Mitt Romney?)¶ Seriously, does anyone believe that?¶ The fact is that, come October, presidential elections cannot permanently change course over a few days or hours (unlike, say, media narratives). The majority of voters have already made their decision, and the debates won’t provide enough of a boost to alter the contest’s trajectory. Sadly for Romney, the path the race is stuck on ends with his defeat.

#### Plan wouldn’t affect states that make the difference in the election

Joel Kotkin 3-30-2012; executive editor of NewGeography.com and is a distinguished presidential fellow in urban futures at Chapman University, and contributing editor to the City Journal in New York. He is author of The City: A Global History. His newest book is The Next Hundred Million: America in 2050, released in February, 2010. Is Energy the Last Good Issue for Republicans? <http://www.newgeography.com/content/002698-is-energy-last-good-issue-republicans>

In the short run, Obama’s political exposure in the energy wars is somewhat limited. Most of the big-producing states—Oklahoma, Wyoming, Utah, Texas, Louisiana, Alaska, and North Dakota—are unlikely to vote for him anyway. Nor does he have to worry about too much pressure from inside his party; Democratic ranks in Congress from energy-producing states have thinned considerably in recent years, removing contrary voices inside the party.

#### Huge laundy list of nuclear incentives and construction now

**Johnson ’12** (US Campaign Trail: is nuclear in the equation? By John Johnson on Apr 25, 2012, nuclear energy expert and analyst, Nuclear Energy Insider, Nuclear Business Intelligence <http://analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation>

Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019.

#### Too late to change the election- ideology

Helling ’12 (DAVE HELLING, McClatchy Newspapers Miami Herald 7-22-12 "Is the race for president already over?"

But **a growing number** of **political scientists and campaign consultants** - backed by the **latest polling data** - think the daily campaign back-and-forth **is having no significant effect on voters.** Most Americans have **locked in** their presidential decisions, polls released Thursday suggested, and the already small number of persuadable voters **shrinks by the hour**. Put another way: America could vote for president next week, and the outcome would probably be the same as it will be in November. "That's accurate, barring some really big, big event or change in the political environment," said Alan Abramowitz, a political science professor at Emory University in Atlanta, who has studied presidential voting patterns. Kenneth Warren, a political science professor at St. Louis University, agreed. "Most people have decided who they're going to vote for early on," he said. Recent polls show those who have decided are split almost evenly between Obama and Romney. In a CBS/New York Times poll, Romney led by 1 point. In a Fox News poll, he trailed Obama by 4 points. A National Public Radio poll found Obama leading by 2 points. A Gallup tracking poll over the same time period showed the race dead even. The average of polls puts the Obama advantage at 1.2 percent, according to Real Clear Politics, a political aggregation website. The incumbent has led Romney in that average by a one- to two-point margin since last October. Political scientists and consultants said there were several reasons for early presidential decision-making. In an Internet-cable-TV age, **voters are pounded with political messages daily, helping them make up their minds far in advance** of the election. An incumbent in the race makes at least one of the candidates a known quantity. And American **voters are deeply divided, further cementing their choices.**

#### No Romney traction – even if voters hate Obama’s energy policy they won’t shift to Romney

Lewis, 10/1/12 - senior contributor to The Daily Caller (Matt, The Daily Caller, “Mitt Romney’s struggle to win blue collar Ohio voters”

This sounds trivial, but it matters greatly — especially in places like Ohio.

The Atlantic’s Molly Ball is consistently a “must read,” and her latest column reinforces a point I’ve been making for a long time — that Mitt Romney is in danger of under-performing with working-class whites in key states like the Buckeye state. (Ball’s teaser says it all: “In Appalachian coal country, Romney is now viewed with nearly as much suspicion as Obama — and that may be the story of the 2012 election.”)

There is at least one substantive reason for these voters to be skeptical of Romney. While interviewing Ohio voters, Ball stumbled over an interesting blast from the past:

It turns out Romney, as governor of Massachusetts in 2003, held a press conference in front of a coal-fired power plant. “I will not create jobs or hold jobs that kill people,” he said, and then, gesturing at the facility behind him: “That plant, that plant kills people.” You can see the footage in an Obama campaign ad that’s been airing heavily here. It seems to have made an impression.

The notion that Romney would be worse for coal than Obama seems absurd. Still, Obama is using the line to effectively muddy the waters. All he really needs is for voters to conclude, “they’re both bad,” and Obama can consider that a victory. Ball sums it up thusly,

I heard it over and over again from Ohioans — the idea that Romney stands for the wealthy and not for them. Obama’s depiction of his rival as an out-of-touch rich guy, which has gotten no little assistance from Romney himself, has made a deep and effective impression with these self-consciously working-class voters.

#### Jobs and gas prices ensure public support---SMRs aren’t an election issue but if they were, links non U

Johnson 12 John, Nuclear Energy Insider, April 25, "US Campaign Trail: is nuclear in the equation?", analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation

In the next Presidential election, American voters will be voting with their pockets. We look at how the campaign so far has revealed which candidate will support nuclear R&D, nuclear new-build projects and ultimately preserve and create nuclear sector jobs. As the U.S. Presidential election draws closer, Americans are most concerned about job creation and how the candidates plan to boost the U.S. economy. Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions. Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019. “There is certainly political consensus in support of clean generation, and large scale cultural consensus as well,” said Keeley. Political benefits of nuclear support As gas prices in the U.S. continue to soar, it’s possible that the tide will turn more in favor of nuclear and other clean energy sources, especially as electric cars take a stronger foothold. In addition, the job creation benefits from nuclear could work their way into the political landscape as well. The two new Vogtle nuclear plants are expected to create approximately 5,000 on-site jobs during the peak of construction, with 800 high paying jobs remaining over the life of the plant.

#### Winners win elections- the plan is key to Obama’s momentum

Creamer, 11 – political strategist for over four decades

(Robert, he and his firm, Democracy Partners, work with many of the country’s most significant issue campaigns, one of the major architects and organizers of the successful campaign to defeat the privatization of Social Security, he has been a consultant to the campaigns to end the war in Iraq, pass health care, pass Wall Street reform, he has also worked on hundreds of electoral campaigns at the local, state and national level, "Why GOP Collapse on the Payroll Tax Could be a Turning Point Moment," Huffington Post, 12-23-11, www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p\_b\_1167491.html, accessed 9-1-12, mss)

2). Strength and victory are **enormous political assets.** Going into the New Year, they now belong to the President and the Democrats. One of the reasons why the debt ceiling battle inflicted political damage on President Obama is that it made him appear ineffectual - a powerful figure who had been ensnared and held hostage by the Lilliputian pettiness of hundreds of swarming Tea Party ideological zealots. In the last few months -- as he campaigned for the American Jobs Act -- he has shaken free of those bonds. Now voters have just watched James Bond or Indiana Jones escape and turn the tables on his adversary. Great stories are about a protagonist who meets and overcomes a challenge and is victorious. The capitulation of the House Tea Party Republicans is so important because it feels like the beginning of that kind of heroic narrative. Even today most Americans believe that George Bush and the big Wall Street Banks - not by President Obama -- caused the economic crisis. Swing voters have never lost their fondness for the President and don't doubt his sincerity. But they had begun to doubt his effectiveness. They have had increasing doubts that Obama was up to the challenge of leading them back to economic prosperity. The narrative set in motion by the events of the last several weeks could be a turning point in voter perception. It could well begin to convince skeptical voters that Obama is precisely the kind of leader they thought he was back in 2008 - a guy with the ability to lead them out of adversity - a leader with the strength, patience, skill, will and resoluteness to lead them to victory. That now contrasts with the sheer political incompetence of the House Republican Leadership that allowed themselves to be cornered and now find themselves in political disarray. And it certainly contrasts with the political circus we have been watching in the Republican Presidential primary campaign. 3). This victory will inspire the dispirited Democratic base. Inspiration is the feeling of empowerment - the feeling that you are part of something larger than yourself and can personally play a significant role in achieving that goal. It comes from feeling that together you can overcome challenges and win. Nothing will do more to inspire committed Democrats than the sight of their leader -- President Obama - out maneuvering the House Republicans and forcing them into complete capitulation. The events of the last several weeks will send a jolt of electricity through the Progressive community. The right is counting on Progressives to be demoralized and dispirited in the coming election. The President's victory on the payroll tax and unemployment will make it ever more likely that they will be wrong. 4). When you have them on the run, that's the time to chase them. The most important thing about the outcome of the battle over the payroll tax and unemployment is that it shifts the political momentum at a critical time. Momentum is an independent variable in any competitive activity - including politics. In a football or basketball game you can feel the momentum shift. The tide of battle is all about momentum. The same is true in politics. And in politics it is even more important because the "spectators" are also the players - the voters. **People** follow - and **vote -- for winners**. The bandwagon effect is enormously important in political decision-making. Human beings like to travel in packs. They like to be at the center of the mainstream. Momentum shifts affect their perceptions of the mainstream. For the last two years, the right wing has been on the offensive. Its Tea Party shock troops took the battle to Democratic Members of Congress. In the Mid-Terms Democrats were routed in district after district. Now the tide has turned. And when the tide turns -when you have them on the run - that's the time to chase them.

## 1ar

### at: exports

#### Cooperation can still be achieved without 123 agreements.

Glasgow, ‘10

[James A., Partner -- Pillsbury Winthrop Shaw Pittman LLP, 6-28, “International Scope of Small Modular Reactors and Outlook for Advanced Reactor Development International Trade Export Controls and SMRs,” http://www.uxc.com/smr/Library/Export%20Issues/2010%20-%20International%20Scope%20of%20SMRs%20and%20Outlook%20for%20Advanced%20Reactor%20Development.pdf]

• While presence or absence of a 123 Agreement is an important factor, lack of such an Agreement does not prevent the Secretary from issuing a specific authorization • DOE has issued more than a dozen specific authorizations for peaceful nuclear assistance to countries that did not have a §123 Agreement with the U.S., including USSR/Russia • “Much…cooperation can take place in the absence of bilateral 123 Agreements, since it involves the exchange of expertise, lessons learned, and best practices rather than the export of nuclear material or reactor components.” • Testimony by Assistant Secretary of State V. Van Diepen at November 2009 hearing of Senate Foreign Relations Committee

#### Each export license is reviewed case-by-case – the plan’s prolif-resistant tech ensures success

ExportControl.org 2005; OVERVIEW OF THE U.S. EXPORT CONTROL SYSTEM http://exportcontrol.org/links/2081c.aspx

Each license application under catch-all controls is reviewed on a case-by-case basis. If the U.S. Government determines that the export poses an unacceptable risk of use in or diversion to a nuclear proliferation activity, or that the export would make a material contribution to a chemical or biological proliferation activity, or a missile project of concern, the license is denied. These controls are consistent with AG, MTCR, and NSG catch-all requirements.

#### The single of the plan will solve – signal key

Stepp 2011 (Matthew Stepp, March 9, 2011, “The Nuclear Energy Game Changer Thoughts After the NRC Regulatory Information Conference,” Innovation Files, <http://www.innovationfiles.org/the-nuclear-energy-game-changer-thoughts-after-the-nrc-regulatory-information-conference/>)

So, while “silver bullet” may be too strong of a statement – SMRs don’t solve all our clean energy needs – the potential benefits of SMRs are significant and the key to realizing these benefits comes down to creating a cohesive national clean energy policy to innovate through a number of technological barriers. And I’m not the only one who thinks so. This week was the 23rd Annual Nuclear Regulatory Commission Information Conference that brought together hundreds of nuclear energy leaders from industry and government to talk all things nuclear. The hottest topic? SMRs. The clear message? Industry and government leaders are ready to move forward in developing new small reactors as soon as policy makers give the green light. In his opening conference speech, NRC Chairman Gregory Jaczko remarked that his agency will be taking the first steps in licensing new SMRs by announcing that, “[the NRC] may take final action on three design certification rules for new [LWR-SMR] reactors as early as this summer, and conduct the first mandatory hearing on a new reactor license since the 1970s.” Department of Energy’s Director for Advanced Reactor Design Sal Golub presented that the goal of his office is to “license and deploy LWR-SMRs by 2020.” The President proposed in both his 2011 and 2012 budgets to create a nearly $100 million SMR program within the DOE Office of Nuclear Energy that would focus on deploying LWR-SMRs as well as perform much needed advanced SMR RD&D. And bipartisan group of Senators have recently proposed a bill designed to speed up the deployment of SMRs.

#### the NEI concludes that strengthening US leverage overcomes barriers – market share key

NEI, 10/1/12 [Report: U.S. Firms at 'Serious Disadvantage' to Compete in Global Nuclear Energy Market

'Billions of Dollars in Exports, Tens of Thousands of US Jobs at Risk, <http://www.nei.org/newsandevents/newsreleases/report-us-firms-at-serious-disadvantage-to-compete-in-global-nuclear-energy-market/>]

WASHINGTON, D.C.—To the detriment of U.S. national security interests and the economy, U.S. energy companies and manufacturers face impediments in capitalizing on the enormous market opportunities presented by the global growth of nuclear energy, business and industry leaders said today in unveiling a [new report on nuclear export challenges](http://www.nei.org/resourcesandstats/documentlibrary/newplants/whitepaper/nuclear-export-controls-a-comparative-analysis-of-national-regimes-for-the-control-of-nuclear-materials-components-and-technology).¶ The report comparing nuclear energy trade regimes in five leading supplier nations concludes that “the U.S. export control regime places (U.S. companies) at a serious disadvantage next to their competitors in the international export market.” The analysis conducted by one of the nation’s top law firms with a specialty in energy—Pillsbury Winthrop Shaw Pittman LLP—identified three features that make the U.S. commercial nuclear exports regime less favorable than the other regimes in the study:¶ The U.S. regime is more complex and difficult to navigate, evidenced by the division of export licensing and authorization powers among four agencies versus one or two at the most in the other nations.¶ The U.S regime contains added restrictions and legal and bureaucratic hurdles that exceed international norms.¶ The United States is significantly less efficient in processing export licenses, often taking nearly a year or more to process applications completed far faster in other nations.¶ Senior officials from the National Association of Manufacturers, the Nuclear Energy Institute, Exelon Generation and the Pillsbury Winthrop law firm discussed global nuclear energy market opportunities and challenges during a [news conference](http://www.nei.org/resourcesandstats/documentlibrary/newplants/whitepaper/presentation-slides-from-the-press-event) where the report was released.¶ National security interests are best served if U.S. suppliers of nuclear energy technology, fuel and services play an active role in the global construction of nuclear energy facilities, said Richard Myers, NEI’s vice president for policy development, planning and supplier programs.¶ “Long-term U.S. influence on global nonproliferation policy and nuclear safety practices, and continued U.S. leadership in nuclear energy technology, require a strong U.S. presence in global commercial nuclear markets,” he said.¶ Billions of dollars in exports and tens of thousands of U.S. jobs are at stake.

### 1ar kritik

#### More than particles

Myers 09 – P. Z., biologist and associate professor at the University of Minnesota, Morris, The Dead are Dead, <http://scienceblogs.com/pharyngula/2009/12/the_dead_are_dead.php>

I have heard that first argument so many times, and it is facile and dishonest. We are not just "energy". We are a pattern of energy and matter, a very specific and precise arrangement of molecules in movement. **That can be destroyed**. When you've built a pretty sand castle and the tide comes in and washes it away, the grains of sand are still all there, but what you've lost is the arrangement that you worked to generate, and which you **appreciated**. Reducing a complex functional order to nothing but the constituent parts is an insult to the work. If I were to walk into the Louvre and set fire to the Mona Lisa, and afterwards take a drive down to Chartres and blow up the cathedral, would anyone defend my actions by saying, "well, science says matter and energy cannot be created or destroyed, therefore, Rabid Myers did no harm, and we'll all just enjoy viewing the ashes and rubble from now on"? No. That's crazytalk. We also wouldn't be arguing that the painting and the architecture have transcended this universe to enter another, nor would such a pointless claim ameliorate our loss in this universe. The rest of his argument is quantum gobbledy-gook. The behavior of subatomic particles is not a good guide to what to expect of the behavior of large bodies. A photon may have no rest mass, but I can't use this fact to justify my grand new weight loss plan; quantum tunnelling does not imply that I can ignore doors when I amble about my house. **People are not particles**! We are the product of the aggregate behavior of the many particles that constitute our bodies, and you cannot ignore the importance of these higher-order relationships when talking about our fate. The rational atheist view is simpler, clearer, and I think, more true. Lanza's sister is dead, and so is mine; that means the features of their independent existence that were so precious to us, that made them interesting, thinking, behaving human beings, have **ceased to exist**. The 20-watts of energy are dissipating as heat, and can't be brought back. They are lost to us, and someday we will end, too. We should feel grief. Pretending that they have 'transcended' into some novel quantum mechanical state in which their consciousness persists, or that they are shaking hands with some anthropomorphic spiritual myth in never-never land, does a disservice to ourselves. The pain is real. Don't deny it. Use it to look at the ones you love who still live and see what you can do to make our existence now a little better, and perhaps a little more conducive to keeping our energies patterned usefully a little longer.

### 1ar elections --- impact

#### Romney’s all talk---he’d work with Russia

Gasyuk 12 (Gasyuk, Rossiyskaya Gazeta’s Washington D.C. correspondent, 6-13, “Romney keeps the gloves off”, http://rbth.ru/articles/2012/06/13/romney\_keeps\_the\_gloves\_off\_15854.html)

Given the sharp disagreements between the United States and Russia on Syria, which is now careening toward civil war, Republicans will harshly criticize every attempt by Obama to further emphasize any progress in bilateral relations. “Some realism regarding U.S.-Russia relations would be constructive for the White House if it wants to avoid Republican attacks,” Simes told Russia Now. But this doesn’t mean that presumptive GOP nominee Mitt Romney, if elected, will transform his public anti-Russian statements into political practice. “I believe that most likely Governor Romney believes in the statements he made, but that does not mean that in practice this rhetoric will be his guide for action,” Simes said. “Many statements from the GOP candidates including those on foreign affairs surely have to be taken in the context of the political and electoral reality in the U.S.,” Aron said. “It is not only possible, but highly probable,” that Mitt Romney’s views on Russia will evolve if he is elected, Simes said. American political history is rife with examples of strategic U-turns that begin the morning after the inauguration balls. When Dwight Eisenhower ran for president, his advisers—such as the famous John Foster Dulles—spoke of Harry Truman’s “cowardly” policy of containment of the Soviet Union and called for the speedy liberation of Eastern Europe. However President Eisenhower instead started the process of normalizing relations through personal meetings with Nikita Khrushchev in 1955 and 1959. President Richard Nixon was viewed as a leading anti-Communist, but it was Nixon who found the way toward detente. Nixon made the first-ever trip by an American president to then-Communist Russia in 1972, but also opened the door to dialogue with Communist China. No one should be too surprised that Mitt Romney, if elected, might rethink his position. When needed for supply routes, Russia is no longer America’s “number one geopolitical foe.” As a president, many observers believe he would take a more realistic approach to handling bilateral ties.

#### Impact empirically denied and rhetoric doesn’t spill over

Ozdal, 10/6/12 [Habibe Ozdal USAK Center for Eurasian Studies, Russian-American Relations during Obama’s Term: Cyclical Convergence The Journal of Turkish Weekly, <http://www.turkishweekly.net/columnist/3669/russian-american-relations-during-obama%C3%ADs-term-cyclical-convergence.html>]

In the late years of George W. Bush’s second term, Russian-American relations hit a new low for the first time after 1980s. The relations were close to a break off in the aftermath of Russian-Georgian War in 2008. The Obama administration has inevitably inherited many crises with regards to bilateral relations, while also dealing with the challenges created by the wars in Iraq and Afghanistan. In addition, Obama needed to keep up with the global financial crisis at the same time. Due to these reasons, Obama has developed the “reset” initiative with regards to bilateral relations between the US and Russia after he was elected as the president in autumn 2008. Obama’s proposal to “resetting” bilateral ties while leaving aside long-term and challenging issues without setting any preconditions gained recognition in the eyes of Kremlin as well. Hereby such reciprocal understanding paved the way for cooperation in particular fields for Russia and the US, against a backdrop of NATO’s expansion to include former Soviet republics in the 2000s, missile shield systems that are planned to be deployed in Czech Republic and Poland, and the “colored” revolutions which took place in Ukraine, Kyrgyzstan and Georgia; all of which served to escalate tensions between the two countries. While it is still a matter of contention if the formula put forward as a recipe to resolve issues inherited from Bush-Putin era actually succeeded or not, the formula was implemented thanks to both contextual developments and the leaders’ common preferences. What accompanies “reset” policy? It is observed that on the part of Obama administration, important steps were taken in fields that are considered vital for American foreign policy. Especially for the United States which is struggling to leave Afghanistan by 2014; the establishment of Northern Distribution Network which provides with an alternative route for equipment to be transported to Afghanistan, signing the agreement on START II which is prepared for strategic arms reduction by April 2010, and the third package of sanctions passing through UN Security Council against Iran with Russia’s support in order to convince the former to give up nuclear proliferation ambitions, are reckoned as major foreign policy successes on Obama’s part with regards to the bilateral relations with Russia. Also according to Andrew Kuchin, Director of the Russia and Eurasia Program of CSIS which is a Washington-centered think-tank, Obama has put his signature under three critical tasks with Russia: Afghanistan, Iran, and nuclear disarmament… It is better to look from a wider perspective towards bilateral ties in order to avoid illusions, despite many affirmative developments in bilateral relations. Those who fall into error by defining bilateral cooperation as an alliance feel the burden of the emphasis of “great power struggle for global hegemony” placed by Russia on the very same web of relations. Even though Russia was not regarded as a power to be balanced during Obama’s term, Moscow is still concerned to prove itself as a pole due to wishful conceptions of a multi-polar global order. Despite cooperation efforts in critical fields for both sides, tensions between Russia and the US escalated considerably due to the process of transformation throughout the Middle East as well as the anti-Putin demonstrations in the months following the Duma elections that took place in December 2011. Because according to Kremlin, the opposition was inflamed by the US. Both the rivalry for global influence that is visible over the discrepancy of attitudes toward the Syrian conflict, and Secretary of State Clinton’s harsh criticism of Russia on the grounds of Western liberal values; prove that everything is “as usual” in bilateral relations. Possible effects of the elections on bilateral relations Question marks that emerged with regard to the future of Russian-American ties in the aftermath of the recent presidential elections in Russia were erased with Putin being reelected for the seat of the president. Indeed, Putin has been the most popular leader in Russia for the last 12 years and the elections of March 2012 proved in a sense that continuity would prevail in Russian politics. Presidential elections that will take place in November 2012 in the United States may pose a more determinant factor on the prospects of bilateral relations when the post-elections landscape becomes clear. In case of Obama being reelected through the elections to be conducted in November, continued efforts with regard to “restart” policy can be expected. Because for Obama, just like in 2008, Iran’s nuclear program is still worrisome. In such a context, taking Russia’s support behind it on this very issue is of vital concern for the US. On the other hand, Washington will not lean towards brushing aside its formal rights to use Russian land and air space to sustain Northern Distribution Network anyway. The US is getting prepared to leave Afghanistan until 2014, and it is also looking forward to maintain its agreements with Central Asian countries. The fate of bilateral relations, in case the Republican candidate Romney is elected as president, is a matter of curiosity. Romney has been defending throughout his electoral campaign the idea that enhanced relations with Russia are a great weakness of the US foreign policy. He also publicly argues that Russia is America’s number one geopolitical foe. Since Obama administration was commonly appreciated thanks to its successful foreign policy of reinitiating relations with Russia, it is not a surprise to see the rival candidate targeting this point. In case he is elected, Romney may well feel compelled to readjust his attitude toward Moscow in line with the realistic national interests of the United States. Therefore he may leave aside his formerly harsh rhetoric during the electoral campaign. Because then, Romney as well will have to face the challenges po

sed by the knotted conflict in Afghanistan and the reality of a global financial breakdown. In conclusion, if we are to have a brief look even only at the limited time frame between the dissolution of the Soviet Union and today, it will be possible pick out a couple of small periods of moderation and cooperation in bilateral ties. On the other hand, it is evident that bilateral relations were never qualified to the level of an alliance, not excluding the four years between 2008 and 2012. Such a perception which forms the nucleus of bilateral relations makes it easier to appraise the essential practice of “selective cooperation” between the two powers accurately. It also brings about more realistic scenarios regarding future projections. In the medium term, since selective cooperation seems fit for a win-win policy in the eyes of both sides, we can expect that both will refrain from major policy deviations that may sever bilateral ties. However, we cannot turn a blind eye to the fact that developments which may alter the fragile balances of international system may end up with an environment of vehement competition between the two.

Russian relations are structurally impossible

Cohen, 2/28/12 [**Professor, Russian Studies at New York University**, America's Failed (Bi-Partisan) Russia Policy, <http://www.huffingtonpost.com/stephen-f-cohen/us-russia-policy_b_1307727.html?ref=politics&ir=Politics>]

2. Vital cooperation will **not be possible** (or stable), however, as long as Washington continues to promote NATO expansion along Russia's borders. This must stop, which means no longer encouraging membership for Georgia or Ukraine. Membership for either would cross Moscow's declared "red lines." The proxy American-Russian war in Georgia, in August 2008, which risked a nuclear confrontation like the 1962 Cuban Missile Crisis, was an unmistakable warning. (Russia has a right, as the United States asserted for itself in that crisis, to be free of menacing foreign military bases near its territory.)

3. But the thirteen-year expansion of NATO to Russia's borders has already institutionalized the worst geo-political, and potentially military, U.S.-Russian conflict. The new NATO members cannot be expelled, but Washington should now honor its promise, also broken, that those countries would not host any NATO or U.S. military installations. Honoring that pledge would, in effect, de-militarize NATO expansion and considerably lessen Moscow's anxieties, resentments and resistance to new forms of security cooperation, including on missile defense and deeper nuclear reductions on both sides.

4. Finally, "democracy-promotion" measures inside Russia also must stop. Many propon

ents of this two-decade U.S. policy sincerely believe in it, but it is wrong on all counts:

- We, the United States, do not have the right, wisdom or power to intervene so directly or deeply in the internal workings of another great nation, especially one whose history is older, different and no less proud than our own. (Russians have shown they know how to democratize their country. To suggest that they do not is contemptuous and an ethnic slur.)

- Here too the proof is in the factual record. Since the 1990s, U.S.-sponsored "democracy-promotion" inside Russia has done more to undermine democratic prospects there than to promote them.

- Even worse, "democracy-promoters" and leaders of opposition groups they sponsor are moving in a profoundly reckless direction. Increasingly, they speak of "delegitimizing" and "de-stabilizing" Russia's political system, even of a "revolution," but without asking what that might mean for a vast state with uncertain control over its enormous, sprawling quantities of devices of mass destruction. When the Russian state suddenly disintegrated in 1991, this kind of catastrophe was averted. But miracles rarely, if ever, happen twice.

The policy changes I propose are, of course, unlikely to be adopted. After twenty years, many powerful American interests are **invested in the existing policy**, however badly it has failed. But it is not enough to blame the U.S. political and media establishments. American critics of Washington's longstanding approach to Moscow also bear some responsibility: They have not fought for the nation's best interests.

### china

#### Romney wouldn’t start a trade war with China if elected

**Politico, 9-15-12**, p. http://www.politico.com/news/stories/0912/81254.html

Mitt Romney is hoping his tough talk on China policy will win him votes — but few of his big business donors or fellow Republicans support what he’s saying or believe he’d follow through if elected.¶ And if he did, many analysts say, he’d likely spark a disastrous and counter-productive trade war that would hurt both American consumers and the workers he says he’s trying to protect. But Romney advisers say voters shouldn’t expect him to back off the tough talk if he gets elected, and other experts say fears of a “trade war” are overblown since the Chinese need the American market just as much consumers like cheap Chinese imports.

#### China won’t retaliate—no impact

Bosco 9/6—national security consultant, master of laws from Georgetown (Joseph A., 9/6/12, <http://www.washingtonpost.com/opinions/china-and-a-mitt-romney-presidency/2012/09/06/32917432-f76f-11e1-a93b-7185e3f88849_story.html>, RBatra)

First, it takes two to wage a “trade war.” When China realizes that Mr. Romney is serious about declaring it a currency manipulator (which it is), wiser counsel may well prevail in Beijing. Playing by international rules is far more in China’s interest than is retaliating against free and fair trade. China could avoid the choice between dangerous escalation and embarrassing submission by preemptively starting to free its currency before a Romney inauguration.

**Strong cooperation is impossible—but total collapse is impossible, either way there’s no impact**

**Blackwill 2009** – former US ambassador to India and US National Security Council Deputy for Iraq, former dean of the Kennedy School of Government at Harvard (Robert D., RAND, “The Geopolitical Consequences of the World Economic Recession—A Caution”, http://www.rand.org/pubs/occasional\_papers/2009/RAND\_OP275.pdf, WEA)

Alternatively, will the current world economic crisis change relations between China and the United States in a much more positive and intimate direction, producing what some are calling a transcendent G-2? This seems improbable for seven reasons. First, the United States and China have profoundly different visions of Asian security. For Washington, maintaining U.S. alliances in Asia is the hub of its concept of Asian security, whereas, for Beijing, America’s alliance system is a destabilizing factor in Asian security and over time should wither away. These opposing concepts will be an enduring source of tension between the two sides. Second, these two countries systematically prepare for war against one another, which is reflected in their military doctrines, their weapons procurement and force modernization, and their deployments and military exercises. As long as this is the case, it will provide a formidable psychological and material barrier to much closer bilateral relations. Third, the United States is critical of China’s external resource acquisition policy, which Washington believes could threaten both American economic and security interests in the developing world. Fourth, despite their deep economic dependence on each other, U.S.-China economic relations are inherently fragile. China sells too much to the United States and buys too little, and the United States saves too little and borrows too much from China. This will inevitably lead to a backlash in the United

States and a Chinese preoccupation with the value of its American investments. Fifth, Chinese environmental policy will be an increasing problem, both for U.S. policymakers who are committed to bringing China fully into global efforts to reduce climate degradation and for Chinese leaders who are just as determined to emphasize domestic economic growth over international climate regimes. Sixth, China and the United States have wholly different domestic political arrangements that make a sustained entente difficult to manage. Americans continue to care about human rights in China, and Beijing resents what it regards as U.S. interference in its domestic affairs. This will be a drag on the bilateral relationship for the foreseeable future. And seventh, any extended application by Washington of “Chimerica,” as Moritz Schularick of Berlin’s Free University has called it,23 would so alarm America’s Asian allies, beginning with Japan, that the United States would soon retreat from the concept.24

Nevertheless, these factors are unlikely to lead to a substantial downturn in U.S.-China bilateral ties. In addition to their economic interdependence, both nations have important reasons to keep their interaction more or less stable. As Washington wants to concentrate on its many problems elsewhere in the world, especially in the Greater Middle East, Beijing prefers to keep its focus on its domestic economic development and political stability. Neither wants the bilateral relationship to get out of hand. In sum, a positive strategic breakthrough in the U.S.-China relationship or a serious deterioration in bilateral interaction both seem doubtful in the period ahead. And the current economic downturn will not essentially affect the abiding primary and constraining factors on the two sides. Therefore, the U.S.-China relationship in five years will probably look pretty much as it does today—part cooperation, part competition, part suspicion—unaffected by today’s economic time of troubles, except in the increasing unlikely event of a cross-strait crisis and confrontation.

### turnout

#### The plan doesn’t reduce turnout

Neil Munro 8-30-2011; Daily Caller “Obama still has green energy vote for 2012” <http://dailycaller.com/2011/08/30/obama-still-has-green-energy-vote-for-2012/>

Environmentalists are staging a two-week oil-pipeline protest outside the White House to boost their importance to President Barack Obama’s political calculations in the 2012 election season. But there’s little evidence so far that progressives’ disappointment with Obama’s environmental policies threatens to reduce their turnout on election day, or that it pressures White House officials to make additional concessions to environmentalists during a political season dominated by the public’s demand for additional jobs. Monday’s colorful, TV-ready protests against the Keystone XL pipeline from Canada’s oil fields to U.S consumers took place in Lafayette Park, in front of the White House. The day’s events included 100 peaceful arrests of environmentalists and celebrities, a multi-faith spiritual event in Lafayette Park, press club speeches by environmental leaders, and numerous suggestions that approval of the pipeline by Obama will cost his campaign votes, volunteers and donations. Hundreds of others have already been arrested, and numerous environmental groups have contributed to two weeks of protest. If Obama approves the pipeline, environmental activist Andrew Driscoll predicted he would not vote to re-elect him. “He hasn’t done anything to earn our vote yet,” said the Massachusetts activist. “The fate of humanity, the fate of the planet” will be determined by Obama’s pipeline decision, he said. “If he approves it, it will be a huge blow, not only for our future, but also for this administration,” said Elijah Zarlin, a campaign manager at CREDO Action, an Atlanta-based progressive group. The protesters “are the people who are maybe going to vote for Obama, and are the people Barack will lose” if he approves the pipeline, he added. However, the leadership of the green movement isn’t threatening to break with Obama over this one decision. (RELATED: Gore: Global warming skeptics are this generation’s racists)

#### The plan creates jobs in key swing states -- boosts reelection probability.

Korte, 4-27-12

[Gregory, USA Today, “Politics stands in the way of nuclear plant's future,” http://www.usatoday.com/money/industries/energy/story/2012-04-13/usec-centrifuges-loan-guarantees/54560118/1]

. USEC estimates the project at its peak will generate 3,158 jobs in Ohio, and 4,284 elsewhere. Pike County, home to the centrifuges, has a 13% unemployment rate — the highest in Ohio. The median household income is about $40,000. The average job at USEC pays $77,316. Centrifuge parts are stacked up in Piketon. "It's as shovel-ready as they come," says spokeswoman Angela Duduit. Indeed, the project has enjoyed bipartisan support. A USA TODAY review of DOE records shows that no fewer than 46 members of Congress — 32 Republicans and 14 Democrats — have pressured the Obama administration to approve the loan guarantee for USEC. "Quick action is paramount," said one bipartisan letter. "It is imperative that this application move forward now," said another. The congressional support comes from states such as Ohio, Pennsylvania, Tennessee, Kentucky, West Virginia, Missouri, Alabama, Indiana, Maryland, North Carolina and South Carolina— an almost exact overlay of the states that would benefit from the 7,442 jobs the company says would be created.

#### Don’t matter

Lazarick ’12 – former State House bureau chief of the Baltimore Examiner

(Len, has also taught Asian history at Montgomery College, Md., and state and local government at Howard Community College, “Commentary: Most minds now made up on presidential race; 13 keys to White House predicts winner”, Maryland Reporter, 9-9-2012, <http://marylandreporter.com/2012/09/09/commentary-most-minds-now-made-up-on-presidential-race-13-keys-to-white-house-predicts-winner/>)

With the party conventions over, it is safe to predict that all the fuss and blather have changed the minds of very few people. Same goes for all the political coverage of the conventions, including the stuff I produced in Charlotte and the stories I ran on my MarylandReporter.com website about Tampa. In-depth polling and analysis indicates that most people have already made up their minds about which presidential candidates they will vote for – or at least whom they will vote against. Perhaps 10% of the electorate is in play and truly undecided. Those people who call themselves “independent” in fact consistently side with one party over the other.

# semis aff v northwestern km

## 2ac

### 2ac solvency

#### And, the plan accelerates development - manhattan

Barton, ‘9

[Charles, retired counselor, writes for Energy From Thorium, “The Liquid Fluoride Thorium Paradigm,” http://www.theoildrum.com/node/4971/]

The Obama campaign, properly in my opinion, opposed the Yucca Mountain nuclear repository. Indeed, there is a far more effective way to use the $25 billion collected from utilities over the past 40 years to deal with waste disposal. This fund should be used to develop fast reactors that consume nuclear waste, and thorium reactors to prevent the creation of new long-lived nuclear waste. By law the federal government must take responsibility for existing spent nuclear fuel, so inaction is not an option. Accelerated development of fast and thorium reactors will allow the US to fulfill its obligations to dispose of the nuclear waste, and open up a source of carbon-free energy that can last centuries, even millennia. It is commonly assumed that 4th generation nuclear power will not be ready before 2030. That is a safe assumption under "business-as-usual”. However, given high priority it is likely that it could be available sooner. It is specious to argue that R&D on 4th generation nuclear power does not deserve support because energy efficiency and renewable energies may be able to satisfy all United States electrical energy needs. Who stands ready to ensure that energy needs of China and India will be entirely met by efficiency and renewables?

#### Loan guarantees attract private capital – increases are key

**Peskoe 12** [Ari Peskoe, associate in the law firm of McDermott Will and Emery LLP and focuses his practice on regulatory, legislative, compliance, and transactional issues related to energy markets, 4-20-2012, "A Solution Looking For a Problem: Building More Nuclear Reactors after Vogtle," The Electricty Journal, vol 25 issue 3, Science Direct]

Given the checkered history of reactor construction projects,56 private lenders are understandably skittish about lending billions of dollars to develop a new reactor. Construction of the Vogtle and SCANA reactors will be a critical test, and significant cost overruns on these two projects could doom the prospects for construction of additional reactors. Even if the construction of Vogtle and SCANA are on budget, it will likely still be difficult for future project developers to raise enough debt financing without government support.57 Federal loan guarantees shift “a large part of the learning costs and construction risks” from private lenders to the federal government by ensuring that lenders receive payment in the event that the developer defaults on repayments.58 Appropriations for the guarantees authorized by the Energy Policy Act of 2005 will soon run out, so future guarantees will require congressional action.59¶ Loan guarantees cost the federal government little or nothing unless there is an event of default.60 Creating a long-term guarantee program would be entirely consistent with the government's historic role in accepting risks and liabilities of nuclear power. Although it has not been implemented effectively, the Nuclear Waste Policy Act (NWPA) of 1982 requires the DOE to transport nuclear waste from privately owned reactors to permanent government storage facilities.61 Concerned about a “cloud of bankruptcy” hanging over its operations,62 the nascent nuclear industry pushed Congress to pass the Price-Anderson Act in 1957, which indemnifies the industry against claims arising from a nuclear incident. Both the NWPA and the Price-Anderson Act socialize costs of nuclear energy. In the case of the NWPA, the industry pays the DOE a tenth of a penny for each kilowatt-hour of nuclear energy sold to fund waste disposal activities.63 The Price-Anderson Act also requires generators to contribute to a fund, but the federal treasury would likely cover much of the liabilities associate with a nuclear disaster.64

#### No defaults or taxpayer risk -- loan guarantees are a key source of federal revenue.

**Congressional Budget Office 11** [“Federal Loan Guarantees for the Construction of Nuclear Power Plants, august 3, 2011, khirn]

Among the goals often posited for federal energy policy are to enhance energy security by diminishing the nation's reliance on foreign oil, to meet a growing demand for electricity, and to reduce greenhouse gas emissions by encouraging investment in clean energy production and technologies. To help further such objectives, the Energy Policy Act of 2005 (Public Law 109-58) established incentives to encourage private investment in innovative technologies, including advanced nuclear energy facilities. Much of the support for such investment is provided under title XVII of that legislation, which offers federal loan guarantees for the construction of nuclear power plants and other types of "alternative" energy facilities. Administered by the Department of Energy (DOE), the loan guarantee program encourages private investment in nuclear energy by lowering the cost of borrowing and possibly increasing the availability of credit for project sponsors—usually an individual utility, a consortium of utilities, or a merchant power producer. In exchange for providing a loan guarantee, DOE is authorized to charge sponsors a fee that is meant to recover the guarantee's estimated budgetary cost. However, budgetary cost estimates—which are calculated as required under the Federal Credit Reform Act of 1990 (FCRA)—are not a comprehensive measure of the cost to taxpayers of those guarantee commitments. Specifically, FCRA estimates do not recognize that the government's assumption of financial risk has costs for taxpayers that exceed the average amount of losses that would be expected from defaults; those additional costs arise because a borrower is most likely to default on a loan and fail to make the promised payments of principal and interest during times of economic stress, when the losses are especially painful for taxpayers. Consequently, the estimated budgetary cost of a guarantee is generally lower than its estimated "fair-value" cost, which approximates the market price that a private guarantor would charge for an obligation with similar risk and expected returns. Because budgetary cost estimates are not a comprehensive measure of the taxpayer resources committed, and because of concerns about the accuracy of the methods and assumptions that DOE uses to forecast default rates and recovery values, some commentators have suggested that federal loan guarantees for the construction of nuclear power plants are being systematically underpriced, whereas others believe they are being overpriced. For this study, the Congressional Budget Office (CBO) reviewed the many factors that can influence the cost to the government of guaranteeing loans for the construction of advanced nuclear facilities; developed a model to estimate guarantee costs for a representative loan using both FCRA-based and fair-value methodologies; performed a sensitivity analysis of those estimated costs to changes in assumptions about key drivers of cost; and explored the challenges inherent in attempting to charge borrowers the full cost of a loan guarantee. CBO's findings are as follows: The expected cost to the federal government of guaranteeing a nuclear construction loan will vary greatly depending on a project's characteristics and on the economic and regulatory environment in which the project will operate. Important considerations include capital structure (the mix of debt and equity used to finance the project); ownership structure (whether it is a stand-alone project or part of a diversified company); whether construction costs may be passed on to utility ratepayers or local taxpayers; the regulatory environment; the degree of uncertainty about construction costs; the cost of competing generation technologies; and the demand for electricity. Although a serious nuclear accident could entail extremely large costs to investors and society, that risk has a small effect on the direct cost to the government of providing a guarantee because liability under the guarantee is limited to the amount of the debt, and the probability that such an accident will occur is low. Default rates and recovery rates are likely to vary considerably, both across projects and over the lifetime of a given project. CBO does not have enough information to independently estimate an average recovery rate for nuclear construction loans. However, assigning a similar expected recovery rate as a starting point for all projects—which is DOE's current practice—does not appear to make full use of the information available to DOE through its detailed project assessment process. For example, when sponsors of stand-alone projects cannot pass on construction costs to rate-payers, very low recoveries may result if bankruptcy occurs during the construction phase. By contrast, recovery rates may be considerably higher once projects become operational. Using a single recovery rate tends to increase the variability of estimated guarantee costs relative to their true values, which increases the government's exposure to a phenomenon known as adverse selection. Adverse selection occurs when borrowers are better able than the government to assess the value of a guarantee offer and take advantage of their superior information at the government's expense. For nuclear construction loans, borrowers will tend to turn down a guarantee if they believe the fee set by DOE is too high but go forward if they consider it fair or underpriced, which increases the likelihood that DOE's portfolio will include more projects for which the subsidy fee has been underestimated than overestimated. When credit ratings are used to assess default probabilities, cost estimates will vary widely with the assigned ratings category, the assumed recovery rate, and whether Treasury interest rates or estimated market interest rates are used for discounting. CBO relied on the information in historical credit ratings to impute default probabilities (as does DOE) and considered a range of recovery rates that might apply to different projects depending on their characteristics. As required under FCRA, budgetary estimates use Treasury interest rates for discounting future cash flows; fair-value estimates rely on estimates of the applicable market interest rates for discounting. Budgetary estimates of guarantee costs are significantly lower than the corresponding fair-value estimates, which provide a more comprehensive measure of the cost to taxpayers. CBO used the credit rating associated with a project to derive the discount rate the market would most likely assign to the loan cash flows. For example, if the risks associated with a guaranteed loan are in the range of those posed by bonds rated A (less risky) and bonds rated BB (riskier), and if 55 percent of the amount owed is expected to be recovered in the event of a default, the budgetary cost, measured on a FCRA basis, ranges from 1 percent to 6 percent of the principal loaned. In contrast, the fair value of the guarantee ranges from 9 percent to 21 percent of the principal loaned. Because of the high degree of uncertainty involved, it may not be possible to charge borrowers the full cost of a loan guarantee. When adverse selection is severe, attempts to offset expected lo**sses with an increase in fees can backfire because the higher fees drive away creditworthy borrowers**, **making it impossible to provide a loan guarantee that does not involve a subsidy.** CBO relied on a credit-ratings-based approach to evaluate the probability of default rather than on the historical experience of the nuclear industry, for which not enough data exist to draw quantitative inferences. However, historical experience suggests that investing in nuclear generating capacity engenders considerable risk. One study found that of the 117 privately owned plants in the United States that were started in the 1960s and 1970s and for which data were available, 48 were canceled, and almost all of them experienced significant cost overruns. As a consequence, most of the utilities that undertook nuclear projects suffered ratings downgrades—sometimes several downgrades—during the construction phase.

### 2ac k economy

#### Prefer util

Cummiskey 90 – Professor of Philosophy, Bates (David, Kantian Consequentialism, Ethics 100.3, p 601-2, p 606, jstor, AG)

We must not obscure the issue by characterizing this type of case as the sacrifice of individuals for some abstract "social entity." It is not a question of some persons having to bear the cost for some elusive "overall social good." Instead, the question is whether some persons must bear the inescapable cost for the sake of other persons. Nozick, for example, argues that "to use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has."30 Why, however, is this not equally true of all those that we do not save through our failure to act? By emphasizing solely the one who must bear the cost if we act, one fails to sufficiently respect and take account of the many other separate persons, each with only one life, who will bear the cost of our inaction. In such a situation, what would a conscientious Kantian agent, an agent motivated by the unconditional value of rational beings, choose? We have a duty to promote the conditions necessary for the existence of rational beings, but both choosing to act and choosing not to act will cost the life of a rational being. Since the basis of Kant's principle is "rational nature exists as an end-in-itself' (GMM, p. 429), the reasonable solution to such a dilemma involves promoting, insofar as one can, the conditions necessary for rational beings. If I sacrifice some for the sake of other rational beings, I do not use them arbitrarily and I do not deny the unconditional value of rational beings. **Persons** may **have "dignity**, an unconditional and incomparable value" that transcends any market value (GMM, p. 436), **but**, as rational beings, persons **also** have **a fundamental equality which dictates that some must** sometimes **give way for the sake of others.** The formula of the end-in-itself thus does not support the view that we may never force another to bear some cost in order to benefit others. If one focuses on the equal value of all rational beings, then equal consideration dictates that one sacrifice some to save many. [continues] According to Kant, the objective end of moral action is the existence of rational beings. Respect for rational beings requires that, in deciding what to do, one give appropriate practical consideration to the unconditional value of rational beings and to the conditional value of happiness. Since agent-centered constraints require a non-value-based rationale, the most natural interpretation of the demand that one give equal respect to all rational beings lead to a consequentialist normative theory. We have seen that there is no sound Kantian reason for abandoning this natural consequentialist interpretation. In particular, a consequentialist interpretation does not require sacrifices which a Kantian ought to consider unreasonable, and it does not involve doing evil so that good may come of it. It simply requires an uncompromising commitment to the equal value and equal claims of all rational beings and a recognition that, in the moral consideration of conduct, one's own subjective concerns do not have overriding importance.

**Doesn’t solve the case**

Mingyuan 5 – Professor of Law

Mingyuan Associate Professor of Law at Tsinghua University School of Law 2005, Wang Temple Journal of Science, Technology & Environmental Law, lexis

Compared to conventional energy resources such as coal and oil, renewable energy resources are generally more environmentally-friendly and, therefore, benefit both the economy and the environment. Unfortunately, while the market mechanism [\*358] generally may not prove renewable energy economically beneficial, sometimes the market fails to operate in terms of a specific energy market. That is, the market fails to operate in the context of energy and renewably energy. Environmental benefits resulting from the development and use of renewable energy sources, a form of positive externality or market failure, cannot be measured by price signals and, therefore, cannot be incorporated into the market system. Furthermore, because of the differences of project scale and the maturity of technology, the costs of developing and using renewable energy are usually more expensive and less competitive than costs of fossil fuel energy, especially electricity derived from coal-burning power plants.

### 2ac a2 123 Disads

#### leadership directly discourages reprocessing – stronger leadership is key

Hibbs, 12 [Mark Hibbs 12, SENIOR ASSOCIATE, NUCLEAR POLICY PROGRAM, Carnegie Endowment, “Negotiating Nuclear Cooperation Agreements,” NUCLEAR ENERGY BRIEF, AUGUST 7, 2012 <http://carnegieendowment.org/2012/08/07/negotiating-nuclear-cooperation-agreements/d98z>]

The outcome of any negotiation for a bilateral nuclear cooperation agreement will depend on the leverage both sides bring to the table. When the United States negotiated most of the 22 such agreements in force today, it was the world’s leading provider of nuclear technology, equipment, and fuel. As the examples of Jordan and Vietnam show, unlike half a century ago, nuclear newcomers today don’t need to buy American.¶ The vendor field is populated by firms in Argentina, Australia, Canada, the European Union, Japan, Kazakhstan, Namibia, Niger, Russia, and South Korea, and in the future they will be joined by others in China and India. Governments in these countries do not seek to establish a no-ENR requirement as a condition for foreign nuclear cooperation. Some of them, Australia and Canada for example, have strong nonproliferation track records. Countries now seeking to form foreign industrial partnerships to set up nuclear power programs have numerous options and they will favor arrangements that provide them the most freedom and flexibility.¶ Equity in international nuclear affairs matters. By negotiating with its partners voluntary political agreements, including side benefits to limit the application of sensitive technologies, instead of trying to legally compel them to make concessions that are politically onerous, the United States can serve its nonproliferation and security interests while avoiding the challenge to U.S. credibility that would follow from rigid application of a one-size-fits-all policy.¶ The United States should show nonproliferation leadership by generally discouraging countries without enrichment and reprocessing capabilities from embarking in this direction. But negotiators need policy guidelines that provide for flexibility and encourage them to create incentives to get desired results. To some extent, the current policy may be informed by the insight that trying to negotiate no-ENR terms into the operative text of an agreement may fail, and that other approaches may be more productive. It also reflects the reality that U.S. leverage on nuclear trade is declining.¶ In any case, negotiators and especially U.S. lawmakers—who must review and approve any new agreement—should not make the perfect the enemy of the good. If at the end of the day the United States must choose between having no agreement with a country and having an agreement without an unconditional and legally binding commitment to forego ENR, in specific instances, where the United States has little leverage and little to offer, the latter choice may be the right choice.¶ Right now, however, negotiators are not getting clear instructions from the top of the administration or from lawmakers about what new 123 agreements should require. In the case of some pending agreements, for example with Saudi Arabia, temporizing by U.S. leaders could set back U.S. economic and security interests. In some other countries, such as Australia and Canada, the cabinet approves a negotiating mandate before any bilateral nuclear cooperation talks take place. This kind of direction is needed in the United States, whether initiated by the White House or by Congress.

#### And, no backlash – Obama won’t support strong ENR agreements now

Grossman, 10/5/12 [U.S. Envoy Touts Trade Norms for Curbing Sensitive Nuclear Activities, Elaine, Global Security Newswire¶ <http://www.nti.org/gsn/article/us-envoy-touts-trade-norms-curbing-sensitive-nuclear-activities/>]

Some prominent nonproliferation experts -- [Democrats and Republicans](http://www.nti.org/gsn/article/bipartisan-house-report-castigates-obama-nuclear-trade-policy/) alike -- have [called](http://www.nti.org/gsn/article/us-nuclear-trade-policy-concerns-mounting-capitol-hill/) for the inclusion of explicit provisions in future U.S. atomic cooperation pacts that would bar a partner state from domestic enrichment or reprocessing. In exchange, Washington would allow access to U.S. technologies and sensitive materials useful for peaceful nuclear power generation.¶ The Obama administration, however, has not embraced a policy of this kind. Instead, it has said Washington would demand what it has called the “gold standard” of a no-enrichment-or-reprocessing pledge only on a “[case-by-case](http://www.nti.org/gsn/article/administration-letter-promises-case-case-approach-nuclear-trade-deals/)” basis in nuclear trade talks with foreign nations. Officials with the Energy and State departments have argued that to do otherwise could alienate potential trade partners and put its international nuclear cooperation -- and any associated U.S. jobs -- at risk.¶

#### Their link evidence assumes leverage that isn’t the plan

Grossman, 10/5/12 [U.S. Envoy Touts Trade Norms for Curbing Sensitive Nuclear Activities, Elaine, Global Security Newswire¶ <http://www.nti.org/gsn/article/us-envoy-touts-trade-norms-curbing-sensitive-nuclear-activities/>]

The strongest incentive for a nation to honor such a political commitment, regardless of changes in leadership over time, would be a desire to avoid putting “its bilateral relationship with the U.S. on the line by reprocessing or enriching,” he said.¶ Should a partner nation later decide to change course and pursue enrichment or reprocessing, it might be more likely to discuss its evolving policy more candidly with Washington if the actions did not involve breaking a legal commitment, he argued. By contrast, any legal restriction could effectively force a nation to pursue these activities only in a clandestine program, he said.¶ Sokolski countered that several nations would consider adopting -- or, like [Taiwan](http://www.nti.org/gsn/article/taiwan-ready-forgo-nuclear-fuel-making-us-pact-renewal/) did recently, actually volunteer to embrace -- the gold standard in their trade accords, particularly if the U.S. government more actively encouraged it during negotiations.¶ Others on Capitol Hill have noted that one powerful draw in embracing such a formal vow should be the type of global acclaim garnered by the United Arab Emirates for forgoing domestic enrichment or reprocessing, and growing support for Taiwan in its willingness to make a similar pledge.

#### And, “leverage” is unique and about each particular country – plan doesn’t affect the agreements that are adopted

Kane, 12 [8/3/12, [US nuclear cooperation agreements and the Middle East](http://www.middleeast-armscontrol.com/2012/08/03/us-nuclear-cooperation-agreements-and-the-middle-east/), http://www.middleeast-armscontrol.com/2012/08/03/us-nuclear-cooperation-agreements-and-the-middle-east/]

In conclusion, any country embarking on a nuclear energy program does it for various strategic reasons. Its decision whether to conclude a nuclear cooperation agreement with the United States is driven by its need or a desire to get U.S. blessing for its program and hope to gain access to U.S. technology. The terms of a specific agreement are driven by the leverage the United States has over a particular country. It will be harder for any country, especially from the Middle East, to conclude an agreement without ENR renunciation if the United States managed to gain agreement from both the UAE and Taiwan, especially because of the more favorable term in the UAE agreement. However, a decision not to conclude such an agreement with the United States may mean it will not be able to buy a reactor from most rectors suppliers.

### 2ac counterplan

#### And, only Thorium based LFTR reactors solve – doesn’t produce plutonium

**Halper, 11** [“The new face of safe nuclear”, By [Mark Halper](http://www.smartplanet.com/search?q=mark+halper) | July 21, 2011, 3:56 AM PDT, <http://www.smartplanet.com/blog/intelligent-energy/the-new-face-of-safe-nuclear/7712>]

Today, other countries including China and India are pursuing thorium nuclear projects. Sorensen believes that thorium should be the pillar of an Americannuclear future, because thorium “is so fundamentally different than every other nuclear story out there right now.” Because his thorium reactor would not produce plutonium, it would mitigate the chance of nuclear weapons proliferation and eliminate the need for utilities to bury plutonium waste. Although thorium in some designs does produce plutonium waste, that waste is less hazardous than other mixes of plutonium waste, there’s less of it, and it decomposes much faster than conventional waste – hundreds of years rather than thousands or more, according to various thorium proponents. And thorium-based fuel fissions much more efficiently than does uranium 235, meaning a thorium reactor requires less fuel. That is in part because the fission cycle runs hotter than conventional uranium cycles, said Sorensen. In the Flibe design, thorium reaction temperatures rise to about 750 degrees Celsius to drive gas turbines, compared to conventional reactors, which tend to reach less than half that temperature and drive less efficient steam turbines, he said. “The hotter you can get, the more efficiently you can turn heat into electricity,” said Sorensen. “Typical reactors today, they only get about one third conversion efficiency. We can get about half.” He also claims that in his design, thorium “isobreeds”, meaning it creates as much fissile fuel as it burns up. For Sorensen, the key to making it happen is to deploy an unconventional reactor technology, called a Liquid Fluoride Thorium Reactor (LFTR, pronounced “lifter”). It is a type of molten salt reactor, which uses liquid salt rather than water as its coolant, akin to what Oak Ridge developed. Flibe’s LFTR uses a liquid fluoride salt to serve both as fuel carrier and coolant. The fuel consists of thorium and uranium 233 – different from the uranium 235 used in conventional reactors. It fissions in the liquid, heats up, and passes through a heat exchanger that conveys the heat to fuel-free liquid fluoride salt that eventually drives the gas turbine. In the event of a total power loss, a frozen plug melts, allowing the fuel to drain into a passively cooled tank where fission stops. Normally, the plug is kept frozen by an external cooling fan. The company name, Flibe, comes from the scientific term FLiBe, an anagram and acronym for the molten salt that Sorensen uses, which consists of lithium fluoride (LiF) and beryllium fluoride (BeF2). Another inherent safety feature of the LFTR is that it runs at normal atmospheric pressure, rather than at the 3000-psi that many conventionally cooled reactors require to keep cooling water in liquid state, Sorensen claimed. Conventional cooling systems can also require external generators to help pump and recombine water, and those generators can fail such as at Fukushima. Some of Sorensen’s thorium competitors advocate using thorium in conventional reactors like pressurized water reactors, using thorium in solid fuel form, not liquid. They say that would substantially lower the costs of moving to a new fuel, because it would not entail the high-priced development of new reactors. Sorensen countered that you only get the full benefits of thorium by applying it in a LFTR type reactor.

#### LFTR construction is best – safety, meltdowns, accidents, and economics

**Martin, 12** [May 8th, Richard, A contributing editor for Wired since 2002, he has written about energy, for Time, Fortune, The Atlantic, and the Asian Wall Street Journal, editorial director for Pike Research, the leading cleantech research and analysis firm, former Technology Producer for ABCNews.com, Technology Editor for The Industry Standard (2000-2001), and Editor-at- Large for Information Week (2005-2008), recipient of the “Excellence in Feature Writing" Award from the Society for Professional Journalists and the White Award for Investigative Reporting, Educated at Yale and the University of Hong Kong, , “SuperFuel: Thorium, the Green Energy Source for the Future”, ISBN 978—0»230-116474]

SECOND, YOU’D MAKE YOUR NEW REACTOR a breeder, preferably a thermal breeder. The failure of fast breeders to fulfill their promise has not erased their appeal; it has just caused the quest for a fast breeder to go in (slightly) new directions. Breeders would be advantageous not only because, theoretically, you’d never run out of fuel, but also because you can use them to process nuclear waste from conventional reactors. At least in the United States, the question of how to store nuclear waste has no clear answer, and there may not be one for the next decade. Building self-sustaining breeder reactors would, as the nuclearati like to say, “close the fuel cycle”; little radioactive material would be left over to dispose of. Then you’d want to make your reactor inherently safe. Inherent safety — not to be confused with passive safety, a very different thing — is a term much beloved by nuclear engineers‘; It has been applied to just about every reactor design, including the uranium-fueled lightwater reactor and the sodium-cooled fast breeder, machines whose inherent safety is, to say the least, questionable. Traditionally, the solution to this problem has been external safeguards, also called overengineering: add more controls, more redundancy, more miles of piping, more plumbing and alarms and sensors and gauges, and the inherent twitchiness of the world’s most volatile energy source could be contained and controlled. Unfortunately, all that engineering brings more complexity, and complexity in itself adds risk. Virtually all the reactor accidents that have ever occurred have had one of two causes: either a fiendishly complex mechanism failed because of a simple mishap (like a loose chunk of zirconium) or a human being failed at the task of monitoring and managing a fiendishly complex mechanism. The only truly inherently safe reactor is a liquid-core reactor, like the molten salt reactor that was created at Oak Ridge in the 1960s. For the purposes of a reactor designer, liquid—whether it’s water, liquid metal, or some type of liquid fluoride — has a marvelous characteristic: it expands rapidly when it gets hot. All materials expand when heated, of course. In a liquid-core reactor, as the energy of the liquid rises, it expands and naturally, passively, slows down the reaction, making a runaway accident nearly impossible. In technical terms, this is known as a “negative temperature coefficient of reactivity.” That means that as the temperature rises (which typically is what happens when something goes wrong in a nuclear reactor), the reactivity goes down. When the reactivity goes down, the reactor is essentially turning itself off. Liquid fuels have several other characteristics that make them safer than conventional solid fuel reactors. This is where the benefits of thorium, which for a variety of reasons is uniquely well suited to liquid fuel reactors, extend beyond the nature of the element itself. No matter how you use it—in a light-water reactor, in a pebble bed reactor— thorium offers advantages over uranium. But in a liquid fuel reactor, that advantage is magnified. If you put high-octane gas in a 1975 Ford Pinto, you’ll see some marginal performance enhancement. To get the full benefit, though, you should put it in a Ferrari Testarossa. Using thorium in a liquid fuel reactor is similar: its unique qualities as an energy source are fully exploited. For example, in liquids—particularly in molten salts—fission products tend to be stable, making it easier to isolate and remove them. One of these fission products, xenon-135, is a nuclear poison that tends to build up in conventional reactors, slowing down the reactions. It renders the fuel unusable after only a small percentage of the potential energy has been used, and it’s hideously difficult to handle as part of the nuclear waste stream. In fluid fuels, because xenon forms a noble gas (one that is impervious to chemical reactions), xenon is easy to remove. In a LFTR it can be boiled off as a gas and processed while the reactor continues operating, reducing downtime and increasing the amount of the potential energy that can be extracted from the thorium fuel. A ton of thorium can produce energy equivalent to that produced by 200 tons of uranium in a conventional light-water reactor. Liquid fuels are also impervious to radiation damage, solving one of the thorniest problems in solid fuel reactors. Continuous bombardment by neutrons over periods of weeks or months wears down not only the solid uranium pellets in a light-water reactor but also the cladding (usually made of zirconium) that contains them. Because of radiation damage and the buildup of fission poisons like xenon, fuel rods age quickly; they have to be replaced every few years, even though only 3 to 5 percent of their energy has been consumed. Liquid fuels have one other characteristic that makes them ideal for reactor cores: they flow. Gravity, not elaborate control systems or so called passive safety systems, gives LFTRs their ultimate protection against a serious nuclear accident. In a criticality accident (i.e., if the fission reaction in the core starts to get out of control), a specially designed freeze plug in the reactor vessel melts and the liquid core simply drains out of the reactor into an underground shielded container, like a bathtub when the drain plug is pulled. The fission reactions quickly cease, and (thanks to the expansive quality noted earlier) the fluid cools rapidly. Decay heat is contained harmlessly. Meltdown is impossible, and there are no solid fuel rods too radioactive to remove. Inherently safe, LFTRs pose less threat than light-water reactors, coal-fired power plants, oil refineries, or just about any other form of large energy or chemical plant. Built small and modular, they will be less expensive to build and operate than just about any other energy source.

#### Condo bad

#### The plan is key to the shipping industry

Hargraves, 12 [July, Robert, Robert Hargraves has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com]

LFTR can power commercial ships. Powering ocean cargo vessels with LFTR electric power will eliminate global oil demand of 7 million barrels per day and eliminate 4% of man-made greenhouse gas emissions. Nuclear power is successfully used today to power navy submarines, ice breakers, and aircraft carriers. The first ever use of nuclear power was to power the submarine USS Nautilus on and in the ocean. Since 1955 the US Navy has accumulated 5,400 reactor years of accident-free experience with its nuclear power plants. Nuclear- powered commercial shipping is a low-hanging-fruit opportunity. Reducing the cargo space occupied by tanks for 380 tons of fuel for every day at sea will increase paying cargo. LFTR energy cheaper than coal is also cheaper than from the asphalt-like refinery residues burned for fuel, reducing operational costs. The elimination of frequent refueling not only ends refueling delays but also allows ships to plan shipping routes without refueling port constraints. The largest container ship in operation in 2012 has a 90 MW power plant, close to the 100 MW size of the small modular LFTR example. The largest, Nimitz-class super-carrier has a 200 MW nuclear power plant. Just as the shipping industry changed from coal power to oil power, it can change from oil power to LFTR power.

#### Key to naval power

**Alberto, et al., 5** (Lieutenant Colonel Ronald P., U.S. Army, Colonel Michael G. Archuleta, U.S. Air Force, Lieutenant Colonel Steven H. Bills, U.S. Air Force, Commander William A. Bransom, U.S. Navy, Mr. Kenneth Cohen, Department of State, Commander William A. Ebbs, U.S. Navy, George Manjgaladze, Ministry of Defense, Republic of Georgia, Commander Elizabeth B. Myhre, U.S. Navy, Audrea M. Nelson, DA, Robert L. Riddick, Department of Defense, Colonel Christopher M. Ross, U.S. Army, Julia N. Ruhnke, DA, Lieutenant Colonel Gregory M. Ryan, U.S. Marine Corps, Colonel David D. Thompson, U.S. Air Force, Commander Hugh D. Wetherald, U.S. Navy, Dr. Mark Montroll, faculty at the Industrial College of the Armed Forces, Dr. Michael Farbman, USAID, faculty at the Industrial College of the Armed Forces, Captain David B. Hill, U.S. Coast Guard, faculty at the Industrial College of the Armed Forces, “SHIPBUILDING”, The Industrial College of the Armed Forces, National Defense University, 2005, http://www.ndu.edu/icaf/programs/academic/industry/reports/2005/pdf/icaf-is-report-shipbuilding-2005.pdf, Deech)

In conclusion, our study found that the tremendous advantage the US enjoys in naval power directly supports our national security through global power projection and maintaining freedom of the seas. Our ability to build large, highly capable naval ships is a vital part of our naval superiority and is therefore inexorably linked to our national security. The US must maintain it lead in naval power by protecting its domestic shipbuilding industry. It is our conclusion that the number one issue facing the American military shipbuilder today is the uncertainty in future orders for ship construction. The year to year fluctuation in the projected naval order book adds uncertainty for the shipbuilder wanting to invest in capital and labor improvement, and adds cost to the vessels actually being delivered. This fluctuation is exacerbated when the US Navy cancels entire ship classes or severely limits procurement of vessels that have been programs of record, programs which the shipbuilders have used to make labor and capital investment decisions. We feel it is imperative for the Navy to identify the force of the future and commit to a stable procurement plan to implement that force. The concept of Seabasing must mature at least to the point where the major yards can invest in the infrastructure necessary to build the force. In this area, we also conclude that the requirement for full funding of naval vessels in the year of authorization hampers the ability of the Navy and the industry to maintain a steady shipbuilding plan. It is apparent to us that the US Navy shipbuilding program is often used as a “bill payer” for other DoD priorities. In addition to the reality that the money is not obligated in the year of funding, the temptation to use the US Navy shipbuilding account to pay current year expenses is greater if significant procurement dollars are available to pay the full cost of individual ships. While we are convinced the nation must maintain sufficient shipbuilding capacity to allow for surge in national emergencies, we feel that the current and projected naval order book does not support the capacity being carried by the six largest shipyards. Restructuring of the industrial base is necessary. This restructuring may entail the politically difficult decision to allow some yards to close, but if the naval order book does not increase and the restructuring does not occur, unit cost will continue to skyrocket out of proportion to the value to the nation of the vessel.

#### Great power war

**Conway et al 7** [James T., General, U.S. Marine Corps, Gary Roughead, Admiral, U.S. Navy, Thad W. Allen, Admiral, U.S. Coast Guard, “A Cooperative Strategy for 21st Century Seapower,” October, http://www.navy.mil/maritime/MaritimeStrategy.pdf]

Deter major power war**.** No other disruption is as potentially disastrous to global stability as war among major powers. Maintenance and extension of this Nation’s comparative seapower advantage is a key component of **deterring major power war**. While war with another great power strikes many as improbable, the near-certainty of its ruinous effects demands that it be actively deterred using all elements of national power. The expeditionary character of maritime forces—our lethality, global reach, speed, endurance, ability to overcome barriers to access, and operational agility—provide the joint commander with a range of deterrent options. We will pursue an approach to deterrence that includes a credible and scalable ability to retaliate against aggressors conventionally, unconventionally, and with nuclear forces.

**Win our Nation’s wars.** In times of war, our ability to impose local sea control, overcome challenges to access, force entry, and project and sustain power ashore, makes our maritime forces an **indispensable element** of the joint or combined force. This expeditionary advantage must be maintained because it provides joint and combined force commanders with freedom of maneuver. Reinforced by a robust sealift capability that can concentrate and sustain forces, sea control and power projection enable extended campaigns ashore.

### 2ac nuclear k

#### War turns structural violenceBulloch 8

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But the idea that poverty and peace are directly related presupposes that wealth inequalities are – in and of themselves – unjust, and that the solution to the problem of war is to alleviate the injustice that inspires conflict, namely poverty. However, it also suggests that poverty is a legitimate inspiration for violence, otherwise there would be no reason to alleviate it in the interests of peace. It has become such a commonplace to suggest that poverty and conflict are linked that it rarely suffers any examination. To suggest that war causes poverty is to utter an obvious truth, but to suggest the opposite is – on reflection – quite hard to believe. War is an expensive business in the twenty-first century, even asymmetrically. And just to examine Bangladesh for a moment is enough at least to raise the question concerning the actual connection between peace and poverty. The government of Bangladesh is a threat only to itself, and despite 30 years of the Grameen Bank, Bangladesh remains in a state of incipient civil strife. So although Muhammad Yunus should be applauded for his work in demonstrating the efficacy of micro-credit strategies in a context of development, it is not at all clear that this has anything to do with resolving the social and political crisis in Bangladesh, nor is it clear that this has anything to do with resolving the problem of peace and war in our times. It does speak to the Western liberal mindset – as Geir Lundestad acknowledges – but then perhaps this exposes the extent to which the Peace Prize itself has simply become an award that reflects a degree of Western liberal wish-fulfilment. It is perhaps comforting to believe that poverty causes violence, as it serves to endorse a particular kind of concern for the developing world that in turn regards all problems as fundamentally economic rather than deeply – and potentially radically – political.

#### Nuke war outweighs structural violence – prioritizing structural violence makes preventing war impossible

Boulding 78 [Ken, is professor of economics and director, Center for Research on Conflict Resolution, University of Michigan, “Future Directions in Conflict and Peace Studies,” The Journal of Conflict Resolution, Vol. 22, No. 2 (Jun., 1978), pp. 342-354]

Galtung is very legitimately interested in problems of world poverty and the failure of development of the really poor. He tried to amalga- mate this interest with the peace research interest in the more narrow sense. Unfortunately, he did this by downgrading the study of inter- national peace, labeling it "negative peace" (it should really have been labeled "negative war") and then developing the concept of "structural violence," which initially meant all those social structures and histories which produced an expectation of life less than that of the richest and longest-lived societies. He argued by analogy that if people died before the age, say, of 70 from avoidable causes, that this was a death in "war"' which could only be remedied by something called "positive peace." Unfortunately, the concept of structural violence was broadened, in the word of one slightly unfriendly critic, to include anything that Galtung did not like. Another factor in this situation was the feeling, certainly in the 1960s and early 1970s, that nuclear deterrence was actually succeeding as deterrence and that the problem of nuclear war had receded into the background. This it seems to me is a most dangerous illusion and diverted conflict and peace research for ten years or more away from problems of disarmament and stable peace toward a grand, vague study of world developments, for which most of the peace researchers are not particularly well qualified. To my mind, at least, the quality of the research has suffered severely as a result.' The complex nature of the split within the peace research community is reflected in two international peace research organizations. The official one, the International Peace Research Association (IPRA), tends to be dominated by Europeans somewhat to the political left, is rather, hostile to the United States and to the multinational cor- porations, sympathetic to the New International Economic Order and thinks of itself as being interested in justice rather than in peace. The Peace Science Society (International), which used to be called the Peace Research Society (International), is mainly the creation of Walter Isard of the University of Pennsylvania. It conducts meetings all around the world and represents a more peace-oriented, quantitative, science- based enterprise, without much interest in ideology. COPRED, while officially the North American representative of IPRA, has very little active connection with it and contains within itself the same ideological split which, divides the peace research community in general. It has, however, been able to hold together and at least promote a certain amount of interaction between the two points of view. Again representing the "scientific" rather than the "ideological" point of view, we have SIPRI, the Stockholm International Peace Research Institute, very generously (by the usual peace research stand- ards) financed by the Swedish government, which has performed an enormously useful service in the collection and publishing of data on such things as the war industry, technological developments, arma- ments, and the arms trade. The Institute is very largely the creation of Alva Myrdal. In spite of the remarkable work which it has done, how- ever, her last book on disarmament (1976) is almost a cry of despair over the folly and hypocrisy of international policies, the overwhelming power of the military, and the inability of mere information, however good, go change the course of events as we head toward ultimate ca- tastrophe. I do not wholly share her pessimism, but it is hard not to be a little disappointed with the results of this first generation of the peace research movement. Myrdal called attention very dramatically to the appalling danger in which Europe stands, as the major battleground between Europe, the United States, and the Soviet Union if war ever should break out. It may perhaps be a subconscious recognition-and psychological denial-of the sword of Damocles hanging over Europe that has made the European peace research movement retreat from the realities of the international system into what I must unkindly describe as fantasies of justice. But the American peace research community, likewise, has retreated into a somewhat niggling scientism, with sophisticated meth- odologies and not very many new ideas. I must confess that when I first became involved with the peace research enterprise 25 years ago I had hopes that it might produce some- thing like the Keynesian revolution in economics, which was the result of some rather simple ideas that had never really been thought out clearly before (though they had been anticipated by Malthus and others), coupled with a substantial improvement in the information system with the development of national income statistics which rein- forced this new theoretical framework. As a result, we have had in a single generation a very massive change in what might be called the "conventional wisdom" of economic policy, and even though this conventional wisdom is not wholly wise, there is a world of difference between Herbert Hoover and his total failure to deal with the Great Depression, simply because of everybody's ignorance, and the moder- ately skillful handling of the depression which followed the change in oil prices in 1-974, which, compared with the period 1929 to 1932, was little more than a bad cold compared with a galloping pneumonia. In the international system, however, there has been only glacial change in the conventional wisdom. There has been some improvement. Kissinger was an improvement on John Foster Dulles. We have had the beginnings of detente, and at least the possibility on the horizon of stable peace between the United States and the Soviet Union, indeed in the whole temperate zone-even though the tropics still remain uneasy and beset with arms races, wars, and revolutions which we cannot really afford. Nor can we pretend that peace around the temper- ate zone is stable enough so that we do not have to worry about it. The qualitative arms race goes on and could easily take us over the cliff. The record of peace research in the last generation, therefore, is one of very partial success. It has created a discipline and that is something of long-run consequence, most certainly for the good. It has made very little dent on the conventional wisdom of the policy makers anywhere in the world. It has not been able to prevent an arms race, any more, I suppose we might say, than the Keynesian economics has been able to prevent inflation. But whereas inflation is an inconvenience, the arms race may well be another catastrophe. Where, then, do we go from here? Can we see new horizons for peace and conflict research to get it out of the doldrums in which it has been now for almost ten years? The challenge is surely great enough. It still remains true that war, the breakdown of Galtung's "negative peace," remains the greatest clear and present danger to the human race, a danger to human survival far greater than poverty, or injustice, or oppression, desirable and necessary as it is to eliminate these things. Up to the present generation, war has been a cost and an inconven- ience to the human race, but it has rarely been fatal to the process of evolutionary development as a whole. It has probably not absorbed more than 5% of human time, effort, and resources. Even in the twenti- eth century, with its two world wars and innumerable smaller ones, it has probably not acounted for more than 5% of deaths, though of course a larger proportion of premature deaths. Now, however, advancing technology is creating a situation where in the first place we are developing a single world system that does not have the redundancy of the many isolated systems of the past and in which therefore if any- thing goes wrong everything goes wrong. The Mayan civilization could collapse in 900 A.D., and collapse almost irretrievably without Europe or China even being aware of the fact. When we had a number of iso- lated systems, the catastrophe in one was ultimately recoverable by migration from the surviving systems. The one-world system, therefore, which science, transportation, and communication are rapidly giving us, is inherently more precarious than the many-world system of the past. It is all the more important, therefore, to make it internally robust and capable only of recoverable catastrophes. The necessity for stable peace, therefore, increases with every improvement in technology, either of war or of peacex

#### No impact uniqueness – world getting better now heg is peaceful

**Busby, 12** [Get Real Chicago IR guys out in force, Josh, Assistant Professor of Public Affairs and a fellow in the RGK Center for Philanthropy and Community Service as well as a Crook Distinguished Scholar at the Robert S. Strauss Center for International Security and Law. <http://duckofminerva.blogspot.com/2012/01/get-real-chicago-ir-guys-out-in-force.html>]

Is Unipolarity Peaceful? As evidence, Monteiro provides metrics of the number of years during which great powers have been at war. For the unipolar era since the end of the Cold War, the United States has been at war 13 of those 22 years or 59% (see his Table 2 below). Now, I've been following some of the discussion by and about Steven Pinker and Joshua Goldstein's [work](http://www.nytimes.com/2011/12/18/opinion/sunday/war-really-is-going-out-of-style.html?pagewanted=all) that suggests the world is becoming more peaceful with interstate wars and intrastate wars becoming more rare. I was struck by the graphic that Pinker used in a Wall Street Journal [piece](http://online.wsj.com/article/SB10001424053111904106704576583203589408180.html) back in September that drew on the Uppsala Conflict Data, which shows a steep decline in the number of deaths per 100,000 people. How do we square this account by Monteiro of a unipolar world that is not peaceful (with the U.S. at war during this period in Iraq twice, Afghanistan, Kosovo) and Pinker's account which suggests declining violence in the contemporary period? Where Pinker is focused on systemic outcomes, Monteiro's measure merely reflect years during which the great powers are at war. Under unipolarity, there is only one great power so the measure is partial and not systemic. However, Monteiro's theory aims to be systemic rather than partial. In critiquing Wohlforth's early work on unipolarity stability, Monteiro notes: Wohlforth’s argument does not exclude all kinds of war. Although power preponderance allows the unipole to manage conflicts globally, this argument is not meant to apply to relations between major and minor powers, or among the latter (17). So presumably, a more adequate test of the peacefulness or not of unipolarity (at least for Monteiro) is not the number of years the great power has been at war but whether the system as a whole is becoming more peaceful under unipolarity **compared** to previous eras, including wars between major and minor powers or wars between minor powers and whether the wars that do happen are as violent as the ones that came before. Now, as Ross Douthat pointed [out](http://douthat.blogs.nytimes.com/2011/10/17/steven-pinkers-history-of-violence/), Pinker's argument isn't based on a logic of benign hegemony. It could be that even if the present era is more peaceful, unipolarity has nothing to do with it. Moreover, Pinker may be wrong. Maybe the world isn't all that peaceful. I keep thinking about the places I don't want to go to anymore because they are violent (Mexico, Honduras, El Salvador, Nigeria, Pakistan, etc.) As Tyler Cowen [noted](http://marginalrevolution.com/marginalrevolution/2011/10/steven-pinker-on-violence.html), the measure Pinker uses to suggest violence is a per capita one, which doesn't get at the absolute level of violence perpetrated in an era of a greater world population. But, if my read of other [reports](http://www.hsrgroup.org/human-security-reports/20092010/graphs-and-tables.aspx) based on Uppsala data is right**,** war is becoming more rare and less deadly (though later [data](http://www.pcr.uu.se/research/ucdp/charts_and_graphs/) suggests lower level armed conflict may be increasing again since the mid-2000s). The apparent violence of the contemporary era may be something of a presentist bias and reflect our own lived experience and the ubiquity of news media .Even if the U.S. has been at war for the better part of unipolarity, the deadliness is declining, even compared with Vietnam, let alone World War II. Does Unipolarity Drive Conflict? So, I kind of took issue with the Monteiro's premise that unipolarity is not peaceful. What about his argument that unipolarity drives conflict? Monteiro suggests that the unipole has three available strategies - defensive dominance, offensive dominance and disengagement - though is less likely to use the third. Like Rosato and Schuessler, Monteiro suggests because other states cannot trust the intentions of other states, namely the unipole, that minor states won't merely bandwagon with the unipole. Some "recalcitrant" minor powers will attempt to see what they can get away with and try to build up their capabilities. As an aside, in Rosato and Schuessler world, unless these are located in strategically important areas (i.e. places where there is oil), then the unipole (the United States) should disengage. In Monteiro's world, disengagement would inexorably lead to instability and draw in the U.S. again (though I'm not sure this necessarily follows), but neither defensive or offensive dominance offer much possibility for peace either since it is U.S. power in and of itself that makes other states insecure, even though they can't balance against it.

#### Your k cherry picks more

Marijke Breuning (professor of political science at the University of North Texas) December 2009 “Thinking Critically About Security Studies” International Studies Review Volume 11, Issue 4, Pages 792-794

In their zeal to critique conspicuous consumption and the American love affair with the SUV, Simon Dalby and Matthew Paterson resort to the familiar argument that the Dutch consume less oil because they choose "to walk, ride bicycles, or take the train" (p. 184). They forget to mention that this is an easy choice in a very densely populated country with public transportation plentiful in most locations, whereas gas is pricey and parking expensive (and difficult to find)—just as public transportation is preferred by many in New York City but generally not an option for residents of the many small towns of the American Midwest. These examples are typical of the interpretations offered in the volume's chapters. Greater reflection on initial judgments might have enabled the authors to arrive at deeper insights. Finally, there is the issue of assumptions. The contributors share a conviction that their perceptions are on target. There is no serious consideration of alternative explanations. Moreover, the explanations tend to attribute a unity of purpose to decisions made by disparate entities (e.g., government, business, and media) and occasionally resemble conspiracy theories. For instance, Marie Thorsten implies that TV shows such as 24 are designed to facilitate citizens' acceptance of the Bush administration's position that torture was both effective and acceptable. She does not consider the possibility that such shows may also turn people against such tactics or that they simply may have little impact because viewers understand them to be fictional entertainment. She also does not consider that the appearance of this show may have been a lucky happenstance for its creator, not something done by design and collusion. Ultimately, critical security studies as presented in this volume is remarkably uncritical. Careful investigation and considered judgment is replaced with the affirmation of foregone conclusions. More is required to successfully address contemporary security challenges.

### 2ac a2 elections

#### Impact empirically denied and rhetoric doesn’t spill over

Ozdal, 10/6/12 [Habibe Ozdal USAK Center for Eurasian Studies, Russian-American Relations during Obama’s Term: Cyclical Convergence The Journal of Turkish Weekly, <http://www.turkishweekly.net/columnist/3669/russian-american-relations-during-obama%C3%ADs-term-cyclical-convergence.html>]

In the late years of George W. Bush’s second term, Russian-American relations hit a new low for the first time after 1980s. The relations were close to a break off in the aftermath of Russian-Georgian War in 2008. The Obama administration has inevitably inherited many crises with regards to bilateral relations, while also dealing with the challenges created by the wars in Iraq and Afghanistan. In addition, Obama needed to keep up with the global financial crisis at the same time. Due to these reasons, Obama has developed the “reset” initiative with regards to bilateral relations between the US and Russia after he was elected as the president in autumn 2008. Obama’s proposal to “resetting” bilateral ties while leaving aside long-term and challenging issues without setting any preconditions gained recognition in the eyes of Kremlin as well. Hereby such reciprocal understanding paved the way for cooperation in particular fields for Russia and the US, against a backdrop of NATO’s expansion to include former Soviet republics in the 2000s, missile shield systems that are planned to be deployed in Czech Republic and Poland, and the “colored” revolutions which took place in Ukraine, Kyrgyzstan and Georgia; all of which served to escalate tensions between the two countries. While it is still a matter of contention if the formula put forward as a recipe to resolve issues inherited from Bush-Putin era actually succeeded or not, the formula was implemented thanks to both contextual developments and the leaders’ common preferences. What accompanies “reset” policy? It is observed that on the part of Obama administration, important steps were taken in fields that are considered vital for American foreign policy. Especially for the United States which is struggling to leave Afghanistan by 2014; the establishment of Northern Distribution Network which provides with an alternative route for equipment to be transported to Afghanistan, signing the agreement on START II which is prepared for strategic arms reduction by April 2010, and the third package of sanctions passing through UN Security Council against Iran with Russia’s support in order to convince the former to give up nuclear proliferation ambitions, are reckoned as major foreign policy successes on Obama’s part with regards to the bilateral relations with Russia. Also according to Andrew Kuchin, Director of the Russia and Eurasia Program of CSIS which is a Washington-centered think-tank, Obama has put his signature under three critical tasks with Russia: Afghanistan, Iran, and nuclear disarmament… It is better to look from a wider perspective towards bilateral ties in order to avoid illusions, despite many affirmative developments in bilateral relations. Those who fall into error by defining bilateral cooperation as an alliance feel the burden of the emphasis of “great power struggle for global hegemony” placed by Russia on the very same web of relations. Even though Russia was not regarded as a power to be balanced during Obama’s term, Moscow is still concerned to prove itself as a pole due to wishful conceptions of a multi-polar global order. Despite cooperation efforts in critical fields for both sides, tensions between Russia and the US escalated considerably due to the process of transformation throughout the Middle East as well as the anti-Putin demonstrations in the months following the Duma elections that took place in December 2011. Because according to Kremlin, the opposition was inflamed by the US. Both the rivalry for global influence that is visible over the discrepancy of attitudes toward the Syrian conflict, and Secretary of State Clinton’s harsh criticism of Russia on the grounds of Western liberal values; prove that everything is “as usual” in bilateral relations. Possible effects of the elections on bilateral relations Question marks that emerged with regard to the future of Russian-American ties in the aftermath of the recent presidential elections in Russia were erased with Putin being reelected for the seat of the president. Indeed, Putin has been the most popular leader in Russia for the last 12 years and the elections of March 2012 proved in a sense that continuity would prevail in Russian politics. Presidential elections that will take place in November 2012 in the United States may pose a more determinant factor on the prospects of bilateral relations when the post-elections landscape becomes clear. In case of Obama being reelected through the elections to be conducted in November, continued efforts with regard to “restart” policy can be expected. Because for Obama, just like in 2008, Iran’s nuclear program is still worrisome. In such a context, taking Russia’s support behind it on this very issue is of vital concern for the US. On the other hand, Washington will not lean towards brushing aside its formal rights to use Russian land and air space to sustain Northern Distribution Network anyway. The US is getting prepared to leave Afghanistan until 2014, and it is also looking forward to maintain its agreements with Central Asian countries. The fate of bilateral relations, in case the Republican candidate Romney is elected as president, is a matter of curiosity. Romney has been defending throughout his electoral campaign the idea that enhanced relations with Russia are a great weakness of the US foreign policy. He also publicly argues that Russia is America’s number one geopolitical foe. Since Obama administration was commonly appreciated thanks to its successful foreign policy of reinitiating relations with Russia, it is not a surprise to see the rival candidate targeting this point. In case he is elected, Romney may well feel compelled to readjust his attitude toward Moscow in line with the realistic national interests of the United States. Therefore he may leave aside his formerly harsh rhetoric during the electoral campaign. Because then, Romney as well will have to face the challenges posed by the knotted conflict in Afghanistan and the reality of a global financial breakdown. In conclusion, if we are to have a brief look even only at the limited time frame between the dissolution of the Soviet Union and today, it will be possible pick out a couple of small periods of moderation and cooperation in bilateral ties. On the other hand, it is evident that bilateral relations were never qualified to the level of an alliance, not excluding the four years between 2008 and 2012. Such a perception which forms the nucleus of bilateral relations makes it easier to appraise the essential practice of “selective cooperation” between the two powers accurately. It also brings about more realistic scenarios regarding future projections. In the medium term, since selective cooperation seems fit for a win-win policy in the eyes of both sides, we can expect that both will refrain from major policy deviations that may sever bilateral ties. However, we cannot turn a blind eye to the fact that developments which may alter the fragile balances of international system may end up with an environment of vehement competition between the two.

#### Gridlock inevitable with any election outcome

Curry, 9/11/12 - NBC News national affairs writer (Tom, NBC Politics, “Romney election could create new scenario for EPA and coal,” <http://nbcpolitics.nbcnews.com/_news/2012/09/11/13807749-romney-election-could-create-new-scenario-for-epa-and-coal?lite>)

Whether Mitt Romney or Barack Obama wins the presidential election, a congressional impasse in 2013 seems likely. That’s because under most conceivable election scenarios – with Romney or Obama in the White House, and with either Democrats maintaining their Senate majority, or the Republicans taking it – the minority party could use the filibuster threat to block proposals it opposed.

##### Obama win inevitable

**Downie, 10/4/12 –** Washington Post Opinion writer, James, Obama lost the first debate, but he will still win the election, Washington Post, http://www.washingtonpost.com/blogs/post-partisan/post/obama-lost-the-first-debate-but-he-will-still-win-the-election/2012/10/04/9c3b7eb8-0deb-11e2-bd1a-b868e65d57eb\_blog.html)

And yet, the president’s supporters would be wrong to wring their hands. Fundamentally, Obama’s loss will not matter. At most, Wednesday night was a case of “too little, too late” for Romney. Yes, the polls will probably move a point or two in Romney’s direction after the first debate. But all the evidence suggests that for Romney, whether or not you believe he should be president, closing the gap and beating Obama is a bridge too far.¶ Consider the task facing Romney going into Wednesday’s debate: Nationally, RealClearPolitics’s poll average had him down three points; Nate Silver’s model had him down four. He had held a lead in a major poll exactly once since the end of August. The electoral college looked even worse for him: RealClear’s map gave Obama 269 electoral votes safe or leaning to Romney’s 181 (with 88 in toss-up states); HuffPost Pollster gave Obama a 290-191 lead; and Nate Silver’s model had Obama winning an average of 319 electoral votes to Romney’s 218, a comfortable margin. Even Karl Rove had 277 votes safe or leaning to Obama, with another 70 as toss-ups.¶ “Ah,” you say, “that may be true, but surely the gap is small enough to close? And wouldn’t the first debate be enough to bring this race back to a dead heat?” In a word, no.¶ Let’s start with the second question. Incumbent presidents almost always have a poor first debate: George W. Bush lost to John Kerry in 2004, for example, and Walter Mondale beat Ronald Reagan so badly in 1984 that there was a spate of articles asking if the incumbent was too old for the presidency. Yet never has a challenger’s strong first debate performance closed as large a national polling gap as Romney faced going into last night’s debate. Furthermore, most post-debate polling bumps come from previously undecided voters, of which there is a historically small amount in this campaign, thus making it even less likely that Romney could exceed past norms. And Romney would need to outdo history by quite a distance — only Harry Truman has come back from a national deficit as large or larger than Romney’s at this point in the campaign.¶ If Romney would have to pull off a miracle to close the gap in national polling, he has no shot at matching the president in the electoral college. As mentioned above, forecasters commonly predict that Obama already has a big lead of safe and leaning states. If we assume Romney will improve in the polls, there would be around nine “swing states”: Colorado, Florida, Iowa, North Carolina, New Hampshire, Nevada, Ohio, Virginia and Wisconsin. There’s one problem here for Romney: He is trailing, and has been consistently trailing, in all but two — North Carolina, where he’s held a small lead, and Florida, this election’s closest thing to a 50-50 state. Romney doesn’t need to win two out of those nine; in almost every scenario, he will need six or seven out of those nine to win, including at least two or three states where he is behind by several points more than he is nationally.¶ All of which brings me to the final point: Given the state of the race before last night’s debate, even most Romney backers would agree that a Romney victory would require a flawless campaign the rest of the way from Romney and a blunder or two from Obama. After six years of both these men running for and/or being president of the United States, is there really anyone out there who thinks Mitt Romney can go a month without making a single mistake? Who thinks Barack Obama, who has been playing it safe for at least several months now, will suddenly make a reckless error, as opposed to a merely lackluster performance? (Or, if you’re Sean Hannity and co., do you believe the lamestream media will suddenly forget their liberal bias and stop protecting the president while assaulting Mitt Romney?)¶ Seriously, does anyone believe that?¶ The fact is that, come October, presidential elections cannot permanently change course over a few days or hours (unlike, say, media narratives). The majority of voters have already made their decision, and the debates won’t provide enough of a boost to alter the contest’s trajectory. Sadly for Romney, the path the race is stuck on ends with his defeat.

##### Energy won’t switch votes

**Farnam, 12** (T.W. Washington Post, Energy ads flood TV in swing states, 6/27, <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.

And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.

The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.

Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”

Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.

In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.

When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

##### Huge laundy list of nuclear incentives and construction now

**Johnson ’12** (US Campaign Trail: is nuclear in the equation? By John Johnson on Apr 25, 2012, nuclear energy expert and analyst, Nuclear Energy Insider, Nuclear Business Intelligence <http://analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation>

Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019.

##### No impact to reduced turnout

Cohn, 10/1/12 [ New Republic Election Expert, Part-Time Georgetown Coach -- his articles go through a TNR editing process and are available for all on his blog, he has been profiled on New York Magazine and MSNBC, “Obama’s College Voter Trump Card, [www.tnr.com/blog/electionate/107974/obamas-college-voter-trump-card](http://www.tnr.com/blog/electionate/107974/obamas-college-voter-trump-card)]

Even if turnout among these voters is down 18 percent—and that’s beneath 2004, by the way—the total number of young, disproportionately non-white, and Obama-friendly voters actually increases from 23.5 to 25.7 million.¶ Even in this relatively low-turnout scenario, 6.5 million new 18-22 year olds will enter the electorate and they can go a long way toward helping Obama compensate for declining turnout among ’08 voters or an increase in conservative turnout. If they vote 63-37 for Obama, the president would net-1.7 million voters.¶ If non-white or young voters turned out at ’08-levels in 2012, demographics would actually ensure that Obama does even better than he did four years ago. These same demographic trends give Democrats a bit of breathing room to withstand modest declines in enthusiasm among young voters without actually falling far behind where they stood four years ago. ¶ With this in mind, it’s no surprise that Obama opened his campaign at Ohio State University, or that Michelle Obama is holding rallies on college campuses across the battleground states. Today’s college students didn’t vote four years ago, and even an underwhelming turnout from America's most diverse age group could help the Obama campaign make up for losses among voters who have abandoned their cause since 2008.

##### Plan happens after the election

Ramsey Cox (writer for The Hill) September 24, 2012 “Congress to hold pro forma sessions until November” http://thehill.com/blogs/floor-action/senate/251313-congress-to-hold-pro-forma-sessions-until-november

Rather than being in recess for more than five weeks, both the Senate and the House decided to hold pro forma sessions until after the November elections. Both chambers will gavel in Tuesday morning for a brief session; typically, legislative business doesn't take place in pro forma sessions. At most members ask to be recognized for a speech, but rarely do. It is unclear if the legislative branch was afraid of recess appointments by the White House, yet both sides took a formal recess in August. The Senate will hold a pro forma session every Tuesday and Friday until Nov. 13 at 2 p.m. when they’ll continue work on S. 3525, the Sportsmen Act, which would increase access to federal land for hunters and fishers while also supporting conservation measures.

##### Plan wouldn’t affect states that make the difference in the election

Joel Kotkin 3-30-2012; executive editor of NewGeography.com and is a distinguished presidential fellow in urban futures at Chapman University, and contributing editor to the City Journal in New York. He is author of The City: A Global History. His newest book is The Next Hundred Million: America in 2050, released in February, 2010. Is Energy the Last Good Issue for Republicans? <http://www.newgeography.com/content/002698-is-energy-last-good-issue-republicans>

In the short run, Obama’s political exposure in the energy wars is somewhat limited. Most of the big-producing states—Oklahoma, Wyoming, Utah, Texas, Louisiana, Alaska, and North Dakota—are unlikely to vote for him anyway. Nor does he have to worry about too much pressure from inside his party; Democratic ranks in Congress from energy-producing states have thinned considerably in recent years, removing contrary voices inside the party.

##### Nuclear power doesn’t swing the election -- identical positions mean it won’t get drawn into the debate.

**Wood, 9-13-12**

[Elisa, AOL, “What Obama and Romney Don't Say About Energy,” http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/]

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future. But two other significant resources, nuclear power and energy efficiency, are evoking scant debate. What gives? Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail. Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy. Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy. The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."

**Nuclear power popular**

Brown ’12 (Dave Brown — Exclusive to Uranium Investing News, “United States Still Favors Nuclear Power”, <http://uraniuminvestingnews.com/11008/united-states-still-favors-nuclear-power.html>, March 28, 2012, LEQ)

According to the results of Gallup’s annual Environment survey, conducted earlier this month, the majority of Americans continue to favor nuclear energy as a source of electricity for the United States. The survey indicated that 57 percent of participants were in favor of nuclear power this year, the same amount as in 1994, the first year for the survey. This year’s results also demonstrate an equal level of support among participants as last year, just prior to the Japanese earthquake and tsunami. Support for the nuclear industry as measured by the survey has ranged from a low of 46 percent in 2001 to a high of 62 percent in 2010. These results are of significance to investors as the US is the largest consumer of uranium in the world, with 104 operational nuclear reactors. Continued public support and confidence from the country should guide future political decisions and foster economic interest in domestic and international uranium resources as well as in nuclear industry stakeholders.

##### Too late to change the election- ideology

Helling ’12 (DAVE HELLING, McClatchy Newspapers Miami Herald 7-22-12 "Is the race for president already over?"

But **a growing number** of **political scientists and campaign consultants** - backed by the **latest polling data** - think the daily campaign back-and-forth **is having no significant effect on voters.** Most Americans have **locked in** their presidential decisions, polls released Thursday suggested, and the already small number of persuadable voters **shrinks by the hour**. Put another way: America could vote for president next week, and the outcome would probably be the same as it will be in November. "That's accurate, barring some really big, big event or change in the political environment," said Alan Abramowitz, a political science professor at Emory University in Atlanta, who has studied presidential voting patterns. Kenneth Warren, a political science professor at St. Louis University, agreed. "Most people have decided who they're going to vote for early on," he said. Recent polls show those who have decided are split almost evenly between Obama and Romney. In a CBS/New York Times poll, Romney led by 1 point. In a Fox News poll, he trailed Obama by 4 points. A National Public Radio poll found Obama leading by 2 points. A Gallup tracking poll over the same time period showed the race dead even. The average of polls puts the Obama advantage at 1.2 percent, according to Real Clear Politics, a political aggregation website. The incumbent has led Romney in that average by a one- to two-point margin since last October. Political scientists and consultants said there were several reasons for early presidential decision-making. In an Internet-cable-TV age, **voters are pounded with political messages daily, helping them make up their minds far in advance** of the election. An incumbent in the race makes at least one of the candidates a known quantity. And American **voters are deeply divided, further cementing their choices.**

##### Eurozone action will outweigh the plan

**Weisenthal, 9/26**/12 - Prior to joining Business Insider in October 2008, Joe was a correspondent for paidContent.org, as well as the Opening Bell editor at Dealbreaker.com. He previously was a writer and analyst for Techdirt.com, and before that worked as an analyst for money management firm Prentiss Smith & Co (Joe, “We're Getting A Glimpse Of Barack Obama's Worst Nightmare” Business Insider, http://www.businessinsider.com/obamas-worst-nightmare-2012-9#ixzz289W0KygN)

This doesn't necessarily seem likely, but the latest turns and twists of the global economy open up a scenario whereby markets could get really ugly between now and the election.

Basically, we present a plausible scenario in which things get bad on two fronts. The scenario is based on developments over the last several days.

Here's how it could go:

First, Europe really stalls out.

Thanks to the political crisis in Spain, suddenly it's not clear if the ECB's powerful bond buying program will ever get off the ground.

Remember, the ECB has announced a plan to backstop government bonds, but it needs the countries to request aid and submit to outside fiscal supervision. Because of mass protests, and a burgeoning secession movement in Catalonia, Spanish PM Mariano Rajoy is very reluctant to ask for a bailout unless it's absolutely necessary. He'd like to delay the request as long as possible.

In addition, you have heightening squabbles over what will be done with Greece (raising the specter that it will leave the Eurozone). There are more and more reports about HUGE holds in the government's budget, and the various creditor parties are fighting about who will take the hit. The specter of Greece leaving the Eurozone is rising.

This could then start hitting markets in the US. Actually that already seems to be happening. The market's dropping. And now we no longer have an implied "put" from the Fed, since it's already blown its wad (or so it seems) with the announcement of open-ended QE.

Already, the market has been weak since QE3 was announced, and in particular, the oil & gas/basic materials stocks that people associate with reflation have been weak.

Those two sectors, which are supposed to rise on successful reflation, make up 2 out of 3 of the worst performing S&P sectors today.

This could be a nothing blip, but a series of weeks like this one (riots in Europe, which inevitably remind people about government

debt) and markets in the US reacting badly could be the "October Surprise" that Romney needs to win.

##### No Romney traction – even if voters hate Obama’s energy policy they won’t shift to Romney

Lewis, 10/1/12 - senior contributor to The Daily Caller (Matt, The Daily Caller, “Mitt Romney’s struggle to win blue collar Ohio voters”

This sounds trivial, but it matters greatly — especially in places like Ohio.

The Atlantic’s Molly Ball is consistently a “must read,” and her latest column reinforces a point I’ve been making for a long time — that Mitt Romney is in danger of under-performing with working-class whites in key states like the Buckeye state. (Ball’s teaser says it all: “In Appalachian coal country, Romney is now viewed with nearly as much suspicion as Obama — and that may be the story of the 2012 election.”)

There is at least one substantive reason for these voters to be skeptical of Romney. While interviewing Ohio voters, Ball stumbled over an interesting blast from the past:

It turns out Romney, as governor of Massachusetts in 2003, held a press conference in front of a coal-fired power plant. “I will not create jobs or hold jobs that kill people,” he said, and then, gesturing at the facility behind him: “That plant, that plant kills people.” You can see the footage in an Obama campaign ad that’s been airing heavily here. It seems to have made an impression.

The notion that Romney would be worse for coal than Obama seems absurd. Still, Obama is using the line to effectively muddy the waters. All he really needs is for voters to conclude, “they’re both bad,” and Obama can consider that a victory. Ball sums it up thusly,

I heard it over and over again from Ohioans — the idea that Romney stands for the wealthy and not for them. Obama’s depiction of his rival as an out-of-touch rich guy, which has gotten no little assistance from Romney himself, has made a deep and effective impression with these self-consciously working-class voters.

##### Undecided/swing votes dont pay attention

Ezra Klein http://www.bloomberg.com/news/2012-09-26/why-undecided-voters-won-t-be-deciding-this-election.html 9-26-12

Even though the ad is an exaggeration, it’s not an outright lie. This election will probably be decided by a tiny fraction of the electorate in eight or nine states. The undecided voters in those states are popularly portrayed as people who just can’t make up their minds. But that’s not quite right. They aren’t so much “undecided” as uninterested and, frankly, uninformed; in political-science parlance -- and SNL ads -- they are “low information” voters. It’s worth stopping here to clarify something: “uninformed” does not mean “dumb.” We’re all uninformed about certain topics. You wouldn’t believe how little I know about, say, baseball. I’m vaguely aware that it happens, and that it culminates in a World Series, but I can’t tell you who won last year, or who’s in contention this year. Baseball just isn’t something I pay attention to. Lynn Vavreck, a political scientist at the University of California at Los Angeles, says that uninformed voters have roughly the same relationship to politics that I have to baseball. “They are lower on political information, for sure. That’s a function of being not that interested and not paying attention,” she said. “It’s not that they can’t comprehend the information, or that they’re at a balancing point and can’t decide. They’re just not dialed in. They’re not getting all the information you or I are getting.” Vavreck asked thousands of voters -- both decided and undecided -- a battery of basic, multiple-choice questions about who’s who in politics. The questions were designed to be easy. You didn’t have to know that John Boehner is Speaker of the House. You just had to know he is a congressman rather than a judge or the vice president. According to Vavreck’s polling, only 35 percent of undecided voters could identify Boehner’s job as “congressman.” Only 69 percent could say that Joe Biden is the vice president rather than, say, a representative. Only 17 percent can identify Chief Justice John Roberts as a judge. Decided voters have an easier time rattling off the job titles of Boehner and Biden, as well as those of Harry Reid, Eric Cantor, Mitch McConnell and Nancy Pelosi. (Interestingly, they struggle more than undecideds to identify Roberts.) That’s likely because decided voters are paying more attention to the election. About 43 percent of decided voters say they’re following the presidential election “very closely.” Only 12 percent of undecided voters say the same. Recognizing that undecided voters are mostly uninterested voters helps to clarify the trajectory of the presidential campaign. In their book “The Timeline of Presidential Elections,” Robert Erikson and Christopher Wlezien show that voter preferences tend to be very stable in the fall, but that campaign observers -- the authors analyze people betting money in online political prediction markets -- tend to assume those preferences are far more volatile. Psychological Projection The misjudgment makes sense as an act of psychological projection. To people personally invested in politics, the homestretch of the campaign appears loaded with the kind of political information that could change voter opinions. There are debates, a flood of ads, inevitable gaffes, the crush of election news -- maybe even an October surprise or two. But undecided voters are precisely those least likely to tune in to the debates, which helps explain why debates typically have little effect on elections. They’re the least likely to care about a gaffe -- or even to know when one has occurred. They’re more likely to throw out political mail and tune out political ads. If they live in a swing state, they’ve already been buffeted by -- and proved immune to -- months of commercials and phone messages. Vavreck has been tracking a group of 44,000 voters since December 2011. When she started, 94 percent were already leaning toward a candidate. Of the 6 percent who were truly undecided, 33 percent now say they’re going with Mitt Romney and 37 percent with President Barack Obama. The ranks of the original undecided voters were partially replenished by voters who had expressed a preference in 2011 but have since grown uncertain. Of the new undecideds, slightly more were Romney supporters in 2011 than were Obama supporters, but the total numbers are small. There’s little reason to believe that undecided voters in this campaign will break sharply toward one candidate. The votes of the undecideds seem to be roughly evenly split, and if any big news happens between now and the election, they’re likely to be the last to know about it, and the least interested in following up on it. If Obama is going to turn this into a rout, or if Romney is to salvage a win, it will probably require changing minds that are already made up, or increasing (or suppressing) turnout among base voters. In other words, don’t expect the votes of the mythical undecideds to actually be decisive. It’s likely to be the decided who will, well, decide. (Ezra Klein is a Bloomberg View columnist. The opinions expressed are his own.)

##### Jobs and gas prices ensure public support---SMRs aren’t an election issue but if they were, links non U

Johnson 12 John, Nuclear Energy Insider, April 25, "US Campaign Trail: is nuclear in the equation?", analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation

In the next Presidential election, American voters will be voting with their pockets. We look at how the campaign so far has revealed which candidate will support nuclear R&D, nuclear new-build projects and ultimately preserve and create nuclear sector jobs. As the U.S. Presidential election draws closer, Americans are most concerned about job creation and how the candidates plan to boost the U.S. economy. Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions. Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry. Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S. The Campaign Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August. While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding. The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes. “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. Research support In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design. “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.” There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017. The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019. “There is certainly political consensus in support of clean generation, and large scale cultural consensus as well,” said Keeley. Political benefits of nuclear support As gas prices in the U.S. continue to soar, it’s possible that the tide will turn more in favor of nuclear and other clean energy sources, especially as electric cars take a stronger foothold. In addition, the job creation benefits from nuclear could work their way into the political landscape as well. The two new Vogtle nuclear plants are expected to create approximately 5,000 on-site jobs during the peak of construction, with 800 high paying jobs remaining over the life of the plant.

##### Winners win elections- the plan is key to Obama’s momentum

Creamer, 11 – political strategist for over four decades

(Robert, he and his firm, Democracy Partners, work with many of the country’s most significant issue campaigns, one of the major architects and organizers of the successful campaign to defeat the privatization of Social Security, he has been a consultant to the campaigns to end the war in Iraq, pass health care, pass Wall Street reform, he has also worked on hundreds of electoral campaigns at the local, state and national level, "Why GOP Collapse on the Payroll Tax Could be a Turning Point Moment," Huffington Post, 12-23-11, www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p\_b\_1167491.html, accessed 9-1-12, mss)

2). Strength and victory are **enormous political assets.** Going into the New Year, they now belong to the President and the Democrats. One of the reasons why the debt ceiling battle inflicted political damage on President Obama is that it made him appear ineffectual - a powerful figure who had been ensnared and held hostage by the Lilliputian pettiness of hundreds of swarming Tea Party ideological zealots. In the last few months -- as he campaigned for the American Jobs Act -- he has shaken free of those bonds. Now voters have just watched James Bond or Indiana Jones escape and turn the tables on his adversary. Great stories are about a protagonist who meets and overcomes a challenge and is victorious. The capitulation of the House Tea Party Republicans is so important because it feels like the beginning of that kind of heroic narrative. Even today most Americans believe that George Bush and the big Wall Street Banks - not by President Obama -- caused the economic crisis. Swing voters have never lost their fondness for the President and don't doubt his sincerity. But they had begun to doubt his effectiveness. They have had increasing doubts that Obama was up to the challenge of leading them back to economic prosperity. The narrative set in motion by the events of the last several weeks could be a turning point in voter perception. It could well begin to convince skeptical voters that Obama is precisely the kind of leader they thought he was back in 2008 - a guy with the ability to lead them out of adversity - a leader with the strength, patience, skill, will and resoluteness to lead them to victory. That now contrasts with the sheer political incompetence of the House Republican Leadership that allowed themselves to be cornered and now find themselves in political disarray. And it certainly contrasts with the political circus we have been watching in the Republican Presidential primary campaign. 3). This victory will inspire the dispirited Democratic base. Inspiration is the feeling of empowerment - the feeling that you are part of something larger than yourself and can personally play a significant role in achieving that goal. It comes from feeling that together you can overcome challenges and win. Nothing will do more to inspire committed Democrats than the sight of their leader -- President Obama - out maneuvering the House Republicans and forcing them into complete capitulation. The events of the last several weeks will send a jolt of electricity through the Progressive community. The right is counting on Progressives to be demoralized and dispirited in the coming election. The President's victory on the payroll tax and unemployment will make it ever more likely that they will be wrong. 4). When you have them on the run, that's the time to chase them. The most important thing about the outcome of the battle over the payroll tax and unemployment is that it shifts the political momentum at a critical time. Momentum is an independent variable in any competitive activity - including politics. In a football or basketball game you can feel the momentum shift. The tide of battle is all about momentum. The same is true in politics. And in politics it is even more important because the "spectators" are also the players - the voters. **People** follow - and **vote -- for winners**. The bandwagon effect is enormously important in political decision-making. Human beings like to travel in packs. They like to be at the center of the mainstream. Momentum shifts affect their perceptions of the mainstream. For the last two years, the right wing has been on the offensive. Its Tea Party shock troops took the battle to Democratic Members of Congress. In the Mid-Terms Democrats were routed in district after district. Now the tide has turned. And when the tide turns -when you have them on the run - that's the time to chase them.

## 1ar

### cp

#### Using water means it doesn’t achieve the required efficiency

Song, 11 [5/9/11, Lisa, Inside Climate News, “Next-Generation Nuclear Energy Reactors: A Primer”, <http://insideclimatenews.org/news/20110505/next-generation-nuclear-reactors?page=3>]

Water as Coolant Despite variations in age and design, most of the pre-Gen IV plants have one thing in common: They all use water as a coolant. A coolant is the fluid that brings heat from the reactor core to other parts of the plant. The heat boils water into steam, which spins turbines to generate electricity. Then the steam is either condensed by pumping in cold water, or cooled through cooling towers. Increasingly, reactors' dependence on water is making them vulnerable to climate change impacts. Nuclear plants have been forced to [decrease capacity](http://solveclimatenews.com/news/20110504/nuclear-power-water-climate-change-heat-cooling) due to heat waves, while drought and water scarcity are adding new constraints. The Gen IV reactors could help mitigate that problem. Five of the six designs use hot gas, molten salt or liquid metal as a coolant. Tim Leahy, senior adviser at [Idaho National Laboratory](https://inlportal.inl.gov/portal/server.pt/community/home), which is part of the U.S. Energy Department, said vulnerability to drought wasn't a big concern when developing the Gen IV reactors. As it turns out, most of them operate at very high temperatures, making it impractical to use water as a coolant. This design change has the advantage of increasing efficiency, said Leahy. Today's reactors are about 33 percent efficient, meaning that for every three units of thermal energy produced by the reactor core, two units are rejected as waste heat and only one unit gets converted into electricity. With a new type of coolant and reactor design, the Gen IV plants can reach nearly 50 percent efficiency.

#### That means water reactors don’t cause criticality

Beebe, 09 [“Thorium: the Nuclear Frontier”, Shannon, Kent Law Professor, Energy Law Class, http://www.kentlaw.edu/faculty/fbosselman/classes/energyF09/Coursedocs/BeebeShannonThorium%E2%80%93theNuclearFrontier.pdf

A higher burnup is necessary to achieve criticality 􀂃 Depending on your source, it sounds as though Light Water Reactors, the most common reactors, are difficult to retrofit for thorium use because they have difficulty achieving the high burn up; so a total switchover might not be feasible in the short term

### smr prolif

#### SMRs are worse for prolif than large reactors

Corey **Nealon 11**, "Could small nukes be the energy answer?," 12-4-11, http://articles.dailypress.com/2011-12-04/news/dp-nws-nuclear-reactors-20111203\_1\_nuclear-power-reactors-energy-department

Also, small reactor technology is newer than conventional reactors, many of which date to the 1970s. Because they are smaller and more automated, they could potentially operate with fewer employees and less regulations, Genoa said.

Disadvantages

That worries the Union of Concerned Scientists, a Massachusetts-based environmental watchdog group. Companies developing small reactors are overstating their benefits and minimizing potential downsides, Edwin Lyman, a scientist with the union’s Global Security Program, told a Senate subcommittee in July.

Small reactors “could pose comparable or even greater safety, security and proliferation risks than large reactors,” Lyman said.

#### Doesn’t solve—this is specific to LIGHT WATER SMRs

**Lyman, 11** - A physicist, Edwin S. Lyman is a senior staff scientist in the Global Security Program at the Union of Concerned Scientists in Washington. (Edward, “An Examination of the Safety and Economics of **Light Water** Small Modular Reactors” Congressional Testimony, 7/14, <http://www.ucsusa.org/assets/documents/nuclear_power/lyman-appropriations-subcom-7-14-11.pdf>)

Proponents of small modular reactors (SMRs) claim that their designs have inherent safety features compared to large reactors, and some even argue that their reactors would have been able to withstand an event as severe as Fukushima. We find these claims to be unpersuasive. For any plant, large or small, the key factor is the most severe event that the plant is designed to withstand—the so-called maximum “design-basis” event. Unless nuclear safety requirements for new reactors are significantly strengthened, one cannot expect that either small or large reactors will be able to survive a beyond-design-basis event like Fukushima. Although some light-water SMR concepts may have desirable safety characteristics, unless they are carefully designed, licensed, deployed and inspected, SMRs could pose comparable or even greater safety, security and proliferation risks than large reactors.

#### Underground location fails and passive safety is a myth

Lyman, ‘11

[Dr. Edwin, Senior Scientist -- Union of Concerned Scientists, “AN EXAMINATION OF THE SAFETY AND ECONOMICS OF LIGHT WATER SMALL MODULAR REACTORS: HEARING before a SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED TWELFTH CONGRESS FIRST SESSION, SPECIAL HEARING, JULY 14, 2011--WASHINGTON DC,” http://www.gpo.gov/fdsys/pkg/CHRG-112shrg72251/html/CHRG-112shrg72251.htm]

Some SMR vendors argue their reactors will be safer because they can be built underground. While underground siting could clearly enhance protection against certain events, it could also have disadvantages. For instance, at Fukushima, emergency diesel generators and electrical switched gear were actually installed below grade to reduce their vulnerability to seismic events, but this increased their vulnerability to flooding. In the event of a serious accident, emergency crews could have difficulty accessing underground reactors if intervention was necessary.

### case

#### And, only thorium sets an international prolif standard best data proves

Grae, 08 [Seth Grae, President and CEO, Thorium Power Ltd'Thorium Power can play a key role in India's nuclear industry', <http://www.ltbridge.com/assets/7.pdf>]

Why is efficient and modern nuclear fuel technology important? Modern fuel technology is vitally important because the future of nuclear power depends on the industry's ability to address the lingering concerns—proliferation, waste and operating economics. All across the world, there are hundreds of new reactors in planning or at different stages of development. But everyone acknowledges the concerns and almost everyone agrees that we can't deploy 20th century technology in order to build a 21st century industry. We need advanced nuclear fuel technology that is safe, viable and economical. The IAEA and World Nuclear Association agree that thorium is an optimal alternative to uranium fuel and there is a clear movement towards thorium fuel. Also, India has always been at the scientific and technological forefront, and India's experts understand the distinct advantages of using thorium in the nuclear fuel cycle. Thorium Power is uniquely positioned to establish a new standard in non-proliferation because we know that the promise of safe nuclear power will only be realised if and when we deploy advanced, non-proliferative fuel-based solutions.

#### They create better international solutions to proliferation -- allows peaceful development without nuclearization.

Katusa, ‘12

[Marin, Chief Energy Investment Strategist, Casey Research, Market Oracle, 2-14, “Why Not Thorium Fueled Nuclear Reactors Instead of Uranium?” http://www.marketoracle.co.uk/Article33137.html]

Thorium is three times more abundant in nature than uranium. All but a trace of the world's thorium exists as the useful isotope, which means it does not require enrichment. Thorium-based reactors are safer because the reaction can easily be stopped and because the operation does not have to take place under extreme pressures. Compared to uranium reactors, thorium reactors produce far less waste and the waste that is generated is much less radioactive and much shorter-lived. To top it all off, thorium would also be the ideal solution for allowing countries like Iran or North Korea to have nuclear power without worrying whether their nuclear programs are a cover for developing weapons… a worry with which we are all too familiar at present.

#### Can’t make weapons from thorium reactors.

Westenhaus, ‘10

[Brian, OilPrice.com -- Energy News, 9-14, “Thorium: A Cheap, Clean and Safe Alternative to Uranium,” http://oilprice.com/Energy/Energy-General/Thorium-A-Cheap-Clean-And-Safe-Alternative-To-Uranium.html]

Thorium offers some other important aspects, it does not require isotope separation, the process of separating the desired reactable forms of uranium and plutonium from the decayed ore, a big cost saving. Weapons made from thorium are impractical.

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