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#### Plan: The United States Federal Government should substantially increase its applied research and development for nuclear reprocessing in the United States.

# Applied R&D Reprocessing

### Inherency

#### US closed reprocessing in short-term ---- r&d is still continuing

McMahon ’13 – contributor to Forbes Environment and Energy Coverage

(Jeff McMahon, “U.S. To Bury Almost All Existing Nuclear Waste; Recycling Deferred At Least 20 Years”, Forbes, 1-28-2013, http://www.forbes.com/sites/jeffmcmahon/2013/01/28/deferring-recycling-u-s-to-bury-almost-all-existing-nuclear-waste/)

There’s little hope that the 70,000 metric tons of used nuclear fuel dispersed across the United States will ever be recycled, according to a recent study by Oak Ridge National Laboratory—so nearly all existing waste will go into the earth.¶ In a study completed late last year, Oak Ridge officials determined that the U.S. is at least 20 years away from large-scale reprocessing of used nuclear fuel, if it decides to pursue such technologies. By then, they estimate, nuclear plants will have generated another 40,000 metric tons of spent fuel. “Based on the technical assessment, about 68,450 (metric tons) or about 98 percent of the total current inventory by mass, can proceed to permanent disposal without the need to ensure retrievability for reuse or research purposes,” Oak Ridge officials conclude in a report issued late last year.¶ The remaining 2 percent should be reserved for research into storage and reprocessing technologies, the report advised.¶ The Oak Ridge report came to light this month when it was cited by the Department of Energy in a document revealing DOE’s plan to seek a new permanent geologic waste depository. The country’s previous depository, Yucca Mountain, was defunded by Congress and the Obama Administration in 2011.¶ The United States long opposed the reprocessing of used nuclear fuel because of terrorism and proliferation concerns, but DOE began researching new reprocessing technologies in 2005, and the Obama Administration has remained open to new technologies.¶ In 2009, Energy Secretary Steven Chu told Congress “there is research that has to be done, again, because reprocessing has the potential for greatly reducing both the amount and lifetime of the waste and to extend the nuclear fuel.”¶ At the time—before meltdowns and hydrogen explosions damaged spent fuel pools at Fukushima—the U.S. appeared more open to recycling processes like those employed in France.¶ After Fukushima, The Blue Ribbon Commission on America’s Nuclear Future, co-chaired by Chu, adopted more cautious language about recycling: “no currently available or reasonably foreseeable reactor and fuel cycle technology developments—including advances in reprocessing and recycling technologies—have the potential to fundamentally alter the waste management challenges the nation confronts over at least the next several decades, if not longer.”¶ But neither the Blue Ribbon report nor the administration’s response close the door to reprocessing, calling it “premature for the United States to commit, as a matter of policy, to ‘closing’ the nuclear fuel cycle given the large uncertainties that exist about the merits and commercial viability of different fuel cycle and technology options.”

#### But, that research will fail long-term – there’s no strategy for transitioning to applied reprocessing R&D

Aloise ’11 – director of the Natural Resources and Environment at GAO

(Gene, “Nuclear Fuel Cycle Options: DOE Needs to ¶ Enhance Planning for ¶ Technology ¶ Assessment and ¶ Collaboration with ¶ Industry and Other ¶ Countries”, GAO, October 2011, pg. 34-35, http://www.gao.gov/new.items/d1270.pdf)

DOE’s R&D plan states that it is necessary to assess the readiness of ¶ technologies associated with the nuclear fuel cycles in selecting fuel cycle ¶ options for further review. According to the R&D plan, DOE is to assess ¶ the status of the technologies associated with the different nuclear fuel ¶ cycle options being considered and estimate the time and costs of further ¶ developing them. The plan also states that DOE will: ¶ continue to evaluate the technological readiness of fuel cycle options ¶ and determine the readiness of these options to differentiate among ¶ them and to focus development in order to meet the R&D plan’s ¶ schedules and goals; ¶ give priority to R&D on technologies associated with the modified ¶ open fuel cycle because of their relative immaturity compared with the technologies associated with once-through and full recycle fuel cycles; ¶ and ¶ seek to raise the readiness of the technologies associated with the ¶ modified open fuel cycle category in order to make meaningful ¶ comparisons among the three nuclear fuel cycle categories, and to ¶ further narrow the range of fuel cycle options. ¶ These proposed actions would help advance DOE’s goals for developing ¶ nuclear fuel cycle options, but neither the R&D plan nor the pilot ¶ screening process describes the current readiness of the fuel cycle ¶ options and associated technologies under consideration, the estimated ¶ time or cost for further developing them, or relate readiness to schedules ¶ and goals. As we have reported, assessing the readiness of technology is ¶ a best practice to help control schedule and costs.¶ 18¶ It may be premature ¶ to assess technology readiness levels for all the fuel cycle options and ¶ associated technologies under consideration, however, without this ¶ information, DOE has not made clear the magnitude of the effort ¶ necessary to develop these technologies nor the costs associated with ¶ doing so. DOE’s R&D plan identifies the importance of collaborating with the ¶ nuclear industry—the ultimate user of any nuclear fuel cycle and ¶ associated technologies that are developed—and the department has ¶ made some efforts to obtain industry advice, but the plan does not include ¶ a long-term strategy for how to conduct such collaboration. According to ¶ the R&D plan, the federal government is responsible for managing ¶ disposal of spent nuclear fuel, but the nuclear industry will be the likely ¶ user of any technologies developed by the government to better manage ¶ this fuel. Hence, the plan states that the nuclear industry is a necessary ¶ partner in DOE’s R&D effort, both to suggest specific challenges to solve ¶ and to offer perspective on proposed nuclear fuel cycle options. ¶ As of June 2011, DOE had obtained industry views by contracting with six ¶ consortia of nuclear industry companies. In December 2009, DOE issued ¶ a request for advice and assistance from companies with experience in ¶ advancing nuclear energy concepts through the licensing and deployment of full-scale production facilities.¶ 19¶ The request also stated that DOE was ¶ seeking studies, analyses, evaluations, and engineering and technical ¶ services from the nuclear industry. DOE received proposals from 14 ¶ nuclear industry groups and contracted with 6 of them in June 2010 ¶ through a 5-year, $30 million contract—known as an Indefinite Delivery ¶ and Indefinite Quantity (ID/IQ) agreement. Through the ID/IQ agreement, ¶ DOE can issue a request for information, known as a task order, from one ¶ or more of the industry groups, and each group may choose to participate ¶ or not in each task order. As of June 2011, DOE had issued five task ¶ orders, for a total of $5 million paid to the industry groups.¶ 20¶ Four of the ¶ industry groups participated in the first task order by, among other things, ¶ providing input through conference calls, face-to-face meetings, attending ¶ an annual meeting, and submitting reports that identified technical areas ¶ for nuclear fuel cycle R&D efforts. The face-to-face meetings have ¶ included workshops DOE held from July 2010 through January 2011, ¶ according to DOE documents we reviewed. These workshops focused on ¶ different aspects of DOE’s eight technical R&D areas. Representatives ¶ from industry groups told us that the ID/IQ agreements are an effective ¶ mechanism to solicit their input on these R&D areas in the short-term. ¶ However, some of these representatives told us that it was unclear how ¶ DOE is using the information the industry provided during workshops and ¶ in response to task orders. Moreover, DOE officials did not provide ¶ information to us on how it was using industry input. ¶ Nevertheless, DOE’s R&D plan does not include a long-term strategy for ¶ working with the nuclear industry to ensure acceptance and use the ¶ technologies DOE develops. The plan has established milestones ¶ through 2050, but its current contracts with nuclear industry partners end ¶ in May 2012, with an option to extend the contracts until May 2015. The ¶ R&D plan provides no detail on how DOE might collaborate with the ¶ nuclear industry beyond these dates. According to our analysis of the ¶ report on the pilot screening process, DOE stated that, as it continues to develop its methodology for selecting nuclear fuel cycles, it will need to ¶ consider evaluation criteria not addressed in the initial screening study ¶ that will be important in selecting a nuclear fuel cycle or cycles that ¶ industry finds acceptable. Specifically, the report identified the need for ¶ broader stakeholder participation, including the nuclear industry, in ¶ refining the evaluation criteria, particularly those associated with ¶ economics, such as the life-cycle costs of a nuclear fuel cycle.

### Contention \_ Solvency

#### Switching focus to applied R&D solves DOE’s long-term research plan – leads to long-term collaboration with the industry and other nations

Aloise ’11 – director of the Natural Resources and Environment at GAO

(Gene, “Nuclear Fuel Cycle Options: DOE Needs to ¶ Enhance Planning for ¶ Technology ¶ Assessment and ¶ Collaboration with ¶ Industry and Other ¶ Countries”, GAO, October 2011, http://www.gao.gov/new.items/d1270.pdf)

To its credit, DOE has taken a systematic approach to planning for the ¶ complex, scientifically challenging process of identifying and selecting ¶ sustainable nuclear fuel cycle options and associated technologies by ¶ 2020 and demonstrating them by 2050. We are concerned, however, that ¶ DOE’s initial steps will not be followed by actions needed to sustain its ¶ plans over this long period to achieve this goal. In particular, DOE’s R&D ¶ plan states that the department will continue to evaluate the technological ¶ readiness of nuclear fuel cycle options to differentiate among them and to ¶ focus development on those that will help meet the R&D plan’s schedules ¶ and goals. However, neither the R&D plan nor the pilot screening process ¶ describe the current readiness of all critical technologies associated with ¶ the nuclear fuel cycles or the estimated time and costs for further ¶ developing them, or relate technology readiness to R&D schedules and ¶ goals. Such estimates are critical to understanding the magnitude of the ¶ R&D effort and to measuring progress in developing these technologies. ¶ In addition, DOE does not have a long-term strategy for collaborating with ¶ the nuclear industry that clarifies the government’s and industry’s roles ¶ and responsibilities. Without such a strategy, DOE cannot be assured that ¶ the nuclear industry will accept and use the technologies that it develops. Furthermore, DOE has not specified in its R&D plan how it will use its ¶ collaborative agreements with other countries to advance its R&D efforts ¶ to develop sustainable nuclear fuel cycles over the longer term. As a ¶ result, DOE may miss opportunities to use facilities and expertise in other ¶ countries to more efficiently and effectively meet its R&D goals. Finally, ¶ DOE has not developed a formal mechanism for coordinating its efforts to ¶ develop sustainable nuclear fuel cycles with NNSA, which has lead ¶ responsibility in DOE for minimizing proliferation and terrorism risks—a ¶ critical factor in selecting new fuel cycles. DOE officials said they ¶ recognize the need for coordination with NNSA and have done so ¶ informally. They also said they have begun to discuss developing a ¶ memorandum of understanding with NNSA. As we have reported, ¶ defining organizational roles and responsibilities in formal mechanisms ¶ can help agencies strengthen their commitments to work collaboratively ¶ by clarifying who will lead or participate in which activities and how ¶ decisions will be made. Formal mechanisms are also important to ¶ sustaining coordination over the long term and avoiding overlap and ¶ duplication. For the Office of Nuclear Energy to reach its goal of selecting sustainable ¶ nuclear fuel cycles and associated technologies by 2020 and ¶ demonstrating them by 2050, we recommend that the Secretary of ¶ Energy direct the Assistant Secretary of the Office Nuclear Energy to take ¶ the following actions: ¶ (1) Revise the R&D plan to ¶  include the current readiness levels of the technologies associated ¶ with the fuel cycle options being considered and the estimated time ¶ and cost for developing these technologies in relationship to the R&D ¶ plan’s schedules and goals, ¶  include a strategy for sustaining long-term collaboration with the ¶ nuclear industry, including a formal mechanism that clarifies the role ¶ industry will have at critical points in selecting fuel cycle options and ¶ associated technologies, and ¶  specify how DOE will use collaborative agreements with other ¶ countries to advance its R&D efforts and use available facilities and ¶ expertise in these other countries to more efficiently and effectively ¶ meet its R&D goals.

**Fed key – needs to send the market signal for nuclear industry cooperation**

**Duarte ‘11**

(Gary J. Duarte, “US Nuclear Energy Foundation A little of our opinion about nuclear fuel reprocessing”, U.S. Nuclear Energy Foundation, 10-12-2011, http://usnuclearenergy.org/REPROCESSING.htm)

To begin with **the massive upfront costs** related to the nuclear energy industry **and** exhaustive **regulation systems** that are **applied by U. S. agencies** to nuclear power plants are responsible for making them the safest large volume 24/7 365 energy producers on the planet. At the same time, we have been trying for 30 years to make renewable sources cost effective and this challenge continues. We have not educated the public throughout the world that nuclear energy “economics” must be “projected” at 60 to 100 years of “operation” as these are what the plants are designed for. Now, these are not “estimates” we have thirty years of nuclear plant track records and zero public fatalities in the U. S. This is unprecedented in ANY other base load power generation method on the planet. The long and short of the reprocessing assessment, since President Reagan “lifted” the U. S. ban on commercial reprocessing of spent nuclear fuels in 1981 has always been the economics (some still believe it is banned, it’s not). A commercial reprocessing facility with the capacity to complete between 800 and 1,000 metric tons annually may cost 10 billion dollars to build in China’s “economics” but 30 billion to build in the U. S. economics. For the past 30 years nearly all of the indecisiveness related to a U. S. reprocessing direction has been the difficulty in facing the economics. Also, over these years, technology has advanced several new and/or different methods for reprocessing, basically introducing yet another decision dilemma. This is why such intense projects have to be decided by the “science community” because the “political community” changes every four-eight years and the capacity to focus is lost. In essence, the DOE and NRC have failed to enlighten Congress and the American public to the scientific need and economic commitment to make reprocessing a “national initiative”; this is what needs to be done. Its costs can only be justified if the program is “painted” as a 100 year mission. Remember, many of us are convinced that America still needs another 150 new nuclear plants to serve our future energy growth and be “energy cost competitive” worldwide. And still, these added plants will also need 6% FINAL deep geologic storage. Then there are those who say that Thorium fuels, pebble bed reactors, etc. will eliminate everything in today’s nuclear waste cycle. Some of our “reality” friends will say many of these are STILL laboratory projects and we will get there in time . . . but we need to START builds based on “TODAY’S functioning technology” over the next twenty years then see where the lab projects are at that time. These same “technology advances” will be occurring with solar and wind, biomass, etc. We must drive these technologies scientifically, but build today’s projects economically. “If” we were to consider a full scale reprocessing facility; estimates are about 12,000 jobs, including 1,000 design jobs during the construction and about 2,500 permanent jobs for decades of operation. A project of this magnitude has the potential to evoke a substantial economic impact on any community and create up to 70,000 jobs overall. Based on the current costs of natural uranium fuel, the “potential value” of the current U. S. stockpile of 66,000 metric tons of commercial reactor spent nuclear fuel would be; $130,000 X 66,000 tons = 8,580,000,000 (8 billion 580 million dollars). We looked at the values of two different opinions, to determine an estimated value of 7 to 11 billion dollars with its reprocessed cost price competitive to natural uranium fuel costs after enrichment. And, as one can see, our current stockpile is only 1/3 the cost for the facility. Now, as we mentioned above, as we build 150 new plants those 6% waste additions will amortize our 30 billion dollar reprocessing facility over 60 – 100 years, fully amortize its cost and generate revenue. (Maybe even be foolish enough to offer “our reprocessing services” to other countries for income and American jobs). With the “experience” of negative U. S. political interests in a strong nuclear build and reprocessing, **NO private company or investors** are going to risk building such a facility until they see the **full “long term” support of the politics** and public policy in America as a “national initiative”. This is the **single largest deterrent** to “commercial scale” reprocessing in the U. S. The science and engineering is accomplished, proven and functional. This entire dialogue that America has studied for 30 years is a fundamental reason that “We the People” must speak up and “separate science from politics” and allow technology to advance the sciences we need to benefit our lives and as a nation be “energy economically competitive”. Science and engineering understand the U. S. need for expanding our nuclear fleet but the government does not, putting most of its attention on (still expensive) renewable energy with only a few waving the nuclear flag. No matter what administration is at the helm, government MUST re-affirm our need for nuclear expansion. Again here, it needs to be a “national initiative”. Nuclear should be re-classified as “green” and allotted government commitment. The nuclear industry has been wrongly battered by government and the environmental movements for years. It needs government to offer the industry 30 – 50% investment tax credits or working loan guarantees for all who build carbon free baseload power, or a tax holiday for the first ten years of operation of carbon free facilities. These incentives would be available to wind, solar and nuclear development. We must raise the success potential for such projects which have been unfairly brutalized in the past.

#### Certainty and credible commitment is key to nuclear industry cooperation

**Berry and Tolley 10** – professors of energy and economic policy

(Professors R. Stephen Berry and George S. Tolley, “Nuclear Fuel Reprocessing Future Prospects and Viability”, University of Chicago Humanities, 11-29-2010, http://humanities.uchicago.edu/orgs/institute/bigproblems/Team7-1210.pdf)

The American and French nuclear power industries developed along divergent paths. The U.S. nuclear power industry as a whole experienced a rapid decline beginning in the 1970’s and culminating with the Three Mile Island accident in 1979 (TMI, a partial core meltdown in Reactor 2 at the Three Mile Island Nuclear Generating Station, remains as one of the most significant accidents in the commercial nuclear energy industry in the in the U.S.) 52. Following a period from the mid-1950’s to the mid 1970’s when the U.S. built more nuclear power plants than any other country (231 through 1974), the U.S. only built 15 after 1974 and none after 1977. 53 This shift away from nuclear power was reversed in the late 1990’s as nuclear energy was perceived as a sustainable energy solution to combat specific environmental concerns. In France, the nuclear power industry achieved a successful implementation and was prospering for many years both before and after TMI. Further, in France, nuclear power generates more than 75% of France’s electricity while in the U.S. nuclear power has never accounted for more than 20% of its electricity. 54 These varying paths of nuclear power development in the U.S. and France stem largely from government’s credible commitment or lack thereof to the industry. By analyzing the political and regulatory frameworks present in the U.S. and France, it is possible to gain a further understanding of the nuclear power industries in the U.S. and France, but more importantly discern the potential frameworks to develop nuclear reprocessing in the U.S. The differentiation in the U.S. and French nuclear industries was largely based on the government’s level of commitment over time. In the U.S., the government’s commitment to the industry was initially strong, but abated over time, while France’s government maintained a strong commitment over time. 55 **The level of a government’s credible commitment to** the nuclear energy industry and specifically **nuclear reprocessing will play an** important role **in shaping the flow of capital into the technology**. 56 As the industry is currently constructed, utilities are sensitive to licensing and construction costs, which may be difficult to predict based on a government’s ability to commit to the industry. Utilities must obtain construction licenses from regulatory bodies to build nuclear facilities. These investment decisions necessitate large sunk costs which must be incurred a number of years prior to operating the plant. **The** decision making process **of the utility is ultimately influenced by** uncertainty **surrounding the regulatory process** that can ease or complicate the process. This uncertainty increases the risk associated with these types of investments and disincentivizes investment in the technology. Therefore an “analysis of the differences in institutional environment attributes can further understanding of government’s credible commitment to the industry.” 57 In understanding the existing differentiation in the institutional environment for both the U.S. and France, it is possible to elucidate how these unique situations have created varying transaction costs for their respective industries.

### Contention \_ Russia

#### Relations with Russia are declining now – expanded areas of cooperation are key

Gearan ’13

(Anne, “Sour U.S.-Russia Relations Threaten Obama’s Foreign Policy Agenda”, IRIB World Service, 1-15-2013, http://english.irib.ir/voj/analyses/commentaries/item/84492-sour-us-russia-relations-threaten-obama)

A poisonous unraveling of U.S. relations with Russia in recent months represents more than the failure of President Obama’s first-term attempt to “reset” badly frayed bilateral relations. It threatens pillars of Obama’s second-term foreign policy agenda as well.¶ From Syria and Iran to North Korea and Afghanistan, Russian President Vladimir Putin holds cards that he can use to help or hurt Obama administration objectives.¶ Obama badly needs Russian help to get U.S. troops and gear out of landlocked Afghanistan. He also wants Russian cooperation — or at least a quiet agreement not to interfere — on other international fronts.¶ Putin, however, appears to see little reason to help. Since his election last year to a third term as president, his political stock has risen among many Russians as he has confronted the West, and the United States in particular. The pro-democracy street demonstrations of a year ago have evaporated, leaving the former KGB officer in clear control.¶ In December, both countries passed punitive laws that capped a year of deteriorating relations. A U.S. law targeting Russia’s human rights record and a tit-for-tat law banning American adoption of Russian children reflected domestic politics and national chauvinism, and they reinforced many of the worst suspicions that each nation holds about the other.¶ The low point puts Obama in the uncomfortable position of deciding how far to bend to appease Putin, who began his tenure last spring by snubbing Obama’s invitation for an Oval Office visit.¶ Obama has long been expected to visit Russia this year, although no summit has been scheduled.¶ “The real question for Putin and Obama is, putting aside the issues on which they are just bound to disagree — like democracy and Syria — what are the issues that matter to them on which they can cooperate?” said Stephen Sestanovich, a Russia expert at the Council on Foreign Relations.¶ “The likelihood is that over the next term, for both of them, that is likely to be a shorter list than it was in the past four years.”¶ Limited leverage¶ Like the United States, Russia holds a veto in the U.N. Security Council, and its membership in other diplomatic clubs confers outsize international clout to the former superpower.¶ By saying no, Putin can stymie U.S. goals in matters far beyond his own shores — and far removed from Russia’s long-standing beef with the United States over the latter’s plans to erect a missile defense shield in Europe.¶ U.S. leverage is limited. Obama is unlikely to either drop the missile defense plan or revisit steps that have eased commercial trade between both nations. Russia appears less swayed by the prospect of arms-control concessions than in the past.¶ From Russia’s perspective, Obama has ignored or overridden its concerns on two major issues — missile defense and the military intervention in Libya. Both instances contributed to the Russian perception that the United States’ main leverage is its ability to roll over friends and foes alike.¶ No U.S. president since Ronald Reagan has had a better relationship with Russia in his second term than in the first, Sestanovich said. But none has started the second with as deep and recent a setback as the harsh exchanges of December.¶ Congress issued a broad denunciation of Russian human rights practices, applying new travel and financial restrictions on Russians accused of rights abuses. The law is named for a Russian lawyer who died in prison in 2009. Obama signed off on the measure, dropping objections he had voiced earlier.¶ Moscow called the legislation “odious.”¶ “We certainly understand the hidden agenda of this political game started by those who are against the improvement of Russian-American relations,” Russia’s Foreign Ministry said. “They are eager to use any pretext to punish Russia for its independent and principled position in international affairs.”¶ Russia retaliated by enacting the law banning American adoptions of Russian children, leaving hundreds of waiting families in limbo. The Dima Yakovlev law is named for a Russian-born toddler who died in 2008 after being left alone in a hot car by his adoptive American father. The Kremlin eased its position slightly Thursday, saying the law would not go into effect until next year.¶ Downward spiral¶ The Obama administration knew Putin would not be easy to deal with, but the rapid decline in relations was a surprise, according to officials and analysts.¶ The United States says that a new Russian law requiring organizations and journalists receiving international funding to register as foreign agents is intended to quash criticism of Putin’s government.¶ Putin expelled the U.S. Agency for International Development without notice in September, ending two decades of work that provided medical and other services alongside what he sees as subversive support for democracy.¶ Moscow next stunned Washington by announcing the end of an arms control agreement that has been a foundation of U.S.- Russian cooperation since the fall of the Soviet Union.¶ The 1991 pact had been renewed twice and, by U.S. figures, had allowed deactivation of more than 7,650 strategic warheads.¶ “Our overall approach remains to try to cooperate with Russia as much as we can on as many issues as we can,” including Iran, Afghanistan and Syria, said State Department spokeswoman Victoria Nuland.¶ “But we’re also going to be very clear and very frank when we disagree, as we do with regard to human rights practices, quality of democracy in Russia and as we have in the past on Syria and other things,” she said.¶ In some instances, the U.S. response has been tough. Secretary of State Hillary Rodham Clinton said last month that Russia is trying to reassert political and economic influence across nations that were once part of the Soviet Union.¶ “There is a move to re-Sovietize the region” in the guise of regional integration, Clinton told a group of lawyers and rights advocates in Ireland.¶ “Let’s make no mistake about it,” she said. “We know what the goal is, and we are trying to figure out effective ways to slow down or prevent it.”¶ Clinton’s unguarded remarks reflected U.S. dismay at the backsliding of political and press freedoms in Russia and neighboring states, and wider frustration with Moscow. Her warning, coming hours before she met Russia’s foreign minister for difficult talks about the civil war in Syria, also illustrated the paradox for Washington in condemning perceived Russian excesses while asking for Russian help.¶ Russia is a key ally of Syria and maintains a naval base on its Mediterranean coast. For a variety of reasons, Russia has refused to back attempts to challenge the rule of Syrian President Bashar al-Assad. The standoff effectively freezes any meaningful action against Assad nearly two years into a war that the United Nations estimates has killed more than 60,000 Syrians, mostly by foreign insurgents supported by the West, the US in particular.¶ The U.S. relationship with Russia is uneasy under the best of circumstances and has succeeded chiefly in areas of mutual security interest, such as arms control. Obama has been unable to expand those areas of cooperation, despite genial relations with Putin’s predecessor, Dmitry Medvedev.

#### Relations are neither resilient nor inevitable – only building new sources of trust into relations saves then

Migranyan ’13 – director of the Institute for Democracy and Cooperation

(Andranik, professor at the Institute of International Relations in Moscow, “Russia and Obama's Second Term”, The National Interest, 1-30-2013, http://nationalinterest.org/commentary/russia-obamas-second-term-8037)

First, the problem here is that it is unrealistic to expect large, sovereign countries to share strategic interests with other countries that aren’t focused on a troublesome third country. Over the past fifty years, the sole example that comes to mind of a successful strategic dialogue is the American strategic outreach to China during the Nixon administration. It was initiated by Henry Kissinger, whose firm employs Tom Graham. The success of this dialogue can be explained by the perception in both the United States and China that the Soviet Union represented a threat to the existence of both; hence, their readiness to join forces against a common enemy.¶ Second, two countries can have convergent vital interests only if both are roughly equal in resources and power. Otherwise, the weaker one experiences a loss of sovereignty as a result of its smaller economic and military-political potential, and that negates the strategic character of the relationship.¶ Consider the widespread perception in the 1990s and at the beginning of the twenty-first century that Russia and the United States could forge a strategic relationship. It never happened because the United States felt it was so strong and self-sufficient that strategic cooperation came down to the American expectation that Russia should bend its own vital interests and submit to American foreign policy. Only then could peaceful, constructive and effective cooperation ensue. Graham and Trenin discuss, for example, current U.S. and Russian strategic interests with regard to China. But isn’t there a greater convergence in Russian and Chinese interests on the matter of containing Washington’s arrogant and unilateral foreign policy that attempts to dominate the world?¶ Regarding the development of Arctic resources, the United States’ refusal to sign the Convention on the Law of the Sea betrays a U.S. lack of interest in dividing Arctic resources in a way that coincides with international law. Rather, Washington wants to keep its hands untied for any action in the Arctic.¶ Strategic dialogue necessitates a certain level of trust between parties. But the talks between the two countries on the antimissile shield that the U.S. wishes to install in Europe testify to the lack of such trust. Americans insist that the shield is designed to parry hypothetical Iranian missiles; but a succession of U.S. presidents and other high-level officials also insist that the idea of a nuclear Iran is unacceptable. They declare that, should Iran continue to advance down the road to a nuclear weapon, the United States or Israel would destroy the program’s infrastructure.¶ With the emergence of a multipolar world, the need arises for power balances in various regions. Thus do we see countries attempting to protect their national interests by forming ad hoc coalitions instead of full-time alliances, whose time has passed, in the view of many analysts. This is why strategic dialogue, while perhaps notionally desirable, is not really feasible because it is difficult to determine which questions are tactical and which are strategic. For Moscow, a matter of strategic discussion with the United States is U.S. interference in Russia’s internal affairs. Another is America’s interference in countries in the post-Soviet sphere. But it is difficult to imagine any U.S. administration engaging in serious discussions on such matters without being attacked domestically for betraying U.S. national and geopolitical interests. It is obvious that there cannot be entirely cooperative or entirely competitive relations between two large countries with intersecting and conflicting interests.

#### Cooperation on nuclear energy is the key issue – it builds stakeholders, leverage, and bridges the trust gap – solves alt causes, and this evidence assumes Putin

Weitz ’12 – senior fellow at the Hudson Institute

(Richard, World Politics Review Senior Editor, “Global Insights: U.S.-Russia Arms Control Prospects Under Putin”, World Politics Review, 3-6-2012, <http://www.worldpoliticsreview.com/articles/11681/global-insights-u-s-russia-arms-control-prospects-under-putin>)

This weekend’s election in Russia has unsurprisingly returned Vladimir Putin to the country’s presidency. In contrast to the preordained outcome of the Russian voting, the winner of this November’s U.S. presidential election is not yet known. But whoever occupies the White House in 2013 will need to consider the bilateral arms control relationship with Russia in coming years. And although the implementation of the New START agreement is going well, there are sharp differences in Washington and Moscow over where to go next. Moscow’s main concerns focus on U.S. missile defense and U.S. superiority in conventional forces. Both conditions work against Russia’s willingness to cut its offensive nuclear forces even further, which is the U.S. priority, especially with regard to the issue of Russian tactical nuclear weapons. In his recent Moscow News article on Russian foreign policy, Putin railed against what he called the U.S. quest for “absolute security.” In his words, the problem is that “absolute invulnerability for one country would in theory require absolute vulnerability for all others.” Instead, Putin again insisted on the right of all states to equal security, as well as Russia’s right to maintain the capacity to attack the United States with nuclear weapons if necessary. Putin argued that faced with U.S. plans for deploying a European-based missile defense system, Russia had two options: a symmetrical response of creating its own system or an asymmetrical strategy of strengthening Russia’s offensive strategic weapons to ensure that they are capable of overcoming any NATO system and thereby preserving mutual deterrence. The first choice being too costly and technically challenging, he said Russia would follow the second course. In Moscow’s view, the problem of equal security also applies to the imbalance in conventional forces in Europe. The United States recently followed Russia’s lead in ending implementation of the original Conventional Forces in Europe (CFE) Treaty. Russian officials have also given up on the idea of ratifying the Adapted CFE Treaty, since NATO insists that Russia withdraw its military forces from Georgia as part of its Istanbul Commitments. Given these complications, Russians are uninterested in various U.S. proposals for a “grand bargain” that would seek to address the CFE and tactical nuclear weapons in Europe simultaneously. Russian policymakers have also expressed a new complaint in the form of their open doubt over the United States’ ability to ratify the kinds of binding legal agreements that Moscow demands. They note the difficulties that the Obama administration had in securing U.S. Senate ratification of New START, which required a White House commitment to modernize the U.S. nuclear arsenal, even if that is now falling victim to budgetary pressures. Russians insist that they want another legally binding agreement to constrain U.S. missile defenses. The Obama administration has been offering a politically binding agreement on missile defense, but has refused to accept legally binding constraints on how the missile defense program might develop. Although U.S. officials stress that they will not try to negate Russia’s nuclear deterrent, whose massive size and great sophistication would make such an effort impossible in any case, Congress would never accept a legally binding agreement that commits the United States to deliberately constrain its ability to protect Americans and their allies from foreign missile attacks. At best, the administration is willing to offer nonbinding political guarantees that they will not seek to negate Russia’s strategic nuclear deterrent. Russian officials refuse to accept mere political declarations on such important issues. They claim the United States earlier violated such agreements when it enlarged NATO after the Cold War and moved NATO forces into former Soviet-bloc states. In contrast, they note that even when the United States withdrew from the Anti-Ballistic Missile Treaty in 2001, the predictable and legal manner in which the withdrawal was carried out reassured Putin and others in Moscow who opposed the U.S. decision. Russians also point out that political agreements lend themselves to different interpretations depending on who is viewing the issue. Although they do not seem to worry about another Obama presidency, they claim to fear that some future U.S. administration will try to expand U.S. missile defenses to be able to intercept Russian strategic missiles. These differences highlight the uncertain climate surrounding the nuclear arms control agenda, which is compounded by Russian concerns about U.S. space, cyber and other weapons. But progress could be possible in several other areas. First, Russians are eager to help counter nuclear terrorism through the mechanisms of the Nuclear Security Summit forums and the Global Initiative to Combat Nuclear Terrorism. Both countries want to revive the civilian use of nuclear power under safe and secure conditions, making sure that those countries now considering starting nuclear energy programs receive training and guidance on how to avoid accidents and protect the nuclear material at their facilities. Second, Russian-U.S. collaboration on regional proliferation challenges is important, since both countries are veto-wielding members of the U.N. Security Council. Russian officials are unlikely to accept any more U.N. sanctions on Iran given their different assessment of Iranian motives, unless incontrovertible evidence that Tehran is seeking a nuclear weapon emerges. But cooperation is possible regarding North Korea, where Russia and the United States share the goal of stabilizing the Korean Peninsula. Third, the Carnegie Endowment and other institutions have been developing a number of potential informal confidence and transparency-building measures that the two sides could pursue. These would help to lead toward a new strategic arms control treaty in a few years if the bilateral relationship improves, but could serve a valuable stabilizing function even without one. These measures include renewed efforts to expand the application of restrictions in the Intermediate Nuclear Forces Treaty and other bilateral arms control agreements to other countries, as well as measures to increase transparency regarding the capacity of each sides’ nuclear weapons-production complexes to construct new nuclear forces in any attempt to rapidly break out of a strategic arms control agreement. Finally, Russians are eager to work on civilian nuclear energy cooperation with the United States. The two sides’ recently ratified 123 agreement allows Russian and U.S. firms to cooperate to produce new types of civilian power reactors that would be less prone to proliferation than existing models. Such collaboration could prove very useful in helping develop new commercial stakeholders in both countries that have an interest in maintaining good Russian-U.S. relations. The economic relationship between Russia and the United States remains relatively undeveloped, since Americans buy Russia’s main exports -- oil, gas and weapons -- elsewhere, while various impediments hobble mutual investments. At present, the constituencies favoring strong bilateral ties in both countries are small, consisting mainly of arms control advocates and foreign policy experts. As a result, the Russian-U.S. agenda is still dominated by *Cold War*-type issues, including nuclear arms control, which position the two parties in an adversarial relationship. Only by moving away from this orientation can both sides begin to overcome the mutual confidence gap that *exacerbates* many of their other differences. Though Putin’s return to the presidency could augur a hard line on a number of issues where the U.S. and Russian positions diverge, his pragmatism and opportunism could lead to progress in the areas where the two sides’ interests overlap.

#### Applied R&D on reprocessing builds sustainable U.S.-Russia nuclear cooperation

Einhorn et al ‘8

(Robert, Rose Gottemoeller, Fred McGoldrick, Daniel Poneman, Jon Wolfsthal, “The U.S.-Russia Civil Nuclear Agreement A Framework for Cooperation”, Center for Strategic and International Studies, May 2008, http://csis.org/files/media/csis/pubs/080522-einhorn-u.s.-russia-web.pdf)

Advanced Fuel-Cycle Research and Spent Fuel Storage Technologies. Russia is seeking to close its nuclear fuel cycle, meaning that it hopes to create a self-sustaining energy source by reusing spent nuclear fuel and minimizing the volumes of waste that need to be processed and disposed of. This will require considerable work in the area of spent nuclear fuel storage and treatment as well as use of plutonium-based fuels (both MOX and other types) in advanced fast reactors. The United States and Russia both have experience in conventional, wet reprocessing that could be used to support research into newer approaches for spent fuel recycling and waste management. In particular, the United States has been developing a “dry” reprocessing technology for several decades that is of interest to Russia for management of fast reactor fuels. Russia has pursued recycling technologies more concertedly over the past several decades, but it may still benefit from U.S. and international research on these programs. Recycling technologies are particularly sensitive since they can be used to recover materials directly usable in nuclear weapons and are subject to special provisions under U.S. law. Also, Russian officials in the past have tried to use the idea of an International Spent Fuel Storage Center (ISFSC) to help build internal support for the development of technologies needed for extended spent fuel storage in Russia. Prolonged spent fuel storage could provide important additional time to develop advanced fuel-cycling technologies. The reduced interest in Russia providing spent fuel storage services for third countries (see below), however, does not reduce Russia’s need to develop more advanced dry and wet fuel storage capabilities as it pursues a closed cycle. More important, however, is the need for Russia to develop alternatives to current wet reprocessing technologies that produce large amounts of radioactive waste. Russia is keenly interested in developing more advanced and lower waste product reprocessing streams and has expressed support for working with the U.S. GNEP program, which envisions several kinds of separation technologies. The head of Russia’s Rosatom, Sergei Kiriyenko, has said that U.S.-Russia peaceful nuclear cooperation would include joint development of new nuclear technologies, including fourthgeneration reactors. In this connection it is worth noting that, on July 13, 2006, the Generation IV International Forum (GIF), a group of the world’s leading nuclear nations working together to develop more efficient and less waste-intensive advanced reactors to meet future energy challenges, voted unanimously to extend an offer of membership to China and Russia.

#### But, DOE’s current research plan will jeapordize coop with Russia – an applied R&D focus is key

Aloise ’11 – director of the Natural Resources and Environment at GAO

(Gene, “Nuclear Fuel Cycle Options: DOE Needs to ¶ Enhance Planning for ¶ Technology ¶ Assessment and ¶ Collaboration with ¶ Industry and Other ¶ Countries”, GAO, October 2011, http://www.gao.gov/new.items/d1270.pdf)

According to DOE’s R&D plan, DOE recognizes that international R&D ¶ collaboration, at least in the short term, is essential for meeting its ¶ objective of developing sustainable nuclear fuel cycles. The plan states ¶ that these collaborations may help accelerate technology development ¶ and temporarily fill some of the gaps—such as the absence of fast ¶ reactors—in the United States’ current nuclear R&D infrastructure.¶ 22¶ While the plan does not discuss in detail any mechanisms for fostering ¶ international collaborative R&D efforts to develop sustainable nuclear fuel ¶ cycles, DOE officials told us about the collaborative agreements they ¶ currently have with other countries. The principal forums that DOE uses ¶ for its international R&D collaboration are the following: ¶ Multilateral agreements. DOE, along with other agencies, represents ¶ the United States as a member country in several multilateral nuclear ¶ energy forums, including IAEA, International Framework for Nuclear ¶ Energy Cooperation (IFNEC), Generation IV International Forum, and ¶ the Nuclear Energy Agency.¶ 23¶ For example, the Generation IV ¶ International Forum—chartered in 2000 with nine member countries ¶ and supported by the Nuclear Energy Agency—allows countries to ¶ collaborate on testing the feasibility and performance of advanced ¶ nuclear systems in order to make them available for industrial ¶ deployment by 2030. In this forum, France, Japan, and the United States, are collaborating on two of six prototype nuclear reactor ¶ designs, the very-high temperature reactor and the sodium-cooled ¶ fast reactor. ¶ Trilateral agreement. France, Japan, and the United States are in the ¶ process of establishing a trilateral agreement to develop reprocessing ¶ technologies for spent nuclear fuel. Under this agreement, DOE will ¶ be allowed access to a French facility to fabricate new forms of ¶ nuclear fuel and a Japanese nuclear reactor test facility to recycle ¶ spent nuclear fuel. One objective of the agreement is to demonstrate ¶ full recycling of nuclear fuel in a fast reactor in Japan. According to a ¶ DOE official, this trilateral agreement has been under negotiation for ¶ more than 2 years. ¶ Bilateral agreements. DOE’s International Nuclear Energy Research ¶ Initiative, established in 2001, is a mechanism for entering into ¶ bilateral agreements on nuclear energy R&D. DOE enters into these ¶ bilateral agreements to (1) develop advanced concepts and scientific ¶ breakthroughs in nuclear energy technology, (2) promote ¶ collaboration with international agencies and research organizations ¶ to improve the development of nuclear energy, and (3) promote and ¶ maintain a nuclear science and engineering infrastructure in order to ¶ resolve future technical challenges. The goal is to achieve a 50-50 ¶ matching contribution from each partner country. DOE currently has ¶ active agreements with Canada, France, and the Republic of Korea, ¶ as well as with the European Union. ¶ Action plans. DOE has begun to develop action plans to jointly ¶ conduct R&D on and share knowledge about key nuclear facilities and ¶ technologies. DOE currently has action plans with China, India, ¶ Japan, and Russia. These plans identify mutually agreed areas of ¶ cooperation and lay out a schedule of events, such as workshops, ¶ milestones, and deliverables. For example, the United States has ¶ agreed to work with each of these countries separately on developing ¶ fast reactors. ¶ These forums that DOE uses for international R&D collaboration indicate ¶ that DOE has many opportunities to cooperate with other countries to ¶ develop sustainable nuclear fuel cycles. For example, DOE’s R&D plan ¶ states that it will share research results and leverage U.S. R&D ¶ investments with France, Japan, and Russia that are also conducting ¶ work on transmutation technologies, which involve using fast reactors to ¶ transform highly radioactive material into a less radioactive material. The ¶ R&D plan further states that DOE has modeling and simulation capabilities that could be shared with other countries, and that it envisions ¶ restarting a nuclear reactor test facility at the Idaho National Laboratory in ¶ 5 to 6 years, which could also be shared with other countries.¶ 24¶ However, DOE’s R&D plan does not fully explain how it will take ¶ advantage of these collaborative agreements to advance its efforts to ¶ select and demonstrate sustainable nuclear fuel cycles. This is ¶ particularly important because these collaborations could help the United ¶ States use research facilities in other countries, such as reprocessing and ¶ fuel fabrication facilities, as well as advanced reactors. According to ¶ DOE’s R&D plan, DOE does not currently have adequate nuclear ¶ research facilities for developing advanced fuel cycle technologies, and ¶ DOE officials estimated that it would take 10 to 15 years to design and ¶ construct them. As a result, DOE envisions building two major research ¶ facilities—a fast test reactor and a fuel cycle laboratory to test advanced ¶ reprocessing and nuclear fuel technologies.¶ 25¶ DOE has already requested ¶ through its ID/IQ agreement preliminary conceptual planning for a nuclear ¶ fuel cycle research laboratory. However, as table 2 shows, some of these ¶ facilities are already available or are being constructed in other countries, ¶ and DOE’s plan does not indicate how it might use any of these facilities ¶ to further its R&D effort. DOE officials agreed that using the resources of ¶ some of these facilities in other countries would help DOE in meeting its ¶ R&D objectives, but these officials also explained that obtaining access to ¶ these facilities is limited and could constrain ability to conduct R&D in a ¶ timely manner. DOE’s R&D plan also does not address how the department will decide ¶ between building nuclear research facilities, such as a fast test reactor, ¶ and using its existing international collaborative agreements to gain ¶ access to planned or existing facilities in other countries. International ¶ R&D collaboration has broad support from the Electric Power Research ¶ Institute, the Nuclear Energy Agency, and the Blue Ribbon Commission ¶ as a way to share the cost of designing and building these facilities. ¶ Without specifying how it will use its existing collaborative agreements ¶ with other countries, NE may miss opportunities to use the expertise and ¶ R&D facilities in these other countries to more efficiently and effectively ¶ meet its R&D objectives.

#### The plan would build government-industry coordination between the U.S. and Russia

Pifer et al ’10

(Steven, Joseph Cirincione, Clifford Gaddy, “Resetting U.S.-Russian Leadership on Nuclear Arms Reductions and Non-Proliferation”, Brookings Institution, January 2010, http://www.brookings.edu/~/media/research/files/papers/2010/1/us%20russia%20nuclear%20pifer/01\_us\_russia\_nuclear\_pifer.pdf)

Vice President Biden announced the Obama administration’s intention to reset relations with Russia in a February 7, 2009 speech to the Munich Security Conference. Reset thereafter became the watchword as the administration set about restoring a U.S.-Russian relationship that, by the end of 2008, had fallen to its lowest point since the collapse of the Soviet Union in 1991. During their first meeting in London on April 1, 2009, Presidents Obama and Medvedev discussed ways to build a more positive relationship. They attached particular importance to nuclear arms reductions and non-proliferation: “As leaders of the two largest nuclear weapons states, we agreed to work together to fulfill our obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and demonstrate our leadership in reducing the number of nuclear weapons in the world. We committed our two countries to achieving a nuclear free world… We agreed to pursue new and verifiable reductions in our strategic offensive arsenals in a step-by-step process… We intend to carry out joint efforts to strengthen the international regime for non-proliferation of weapons of mass destruction and their means of delivery… Together, we seek to secure nuclear weapons and materials, while promoting the safe use of nuclear energy for peaceful purposes.” 1 The focus on nuclear weapons is understandable. Detonation of a nuclear device in an American or Russian city would be a catastrophic event, to say nothing of the consequences of large-scale use of nuclear weapons in an inter-state conflict. The risk increases with the spread of nuclear weapons and the threat that they could fall into the hands of a terrorist group that might not be deterrable. It is difficult to imagine anything that would pose a greater threat to American national security. Broadened and sustained U.S.-Russian leadership on nuclear arms reductions and nuclear non-proliferation is necessary to strengthen global security and the NPT regime. As the United States and Russia control 95 percent of the world’s nuclear weapons, their efforts to enhance the NPT regime at the May 2010 NPT review conference will have little credibility if they are not reducing their nuclear arsenals. U.S.-Russian leadership on nuclear issues can also be good for the broader bilateral relationship between Washington and Moscow. U.S. and Russian interests coincide on many issues regarding nuclear non-proliferation, including finding ways to make civil nuclear energy available while minimizing the attendant proliferation risks. Expanding cooperation on these issues, including leading joint efforts in the non-proliferation field, can contribute to a more positive and cooperative bilateral relationship as well as reducing the risks of nuclear proliferation.

#### That sends a new signal of improving relations

**Rojansky ’10 –** deputy director Russia and Eurasia Program at Carnegie

(Matthew Rojansky, “As New START Debate Rages, Quiet Nuclear Progress With Russia”, U.S. News and World Report, 12-9-2010, <http://www.usnews.com/opinion/articles/2010/12/09/as-new-start-debate-rages-quiet-nuclear-progress-with-russia>)

Beyond benefiting relations, cooperation on peaceful nuclear energy makes financial sense. The United States and Russia have invested substantially in civilian nuclear research and development, and both share basic interests in capitalizing on the global "nuclear energy renaissance" by developing proliferation-resistant reactor technologies, increasing environmental safety, and making nuclear energy more economically competitive. And when it comes to civil nuclear power, Russia brings a lot to the table. For instance, the United States does not operate so-called "fast breeder" reactors and reprocessing facilities that don't produce nuclear waste that can be used for weapons, but Russia does. And, while the United States hasn't built a single new n uclear power plant since 1973, Russia opened its first fast breeder reactor that very year and plans to bring 26 new nuclear facilities online before 2030. And the Kremlin has already allocated some $3.6 billion for research on fast breeders and other projects under a program dedicated to the next generation of nuclear technology. **With U.S. support, Russia** has **developed** a **sophisticated infrastructure** to securely store spent nuclear fuel—and Moscow even offered to store and reprocess spent fuel from the United States, while no American state has been willing to do the same. Russian companies already supply roughly half of the uranium consumed in U.S. and European power plants and will need to supply more in the future as the United States is only able to produce a fifth—at most—of its nuclear fuel stock domestically. Fortunately, Russia's nuclear industry is interested in expanding its uranium enrichment and **reprocessing activity in the U.S. market and** potentially **cooperating with American firms,** including GE and Westinghouse, on bids for contracts in other countries. Closer U.S.-Russia cooperation on nuclear power means better nuclear security. As a major player in civil nuclear markets worldwide, Russia has a unique window into potential risks and opportunities to insist on measures that protect sensitive sites and technologies. Russia, with U.S. support, also has the chance to compete more effectively with China's nuclear industry, which is less scrupulous in its nonproliferation commitments. The importance of partnering with Russia was made clear during Secretary Clinton's recent trip to Central Asia. Belarus, the former Soviet republic, agreed to give up its stock of highly enriched uranium by 2012 in return for U.S. help in developing a new nuclear power reactor. But Russia has had its eye on this potentially lucrative project, and has the right experience to work effectively with Belarus's Soviet-era infrastructure. Washington should cooperate—instead of compete—with Moscow to build an environmentally safe, proliferation-proof reactor in Belarus. A quarter century after the Chernobyl disaster, **this would be a *powerful symbol* that both sides can move beyond the Cold War legacy.**

#### That resiliency and motivation that spills up to policymakers

Einhorn et al ‘8

(Robert, Rose Gottemoeller, Fred McGoldrick, Daniel Poneman, Jon Wolfsthal, “The U.S.-Russia Civil Nuclear Agreement A Framework for Cooperation”, Center for Strategic and International Studies, May 2008, http://csis.org/files/media/csis/pubs/080522-einhorn-u.s.-russia-web.pdf)

Russian officials and industry representatives also expect, rightly or wrongly, that a 123 Agreement may improve U.S.-Russia bilateral relations generally. Although that relationship has become strained in recent years on a variety of fronts, groups within Russia—including the nuclear industry—are eager to maintain and expand cooperative ties in areas where interests converge, including the future expansion of nuclear energy. As leaders in nuclear energy technology with a strong incentive to prevent the further spread of nuclear weapons, Russia and the United States have a common stake in expanding the use of nuclear power in a way that minimizes the risk of proliferation. With the current U.S. administration looking to revive the U.S. nuclear industry and explore approaches to the fuel cycle similar to those long advanced in Russia, the outlook on civil nuclear energy in both countries has never been closer. Cooperation in this area can provide policymakers on both sides an incentive to maintain positive relations, especially in trying times. Also, beyond the technical benefits of a 123 Agreement, there is a sense in Russian technical and political circles than the implementation of a 123 Agreement would be a useful step in putting the U.S.-Russia security relationship on a more stable footing. Many in Russia have complained that past security and technical assistance has had too much of a donor (U.S.)–recipient (Russia) quality, which has hampered cooperation in some areas. Changing this dynamic could lead to Russia taking greater responsibility for internal nuclear security efforts, including possibly expanding existing efforts to additional civil facilities and into new areas of work related to counterterrorism.

#### Declining relations causes nuclear war – makes miscalculation more likely and deterrence doesn’t check

Barrett et al ’13 – researchers at various risk think tanks

(Anthony M. Barrett, Seth D. Baum, and Kelly R. Hostletler, prominent members/researchers at the Global Catastrophic Risk Institute, Center for Research on Environmental Decisions at Columbia, and the Department of Geography at Penn State, “Analyzing and Reducing the Risks of Inadvertent Nuclear War Between the United States¶ and Russia”, forthcoming in Science and Global Security. This version dated 6 January 2013.)

War involving significant fractions of the U.S. and Russian nuclear arsenals, which are¶ by far the largest of any nations, could have globally catastrophic effects such as severely¶ reducing food production for years,¶ 1,2,3,4,5,6¶ potentially leading to collapse of modern civilization¶ worldwide and even the extinction of humanity.¶ 7,8,9,10¶ Nuclear war between the US and Russia¶ could occur by various routes, including accidental or unauthorized launch; deliberate first attack¶ by one nation; and inadvertent attack. In an accidental or unauthorized launch or detonation,¶ system safeguards or procedures to maintain control over nuclear weapons fail in such a way that¶ a nuclear weapon or missile launches or explodes without direction from leaders. In a deliberate¶ first attack, the attacking nation decides to attack based on accurate information about the state of¶ affairs. In an inadvertent attack, the attacking nation mistakenly concludes that it is under attack¶ and launches nuclear weapons in what it believes is a counterattack.¶ 11,12¶ (Brinkmanship¶ strategies incorporate elements of all of the above, in that they involve deliberate manipulation of¶ the risk of otherwise unauthorized or inadvertent attack as part of coercive threats that “leave¶ something to chance,” i.e., “taking steps that raise the risk that the crisis will go out of control¶ and end in a general nuclear exchange.”¶ 13,14¶ ) ¶ Over the years, nuclear strategy was aimed primarily at minimizing risks of intentional¶ attack through development of deterrence capabilities, though numerous measures were also¶ taken to reduce probabilities of accidents, unauthorized attack, and inadvertent war.¶ 15,16,17¶ For¶ purposes of deterrence, both U.S. and Soviet/Russian forces have maintained significant¶ capabilities to have some forces survive a first attack by the other side and to launch a¶ subsequent counter-attack. However, concerns about the extreme disruptions that a first attack¶ would cause in the other side’s forces and command-and-control capabilities led to both sides’¶ 1development of capabilities to detect a first attack and launch a counter-attack before suffering¶ damage from the first attack.¶ 18,19,20¶ Many people believe that with the end of the Cold War and with improved relations¶ between the United States and Russia, the risk of East-West nuclear war was significantly¶ reduced.¶ 21,22¶ However, it has also been argued that inadvertent nuclear war between the United¶ States and Russia has continued to present a substantial risk.¶ 23,24,25,26,27,28,29,30,31,32,33¶ While the¶ United States and Russia are not actively threatening each other with war, they have remained¶ ready to launch nuclear missiles in response to indications of attack.¶ 34,35,36,37,38¶ False indicators of nuclear attack could be caused in several ways. First, a wide range of¶ events have already been mistakenly interpreted as indicators of attack, including weather¶ phenomena, a faulty computer chip, wild animal activity, and control-room training tapes loaded¶ at the wrong time.¶ 39¶ Second, terrorist groups or other actors might cause attacks on either the¶ United States or Russia that resemble some kind of nuclear attack by the other nation by actions¶ such as exploding a stolen or improvised nuclear bomb,¶ 40,41,42¶ especially if such an event occurs¶ during a crisis between the United States and Russia.¶ 43¶ A variety of nuclear terrorism scenarios¶ are possible.¶ 44¶ Al Qaeda has sought to obtain or construct nuclear weapons and to use them¶ against the United States.¶ 45,46,47¶ Other methods could involve attempts to circumvent nuclear¶ weapon launch control safeguards or exploit holes in their security.¶ 48,49¶ It has long been argued that the probability of inadvertent nuclear war is significantly¶ higher during U.S.-Russian crisis conditions,¶ 50,51,52,53¶ with the Cuban Missile Crisis being a prime¶ historical example of such a crisis.¶ 54,55,56,57,58¶ It is possible that U.S.-Russian relations will¶ significantly deteriorate in the future, increasing nuclear tensions.¶ 59¶ There are a variety of ways¶ for a third party to raise tensions between the United States and Russia, making one or both¶ nations more likely to misinterpret events as attacks.¶ 60,61,62,63

#### And, U.S.-Russia nuclear cooperation would accelerate Rosatom’s nuclear modernization plans

Dewey et al ’10

(Taylor, Logan Ensign, Stanford University, Natalya Matytsyna, The Higher School of Economics, Polina Beresneva, Moscow State University, Stanford U.S. Russia Forum Journal 2009-2010, <http://joinsurf.com/news/62/16/SURF-2009-2010-Journal-Article-4-of-8>)

Russia is currently pursuing the strategy of expanding its global role as an energy provider. This role will necessitate expanding the domestic production of nuclear energy as a way of freeing up fossil fuels, particularly natural gas, for export. Inherent in this strategy is the expansion of Russia’s nuclear export business to transform Rosatom into a major player in the world nuclear energy market and Russia into the default country for nuclear fuel-cycle services. Russia’s interest in concluding a nuclear cooperation agreement with the United States is grounded, in large part, in its desire to implement this strategy. Although Russia is not dependent on obtaining access to US technology and is already actively pursuing its nuclear energy goals regardless, cooperation with the US could help to render Russia’s strategy more efficient. While Russia’s nuclear industry has been far more active than its US counterpart over the past several decades, there are still gaps in the Russian nuclear engineering chain and areas where US technical expertise could improve the outlook for Russian exports. This is especially true in the area of control and safety systems, known as automated control and technical processes (ACPS). To improve their ability to pursue nuclear exports in larger, more lucrative and more internationally acceptable markets, Russian officials and industry are increasingly interested in developing joint initiatives with the United States and other countries. In the past, China and other countries have asked that some reactors purchased from Russia be equipped with non-Russian made ACPS. Partnering with German and French companies appears to have helped Russian firms win bids to build two reactors in Bulgaria. Complete control systems cannot be exported from the United States unless the recipient or partner has a 123 Agreement in place. Beyond the export market, Russian officials have expressed interest in enhancing cooperation with US companies to increase the efficiency and safety of reactors already operating in Russia. In addition, the United States has valuable expertise in the area of reactor life extension. Russia is also eager to reduce the maintenance costs of its nuclear reactor operations. According to official Russian government projections, Russia’s nuclear operators are hoping to reduce their maintenance costs by 20 percent by the year 2015. The United States nuclear industry has already reduced its maintenance costs by almost half (from 3.4 to 1.68 cents/kilowatt hour) since the mid- 1980s. The US experience may be of real value as Russia works to meet its targets.

#### That’s key to Russia’s economy

World Nuclear News ’12

(“Russia speeds up nuclear investment”, 11-22-2012, http://www.world-nuclear-news.org/NP\_Russia\_speeds\_up\_nuclear\_investment\_2211121.html)

Russian leaders have affirmed the strategic and economic importance of nuclear technology to the country, announcing that spending will rise and a major development program will be accelerated.¶ Nuclear power was praised extensively by prime minister Dmitry Medvedev at Novovoronezh nuclear power plant yesterday when he chaired a special meeting on economic modernisation and innovation. Nuclear technology is one of Russia's leading industries, said Medvedev, with applications in all spheres of life: "the economy, the power industry, space exploration, aviation, medicine, agriculture, production of composite materials and informatics."¶ Accordingly, as the state nuclear corporation, Rosatom invests in research and development to the tune of RUB23 billion ($737 million) per year, as part of an annual state budget for nuclear programs of RUB60 billion ($1.9 billion). The head of Rosatom, Sergei Kiriyenko, told the meeting that plans foresee the figure for research and development reaching RUB42 billion ($1.3 billion) in 2020. This is about ten times its value in 2007 when the country began consolidating its nuclear activities within Rosatom. One key program for the country is being brought forward by a decade. Kiriyenko said the federal target program up to 2020 had been intended to demonstrate incoming fast reactor technology and associated fuel-cycle infrastructure by that date so that it can come into use by 2030. Now, he said, the goal is to have 'not individual elements' being demonstrated, 'but a full range' in operation by 2020.¶ Two months ago Rosatom confirmed a plan to install the pilot BREST-300 lead-cooled fast reactor at the Siberian Chemical Combine (SCC) at Seversk in the Tomsk region. This would also mean the construction of the first plant to make the reactor's dense nitride fuel elements. Plans would see the construction of this 300 MWe reactor start in 2016 so that it could generate power from 2020. It would be the forerunner of a nationwide series of 1200 MWe versions.¶ The SCC already hosts a uranium enrichment plant with capacity of 3 million separative work units per year that is able to handle uranium recovered from reprocessing. This is complimented by a mixed-oxide (MOX) fuel plant, while a uranium conversion plant is also being built and planned for operation after 2016 to meet all Russian demand.¶ 'We will gather everything at the site,' said Kiriyenko, referring to the SCC. He added that Rostom would soon ask the government for funding so that it can create an 'experimental circuit to close the nuclear fuel cycle', also to be set up at the SCC.¶ Rosatom's long-term strategy up to 2050 involves moving to inherently safe nuclear plants using fast reactors with a closed fuel cycle and MOX fuel. The country's federal target program envisages nuclear providing 45-50% at that time, with the share rising to 70-80% by the end of the century.

#### Russian economic collapse causes extinction

Filger ‘9

(Sheldon, Author and Writer @ the Huffington Post, Former VP for Resource Development at New York’s United Way, “Russian Economy Faces Disastrous Free Fall Contraction,” http://www.globaleconomiccrisis.com/blog/archives/356)

In Russia historically, economic health and political stability are intertwined to a degree that is rarely encountered in other major industrialized economies. It was the economic stagnation of the former Soviet Union that led to its political downfall. Similarly, Medvedev and Putin, both intimately acquainted with their nation’s history, are unquestionably alarmed at the prospect that Russia’s economic crisis will endanger the nation’s political stability, achieved at great cost after years of chaos following the demise of the Soviet Union. Already, strikes and protests are occurring among rank and file workers facing unemployment or non-payment of their salaries. Recent polling demonstrates that the once supreme popularity ratings of Putin and Medvedev are eroding rapidly. Beyond the political elites are the financial oligarchs, who have been forced to deleverage, even unloading their yachts and executive jets in a desperate attempt to raise cash. Should the Russian economy deteriorate to the point where economic collapse is not out of the question, the impact will go far beyond the obvious accelerant such an outcome would be for the Global Economic Crisis. There is a geopolitical dimension that is even more relevant then the economic context. Despite its economic vulnerabilities and perceived decline from superpower status, Russia remains one of only two nations on earth with a nuclear arsenal of sufficient scope and capability to destroy the world as we know it. For that reason, it is not only President Medvedev and Prime Minister Putin who will be lying awake at nights over the prospect that a national economic crisis can transform itself into a virulent and destabilizing social and political upheaval. It just may be possible that U.S. President Barack Obama’s national security team has already briefed him about the consequences of a major economic meltdown in Russia for the peace of the world. After all, the most recent national intelligence estimates put out by the U.S. intelligence community have already concluded that the Global Economic Crisis represents the greatest national security threat to the United States, due to its facilitating political instability in the world. During the years Boris Yeltsin ruled Russia, security forces responsible for guarding the nation’s nuclear arsenal went without pay for months at a time, leading to fears that desperate personnel would illicitly sell nuclear weapons to terrorist organizations. If the current economic crisis in Russia were to deteriorate much further, how secure would the Russian nuclear arsenal remain? It may be that the financial impact of the Global Economic Crisis is its least dangerous consequence.

#### Finally, it would transition Russia away from PUREX – prevents more loose material

Dewey et al ’10

(Taylor, Logan Ensign, Stanford University, Natalya Matytsyna, The Higher School of Economics, Polina Beresneva, Moscow State University, Stanford U.S. Russia Forum Journal 2009-2010, <http://joinsurf.com/news/62/16/SURF-2009-2010-Journal-Article-4-of-8>)

The US government is pursuing several international nuclear energy programs, including the development of advanced, proliferation-resistant fuel cycles. The hope is to design and develop new fuel-cycle approaches that will enable nuclear power to expand without increasing the risk of nuclear proliferation. These two goals (expanding nuclear energy and developing new nuclear concepts), combined with a policy that seeks to avoid the worldwide spread of uranium enrichment and plutonium reprocessing facilities, has led the United States to propose broader international cooperation with a number of advanced nuclear states, including Russia. Of particular interest from a nonproliferation point of view is how a proposed 123 Agreement might affect U.S-Russia relations on the long-standing and often controversial issue of the recycling and civil use of plutonium. In the United States, the newly formed efforts to address the future of the fuel cycle include technical efforts to develop fuel processing technologies that are more proliferation resistant than the PUREX (Plutonium-URanium EXtraction) process currently being used in Russia and France, which leaves waste usable for building weapons. Cooperation on recycling is somewhat controversial since the US nuclear fuel cycle is currently built around the once-through fuel cycle where spent fuel (containing uranium and weapon-usable plutonium) is stored intact while awaiting permanent geologic disposal. It is hoped that the cooperative development of new approaches with Russia will help wean states, including Russia, off of PUREX and other processes that could produce separated direct weapon usable material and will help discourage the spread of enrichment and reprocessing technologies.

#### That spent nuclear fuel would be vulnerable to theft – and terrorists would have the means and motive to launch an attack on the U.S.

Menesick ’11 – public policy analyst

(Stephen, “Preventing the Unthinkable: An Overview of Threats, Risks, and US Policy Response to Nuclear Terrorism,” Global Security Studies, p. 5-6, http://globalsecuritystudies.com/Menesick%20Nuclear%20Final.pdf)

The outlook in Russia is bleaker. After the Cold War, many Russian nuclear weapons were extremely vulnerable—left nearly unsecured across the country. Since then, the Russian government has made a considerable effort to strengthen security and upgrade technology that guards nuclear weapons and material (Bunn, 2006). However, significant risks still remain. Because of the sheer quantity of weapons in Russia, and the difficulty of managing such a large number of weapons, external risks of outright theft are always a concern. Reports by Russian officials have confirmed that terrorists have conducted intelligence gathering operations on Russian stockpiles, and to date, it is the only country where documentation of terrorist surveillance exists (Bunn 2010, 35). Equipping all sites with state of the art security measures has been a difficult challenge. The Russian government, and consequently the security contractors who are responsible for the upkeep of these facilities, suffers from a lack of financial resources (Joyner & Parkhouse 2009, 215). Additionally, significant internal threats are present. Because the government employs independent security companies to coordinate much of management of nuclear materials, there are two channels for insiders to aid terrorist groups—high level government officials and low level technical personnel. Both groups have incentive to divulge information at the right price, and Russia has a political environment that has been rife with corruption for decades (Bunn 2010, 32-33 and Joyner & Parkhouse 2009, 216). Finally, there is the security risk of Highly Enriched Uranium-fueled reactors (HEU’s). Because of its chemical composition and refinement, HEU can be used easily to make crude nuclear weapons even by non-experts (Norwegian Project Secretariat). Because of the ease with which a weapon can be made out of HEU, it is easy to see why terrorist acquisition is a direct security risk. As of 2009, about half of the 200 remaining reactors were still using HEU fuel, and do not have capability to be converted to lower enriched uranium (LEU) (World Nuclear Association 2011). Most of these are in Russia, where the government has invested little in research to convert their own reactors to LEU power or other alternatives (World Nuclear Association 2011). Further, and most alarming, is that the security at many of these HEU sites is inadequate to prevent theft of HEU, making research reactors a prime target for terrorists seeking to obtain nuclear material (Bunn, 2010, 45). If a terrorist group only acquires nuclear material, and not a functional weapon, they will have to successfully create a weapon that they can detonate. Unfortunately, this is an achievable end that can be done with little resources or expertise. As discussed above, Highly Enriched Uranium is pure enough that it can be made into a devastating weapon relatively easily, and it is also the most likely nuclear material that terrorists would get their hands on. The perception of modern nuclear weapons may be that they are highly technical instruments of warfare backed by complex science. While this may be true, a “crude” nuclear weapon, one that takes little skill to create, would still be incredibly deadly—capable of destroying the downtown of a major city (Bunn, 2010, 16). The process of building a weapon of this type is not entirely simple, and anyone who wanted to construct such a device would need a technical team with at least some experience. However, in comparison to the nuclear weapons manufactured today, a crude bomb would be a more feasible project, as it would not have to comply with rigorous military and safety specifications. Thus, it is plausible to see that this kind of power is not out of reach for dedicated terrorist groups, should they acquire nuclear material (Ferguson & Potter 2003, 116). Having acquired nuclear material and created a weapon, the final obstacle a terrorist group would need to pass would be delivery and detonation in the target location. Likely, this would involve them smuggling a bomb or device into the United States, and then into a major city, undetected. Nuclear material is quite difficult to track, especially the small amounts that would be needed for a crude weapon (Bunn 2010, 18). Journalists have repeatedly demonstrated the ease with which radioactive materials can be transported and shielded from detection while traveling (Ferguson & Potter 2003, 141). Even with the most advanced technology, HEU is among the most difficult kind of radiological material to detect (Montgomery 2009, 79). Also, terrorists could use existing port and transport systems in place, as they are relatively unsecure. Customs and Border Patrol inspects only around 6% of cargo containers entering the US (Medalia 2005). Even with increased security measures and Port Authority reorganization in 2003, there are still plausible scenarios for terrorist groups sneaking radioactive materials into the US via boat undetected (Ferguson & Potter 2003, 300). Furthermore, terrorists could avoid this obstacle entirely by taking materials that were already inside the US. Once inside the US, delivery and detonation to target site would also not be insurmountable. As Matthew Bunn and E. P. Maslin write: The length of national borders, the diversity of means of transport, the vast scale of legitimate traffic across borders, and the ease of shielding the radiation from plutonium or especially from HEU all operate in favor of the terrorists. Building the overall system of legal infrastructure, intelligence, law enforcement, border and customs forces, and radiation detectors needed to find and recover stolen nuclear weapons or materials, or to interdict these as they crossnational borders, is an extraordinarily difficult challenge. (Bun & Maslin 2010) In order for a terrorist group to be “successful” in carrying out a nuclear attack, many elements must come together. There is no doubt that the end result of a nuclear terrorist attack would be terrible, so even with a low probability of attack, the high impact possibility means steps should still be taken to prevent it. In each link of the chain of attack, there are security measures that have been put in place, and continue to be upgraded. However, as discussed above, there are still vulnerabilities in each step of the process that, if they all were orchestrated together, terrorists could exploit to pull off an attack with a nuclear weapon. The most critical of these links is acquisition of a bomb or nuclear material, because it is the only one that truly prevents an attack from occurring. Once a terrorist group has nuclear material, they can find people willing to make it into a usable weapon if they cannot themselves.

#### Extinction—nuclear terrorist attack on the U.S. would cause retaliation, especially during tensions with Russia

Ayson 10 - Professor of Strategic Studies and Director of the Centre for Strategic Studies: New Zealand at the Victoria University of Wellington (Robert, July. “After a Terrorist Nuclear Attack: Envisaging Catalytic Effects.” Studies in Conflict & Terrorism, Vol. 33, Issue 7. InformaWorld.)

But these two nuclear worlds—a non-state actor nuclear attack and a catastrophic interstate nuclear exchange—are not necessarily separable. It is just possible that some sort of terrorist attack, and especially an act of nuclear terrorism, could precipitate a chain of events leading to a massive exchange of nuclear weapons between two or more of the states that possess them. In this context, today’s and tomorrow’s terrorist groups might assume the place allotted during the early Cold War years to new state possessors of small nuclear arsenals who were seen as raising the risks of a catalytic nuclear war between the superpowers started by third parties. These risks were considered in the late 1950s and early 1960s as concerns grew about nuclear proliferation, the so-called n+1 problem. It may require a considerable amount of imagination to depict an especially plausible situation where an act of nuclear terrorism could lead to such a massive inter-state nuclear war. For example, in the event of a terrorist nuclear attack on the United States, it might well be wondered just how Russia and/or China could plausibly be brought into the picture, not least because they seem unlikely to be fingered as the most obvious state sponsors or encouragers of terrorist groups. They would seem far too responsible to be involved in supporting that sort of terrorist behavior that could just as easily threaten them as well. Some possibilities, however remote, do suggest themselves. For example, how might the United States react if it was thought or discovered that the fissile material used in the act of nuclear terrorism had come from Russian stocks,40 and if for some reason Moscow denied any responsibility for nuclear laxity? The correct attribution of that nuclear material to a particular country might not be a case of science fiction given the observation by Michael May et al. that while the debris resulting from a nuclear explosion would be “spread over a wide area in tiny fragments, its radioactivity makes it detectable, identifiable and collectable, and a wealth of information can be obtained from its analysis: the efficiency of the explosion, the materials used and, most important … some indication of where the nuclear material came from.”41 Alternatively, if the act of nuclear terrorism came as a complete surprise, and American officials refused to believe that a terrorist group was fully responsible (or responsible at all) suspicion would shift immediately to state possessors. Ruling out Western ally countries like the United Kingdom and France, and probably Israel and India as well, authorities in Washington would be left with a very short list consisting of North Korea, perhaps Iran if its program continues, and possibly Pakistan. But at what stage would Russia and China be definitely ruled out in this high stakes game of nuclear Cluedo? In particular, if the act of nuclear terrorism occurred against a backdrop of existing tension in Washington’s relations with Russia and/or China, and at a time when threats had already been traded between these major powers, would officials and political leaders not be tempted to assume the worst? Of course, the chances of this occurring would only seem to increase if the United States was already involved in some sort of limited armed conflict with Russia and/or China, or if they were confronting each other from a distance in a proxy war, as unlikely as these developments may seem at the present time. The reverse might well apply too: should a nuclear terrorist attack occur in Russia or China during a period of heightened tension or even limited conflict with the United States, could Moscow and Beijing resist the pressures that might rise domestically to consider the United States as a possible perpetrator or encourager of the attack? Washington’s early response to a terrorist nuclear attack on its own soil might also raise the possibility of an unwanted (and nuclear aided) confrontation with Russia and/or China. For example, in the noise and confusion during the immediate aftermath of the terrorist nuclear attack, the U.S. president might be expected to place the country’s armed forces, including its nuclear arsenal, on a higher stage of alert. In such a tense environment, when careful planning runs up against the friction of reality, it is just possible that Moscow and/or China might mistakenly read this as a sign of U.S. intentions to use force (and possibly nuclear force) against them. In that situation, the temptations to preempt such actions might grow, although it must be admitted that any preemption would probably still meet with a devastating response. As part of its initial response to the act of nuclear terrorism (as discussed earlier) Washington might decide to order a significant conventional (or nuclear) retaliatory or disarming attack against the leadership of the terrorist group and/or states seen to support that group. Depending on the identity and especially the location of these targets, Russia and/or China might interpret such action as being far too close for their comfort, and potentially as an infringement on their spheres of influence and even on their sovereignty. One far-fetched but perhaps not impossible scenario might stem from a judgment in Washington that some of the main aiders and abetters of the terrorist action resided somewhere such as Chechnya, perhaps in connection with what Allison claims is the “Chechen insurgents’ … long-standing interest in all things nuclear.”42 American pressure on that part of the world would almost certainly raise alarms in Moscow that might require a degree of advanced consultation from Washington that the latter found itself unable or unwilling to provide. There is also the question of how other nuclear-armed states respond to the act of nuclear terrorism on another member of that special club. It could reasonably be expected that following a nuclear terrorist attack on the United States, bothRussia and China would extend immediate sympathy and support to Washington and would work alongside the United States in the Security Council. But there is just a chance, albeit a slim one, where the support of Russia and/or China is less automatic in some cases than in others. For example, what would happen if the United States wished to discuss its right to retaliate against groups based in their territory? If, for some reason, Washington found the responses of Russia and China deeply underwhelming, (neither “for us or against us”) might it also suspect that they secretly were in cahoots with the group, increasing (again perhaps ever so slightly) the chances of a major exchange. If the terrorist group had some connections to groups in Russia and China, or existed in areas of the world over which Russia and China held sway, and if Washington felt that Moscow or Beijing were placing a curiously modest level of pressure on them, what conclusions might it then draw about their culpability

### Contention \_ Proliferation

#### U.S. influence in fuel cycles is declining – need to reengage in commercialization research

**Rasp 11 –** communications director for the Energy Institute at the University of Texas-Austin

(Gary Rasp, “Spent nuclear fuel is anything but waste”, Energy Institute at University of Texas at Austin, 2-20-2011, http://www.eurekalert.org/pub\_releases/2011-02/teia-snf021611.php)

Time has come revive long-dormant reprocessing program Failure to pursue a program for recycling spent nuclear fuel has put the U.S. far behind other countries and represents a **missed opportunity** **to** enhance the nation's energy security and **influence other countries**, the former chairman of the Nuclear Regulatory Commission said Sunday. Dale Klein, Ph.D., Associate Vice Chancellor for Research at the University of Texas System, said largely unfounded concerns and "long-held myths" about the reprocessing of spent fuel have prevented the U.S. from tapping into an extremely valuable resource. Spent nuclear fuel, which includes some plutonium, often is inaccurately referred to as waste, Klein said. "It is not waste," he said. "The waste is in our failure to tap into this valuable and abundant domestic source of clean energy in a systematic way. That's something we can ill-afford to do." Klein, who also serves as an associate director at UT Austin's Energy Institute, made his remarks Sunday morning at the American Association for the Advancement of Science's (AAAS) annual meeting, in Washington, D.C. Compared to other fuels used in the production of electricity, the energy density of uranium is remarkable, Klein said, noting that 95 percent of the energy value in a bundle of spent nuclear fuel rods remains available to be re-used. "The once-through nuclear fuel cycle, which is our practice in the U.S., is an enormous waste of potential energy," he said. Critics cite the potential for nuclear weapons proliferation as the biggest reason to oppose recycling. But such concerns are largely unfounded, Klein said. "While it is true that the plutonium in recycled nuclear fuel is fissionable, no country in the world has ***ever*** made a nuclear weapon out of low-grade plutonium from recycled high burn-up nuclear fuel," he said. "It just doesn't work for a strategic or a tactical nuclear weapon." While the U.S. has sat on the sidelines, other countries, including France, Japan, the United Kingdom, Russia, India, and China have dedicated **significant resources** toward their reprocessing programs, Klein added. "**U.S. leadership in this area has been lost, and the underlying technological capability and intellectual capital needed to compete internationally have diminished to near irrelevance**." Reprocessing not only recovers significant energy value from spent fuel, it substantially reduces the volume and radiotoxicity of high-level nuclear waste. Today, U.S. utilities operating nuclear power plants continue to store spent nuclear fuel rods on site in pools of water, before eventually moving them to dry cask storage. And while there is some debate over whether the casks should be located in one central storage site, the practice is widely accepted as safe and secure. "That's another myth – that we don't know how to safely store nuclear spent fuel," Klein said. Establishing a program to recycle nuclear fuel will require a public-private partnership that operates outside normal Congressional appropriations and has a charter to manage the fuel over a period of decades, he asserted. The government's Blue Ribbon Commission, chartered by the Department of Energy, is charged with making recommendations for the safe, long-term management of spent fuel. The 15-member commission is to issue a draft report this summer, with a final report to be completed in January 2012. "At a time when we are seeking ways to limit carbon emissions from the generation of electricity, the recycling of spent nuclear fuel would appear to be a particularly good fit."

#### Plan increases leverage – commercial R&D allows us set fuel cycle standards

NNSA ‘8

(“Nonproliferation Impact Assessment for the Global Nuclear Energy Partnership Programmatic Alternatives”, December 2008, http://nnsa.energy.gov/sites/default/files/nnsa/inlinefiles/GNEP\_NPIA.pdf)

Policy Impact: By taking an active role in spent fuel recycling, the United States would strengthen its ability to influence how other countries engage in recycling. In choosing to abstain from civil spent fuel reprocessing for the past 30 years, the United States aimed to influence other countries to make the same choice. However, some countries had already chosen to pursue civil reprocessing. The U.S. choice not to pursue that path reduces the U.S. ability to influence the policies and practices of those who do. Conversely, by choosing to pursue civil spent fuel recycling, the United States could increase its influence among those countries and over time establish a leadership role. Such leadership and influence could take several forms. First, the United States could define and build consensus on goals for spent fuel recycling. The GNEP Statement of Principles provides an example of successful U.S. leadership in this area (see text box below). Second, the United States could cooperate with international partners on Research And Development for technologies to achieve those goals, subject to constraints on the transfer of sensitive technologies (see Chapter 2). Third, by participating directly in developing the options for providing back-end fuel services, the United States could set standards that influence the choices of other countries, either as users or as providers of back-end services. By working to establish partnerships with other countries to offer a comprehensive package of nuclear energy and fuel cycle services, the United States could help define how those partnerships functioned to meet shared nonproliferation objectives through full actinide recycle.

#### Plan solves signal – ensures prolif resistant tech is adopted, bolsters U.S. nonprolif leadership, and no risk of tech diversion

**ANS ‘11**

(American Nuclear Society “American Nuclear Society Issue Paper on the Nuclear Fuel Cycle and U.S. Nuclear Nonproliferation Policy”, 2011, http://www2.ans.org/pi/ip/pdfs/nonproliferation.pdf)

U.S. nonproliferation policy is set forth in Presidential Decision Directive-13 (PDD-13), dated September 27, 1993, which states that “the United States does not encourage the civil use of plutonium and, accordingly, does not engage in plutonium reprocessing for either nuclear power or nuclear explosive purposes.” For more than 40 years, the U.S. engaged in both plutonium reprocessing for defense purposes and in programs to develop nuclear reactors that would “breed” plutonium for use in nuclear energy systems. “Breeder” reactors are reactors that can actually produce more fuel than they consume. Breeder reactor programs were pursued by the U.S., along with France, Japan, Russia, and other countries, as a way to help ensure energy independence by extending nuclear fuel supplies from a 50-100 year reserve to a reserve of more than 1000 years. Today, France, Japan, Russia, and the United Kingdom also reprocess civilian nuclear fuel to maximize the use of nuclear fuel resources in conventional reactors. In implementing PDD-13, the U.S. Department of Energy (DOE) ceased both defense plutonium reprocessing and the development of breeder reactors. The U.S. breeder reactor programs were terminated in 1994, under the premise that by pursuing breeder reactor development, the U.S. was sending a signal to other countries that we weren’t serious about our objection to the civil use of plutonium. **Despite the U.S. action**, France, Japan, Russia, and other countries continued the development of breeder reactors and the use of reprocessing. **Commercial reprocessing is a major international industry**. Since 1994, great strides have been made world-wide in the development of nuclear fuel recycling technologies that do not result in the separation of plutonium suitable for use in nuclear weapons. These technologies have been developed with the express purpose of greatly reducing or eliminating altogether the potential for proliferation from nuclear fuel recycling operations. These technologies could lead to the development of nuclear energy systems that produce an essentially inexhaustible supply of nuclear fuel. The need for the U.S. to reassert its leadership in nuclear fuel cycle research was spelled out in a January 2000 report of the Center for Strategic and International Studies Project on Global Nuclear Materials Management. This Project, Chaired by former Senator Sam Nunn, concluded that “The United States has virtually **disengaged** from international discussions and cooperation on the future of the nuclear fuel cycle.” The report recommends that “the United States should re-engage in international discussions and R&D on safe and proliferation-resistant approaches to the fuel cycle.” This re-engagement should conducted be with an eye toward “finding ways to better utilize limited nuclear resources and ensure adequate fuel supplies for the long-term...” This is not to infer that commercial nuclear fuel reprocessing should be resumed in the U.S. at this time. There are no driving economic or resource issues that would prompt the U.S. today to consider commercial recycle. However, as advocated by Senator Pete Domenici, it is in the national interest to ensure that proliferation-resistant recycle technologies are available when they are needed, and to restore U.S. influence over nuclear fuel cycle decisions abroad. To achieve these important national security goals, the U.S. should resume research as part of a larger effort to develop sustainable nuclear energy systems. Recommendation The American Nuclear Society believes it is time for the U.S. to allow the consideration of proliferation-resistant nuclear fuel recycling technologies and nuclear power systems. This action will help ensure that proliferation-resistant recycle technologies are available when they are needed, and will give the U.S. a greater degree of influence over nuclear fuel cycle decisions made abroad. The next Administration should acknowledge that not only can closed fuel-cycle research be conducted in a manner consistent with U.S. nonproliferation policy, it is necessary to enable effective implementation of that policy.

#### U.S. nonprolif leadership key – alternative is ambivalence and nuclear brinkmanship

Ogilvie-White ’12 – senior analyst in international strategy at the Australian Strategic Policy Institute

(Dr. Tanya, “Position Vacant: Nonproliferation and Disarmament Leader, Asia”, PacNet, a publication of CSIS, Number 77A, 12-5-2012, http://csis.org/files/publication/Pac1277A.pdf)

During the past few weeks, there have seen some striking discussions in the international media about the future strategic order. One of the most interesting is an article by Ralph Cossa and David Santoro, which was originally published as a PacNet (PacNet #77, Nov. 26, 2012) and was then picked up by the Japan Times. Two short sentences half way through the piece particularly caught my eye: “The United States has limited power and influence to shape the major power agenda in the Asia-Pacific. The future of this agenda will be determined by decisions made in Beijing, New Delhi and Islamabad – not in Washington.” This is true over the longer-term, and the implications for world order are significant. It brings to mind William Walker’s new book, A Perpetual Menace, which raises concerns about the weaklydefined Asia-centric system of military engagement that is likely to replace the Eurocentric one. The big questions are: how will peace and stability be achieved as US preeminence wanes, and what values will underpin the new Asia-centric system? This discussion is becoming urgent, including in the nuclear context. One problem is that the existing nonproliferation regime has been largely shaped by the Eurocentric system (the Western powers and the Soviet Union/Russia) that is currently in decline. At the heart of this regime, the Nuclear Nonproliferation Treaty (NPT) has expanded and deepened its original role, achieved almost universal membership and withstood serious challenges, primarily because its strategic and political value has been recognized by the states that have dominated the Eurocentric system. Of these, the US has had the most significant impact on the Treaty’s success: when it has offered proactive support, great strides have been possible; when it has dropped the ball, as it did most dramatically during the George W. Bush years, the consequences have been serious. As power continues to shift eastward, it is likely that the nonproliferation regime will eventually slip out of the United States’ grip. Critics of the US may welcome this development, but the danger is that the leadership role will pass to a more ambivalent successor or be left vacant altogether. In a world in which states still dominate, and in which international governmental organizations, legal frameworks, and norms are dependent upon the support of the most powerful states, this would have huge implications, threatening to unravel a critical security regime that has taken nearly 50 years to build. At the moment, it is not clear whether the nuclear nonproliferation regime can be embedded into an Asia-dominated strategic order. It is not even clear that Asia’s potential superpowers want this to occur, or whether they would consider a future of further horizontal and vertical nuclear weapons proliferation as fairer, more equitable, and possibly even more stable than the current uneasy compromise between nuclear haves and have-nots. It’s a worrying situation, which in the worst-case scenario could trigger the same kind of short-sighted and dangerous nuclear brinkmanship that characterized the early years of the Cold War. Only this time there would be some appalling additions: more powerful weapons, new platforms, fragile nuclear-armed states, and nonstate actors that seek nuclear materials for use in terrorist acts. What Asia needs is leaders who possess the right combination of influence, vision, and courage to champion non-nuclear norms and create and sustain nonproliferation and disarmament momentum. What Asia has is rather different. China has often shown a blatant disregard for nonproliferation instruments and norms, and is expanding and modernizing its nuclear arsenal. India, which has steadfastly refused to join the NPT on the basis that it is discriminatory and does not serve its strategic interests, is linked into a nuclear triangle with China and Pakistan, from which it is unable and unwilling to detach itself. The only states in the region that currently show leadership potential lack the necessary strategic clout to back it up, and must rely on others. ASEAN is an important international actor in this respect, although it has not always been consistent where nonproliferation advocacy is concerned, and the organization’s future is increasingly vulnerable to divisive great power ambitions. Diplomatic coalitions that operate within the NPT review process are another important source of leadership, but – as Japan and Australia may discover in spearheading the Nonproliferation and Disarmament Initiative – they are notoriously difficult to manage and even harder to sustain over the longer-term.

#### Brink is now – bipolar deterrence will fail in multipolarity

**Rosenbaum ‘11**

(Ron, journalist, graduated Yale’s English Literature Graduate Program, “How The End Begins: The Road To A Nuclear World War III,” March 2nd, <http://www.npr.org/2011/03/02/134203232/Ron-Rosenbaum-World-On-The-Brink-Of-World-War-III>)

And so by the time the Israeli jets reached the northeast corner of Syria and turned toward the Syrian reactor on the Euphrates, threats and counterthreats may well have been zapping through the ether and suddenly both nuclear superpowers with approximately five thousand land-based nuclear missiles on "hair-trigger" alert were on the verge of — only one misperception or hasty overreaction, one degree of separation away — being drawn into a potential regional **nuclear war**. Then there's the wild card, Pakistan, with its "Islamic bomb," which is shorthand for some sixty to one hundred warheads under the kind of loose, decentralized control that could allow a regional commander with ties to Islamic nations such as Iran and Syria to step in and set off another variety of **regional nuclear war** with equal **potential for escalation**. All those signals, threats, and counterthreats flashing through the night could easily have been known to the "very senior" British minister quoted in The Spectator, assuming he had access to GCHQ, Government Communications Headquarters, the legendary British signals interception facility, which, in tandem with the U.S. government's NSA (National Security Agency and its spy satellite system), can listen in to just about everything, even to secret military encryptions, in near real time. What the very senior minister was describing was perhaps the most perilous — and emblematic — crisis of the second nuclear age thus far: it is a new world in which the bipolar "stability" of the "balance of terror" has degenerated into a chaotic state of multipolar nuclear powers with less control and less restraint and a greater chance of touching off a regional nuclear war that could escalate to global scale. Nuclear proliferation scholar Benjamin Frankel tells us the "inherent complexity" of the new nuclear age "dooms multipolar systems to instability making them susceptible to crisis and war." "The world has arrived at **a nuclear tipping point**," a Carnegie Endowment for International Peace study warned. "We are at the tipping point," former Senator Sam Nunn, co-founder of the Nuclear Threat Initiative, has said, "and we are headed in the wrong direction." "The current global nuclear order," declared Harvard's Graham Allison, "is **extremely fragile**." Already India and Pakistan nearly used their nuclear arsenals against each other in 1999 and 2002. That was still bipolar. The Syria raid, however, was the most dramatic embodiment of the difference between the bipolar Cold War type of nuclear war close calls, and the new type of multipolar chain reactions that could reach critical mass in our new nuclear age

#### Prolif would be fast – cheaper and newer tech makes it easier to hide

**Heisbourg ’12 –** chairman of the International Institute for Strategic Studies

[François, chairman of the International Institute for Strategic Studies, special adviser at the Fondation pour la Recherche Stratégique, “How Bad Would the Further Spread of Nuclear Weapons Be?” http://www.npolicy.org/article.php?aid=1171&rtid=2]

**Ongoing proliferation differs from that of the first half-century 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, cross-border 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-to-state 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 CANDU-type 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. Non-state 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.

#### Prolif causes first strikes, use-or-lose pressures, and deterrence breakdowns

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**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.[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**.[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.[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.”[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.[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.

#### Prolif causes accidental nuclear war – high-alert and delegation increase the risk

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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.[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.[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.[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.[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.[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.”[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 increasing probability 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.”[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**.[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**.

# 2ac

### Solvency

#### Utilities would reprocess – concerns about spent nuclear fuel

Beattie ’11

(Jeff, “Areva Exec: U.S. Utilities Rallying Behind Reprocessing.”, Energy Daily, Issue 108, p.3, 6-7-2011, accessed on EbscoHost)

Despite questions raised about the near-term feasibility of the technology by the Obama administration's expert panel on radioactive waste management, U.S. utilities are becoming increasingly interested in the possible development of a large-scale nuclear reprocessing facility to handle their spent reactor fuel, the head of Areva's U.S. unit said Monday.¶ Jacques Besnainou, chief executive officer of Areva Inc., told reporters at a press breakfast sponsored by The Energy Daily and Areva that his company's talks with U.S. utilities on the possibility of a new domestic spent fuel reprocessing facility have "accelerated" as utility leaders have watched the crisis unfold at the Fukushima Daiichi plant and have begun re-thinking how to best manage radioactive spent fuel at their plants.¶ Indeed, he said Areva Inc., the U.S. subsidiary of French nuclear giant Areva, plans to unveil an alliance with U.S. utilities later this year to forcefully push for the construction of an integrated recycling center in the United States.¶ In expansive remarks, Besnainou also said the continued large-scale storage of spent fuel at U.S. reactors was "immoral" in that it left a huge liability to the next generation.¶ And he suggested that the administration's expert panel on nuclear waste is merely "kicking the can down the road" with a recent set of interim recommendations that the United States should re-frame its nuclear waste management plans around finding one or more volunteer communities to host interim storage sites for fuel currently stored at dozens of reactor sites around the country.¶ Futher, Besnainou suggested that the U.S. government likely would have a hard time finding a community willing to host a controversial spent fuel storage facility because it would provide few jobs and economic benefits.¶ In contrast, he said he believes there could be a competition among states and communities to host a reprocessing plant because of the large number of jobs and economic growth it could provide, both during construction and operation.

### Proliferation

#### PUREX is inevitable globally

Paviet-Hartmann et al ’11

(Patricia, Gary Cerefice, Marcela Riveros Stacey, Steven Bakhtiar, “Analysis of Nuclear Proliferation Resistance Reprocessing and Recycling Technologies”, Idaho National Laboratory, 2011, http://www.inl.gov/technicalpublications/Documents/5025962.pdf)

The selection of strategy for UNF management is a complex decision with many factors to be taken into account including technical issues associated with the composition of the domestic reactor fleet, national legal and regulatory framework, political and public acceptance, economics and environmental protection, proliferation risks. Conventional recycling technology is expected to play an important role in the medium term (IAEA 2008). The PUREX process has been progressively and continuously improved during the past three decades, and these improvements account for successful commercialization of reprocessing in a few countries such as France, Japan and UK. We should not forget though that one of the greatest proliferation concern could be associated with any enrichment process. It is clear that some techniques may be more susceptible to various kinds of abuse or misuse than others. But this should not stop the renewed interest in nuclear energy and the international growth of nuclear electricity generation. Indeed, the nuclear renaissance presents a unique opportunity to enhance the culture of nonproliferation. The nuclear industry will play a major role in strengthening this culture. While a few countries have taken irresponsible actions in the nuclear field that threaten the international and regional peace and security, the international nonproliferation system has, on the whole, been highly successful in limiting the spread of nuclear weapons. One hundred and eighty seven states now adhere to the Treaty on the Non-Proliferation Of Nuclear Weapons (NPT). Only three states, Pakistan, Iran and North Korea have elected not to join NPT, and some states such as South Africa and Libya have abandoned or dismantled their nuclear weapon programs altogether. (Lauvergeon, 2009)

#### Any signal of reprocessing won’t affect the global market

**Lee 10**

(Nathan R. Lee, WISE Intern and B.S.E. in Materials Science & Engineering from UPenn, Sustainability Of U.S. Nuclear Energy: Waste Management And The Question Of Reprocessing American Nuclear Society, 2010, http://www.wise-intern.org/journal/2010/NathanLeeWISE2010.pdf)

No matter how much some nuclear energy proponents might play down the dual purpose of nuclear technologies, as long as the fundamental driving force remains the splitting of the atom, so too will the risk of proliferating those technologies for use in an atom-splitting bomb. Seeking a proliferation-proof nuclear energy policy is futile; instead, a smart policy should aim to maximize proliferation resistance under the given circumstances. In the case of reprocessing used nuclear fuel, the principal concern is over the isolation of plutonium in the product stream, which could then be converted for use in a bomb. Unprocessed used nuclear fuel is sufficiently secure against physical enemy intrusion due to the multiplicity of highly radioactive components it contains. Since plutonium itself is not highly radioactive, it becomes much easier to approach after separation. Although newer reprocessing technologies leave different radioactive contaminants in the product stream to offset the loss in proliferation resistance, none of them remain significantly “self-protecting” by the International Atomic Energy Agency (IAEA) standards (Fig. 10). There are several avenues by which plutonium proliferation could occur. A terrorist group or rogue state could steal the plutonium from the product stream of another country’s reprocessing plant or could acquire the technology itself on the black market to isolate plutonium themselves. Another risk involves a state legally operating a reprocessing facility but illegally diverting plutonium from the product stream or operating a clandestine plant in parallel. Any of these scenarios could occur for all the reprocessing technologies considered. While the risk levels for one-pass Pu recycling and full actinide recycling would vary based on total material flow, amount of transport required, technology safeguards, and additional factors, the fundamental issue of plutonium isolation is the same. President Carter’s decision to ban reprocessing in the U.S. was ostensibly motivated by this issue. It was supposed to deter other nuclear countries from reprocessing as well, thereby bolstering global nonproliferation. However, they did not follow suit; several countries now operate reprocessing facilities. Consequently, the proliferation ramifications of implementing reprocessing in the United States in the 21st century are no longer the same as perceived in the early stages of the nuclear industry. Not only has the international deterrent argument been largely discredited, but the marginal impact in the global proliferation risk from initiating reprocessing in the U.S. would be much less substantial now that there already exists **an established international reprocessing market.** Furthermore, by entering this market, some argue that the U.S. might actually slow the dissemination of reprocessing technology by providing the service to other countries that wish to reprocess their used nuclear fuel, making domestic development less economical. 38 However U.S. reprocessing would affect the global interplay, by far the most critical factor for deciding whether to reprocess domestically would be our own ability to prevent direct proliferation. In this arena, the U.S. has proven over the last sixty years that it can effectively manage and safeguard large plutonium stockpiles and dangerous technologies. 39 Moreover, improvements are already underway in utilizing real-time monitoring of material flows to detect and prevent proliferation attempts. 40

#### States haven’t pursued reprocessing because of economic constraints, not U.S. policy—and the economic climate is changing

NNSA ‘8

(“Nonproliferation Impact Assessment for the Global Nuclear Energy Partnership Programmatic Alternatives”, December 2008, http://nnsa.energy.gov/sites/default/files/nnsa/inlinefiles/GNEP\_NPIA.pdf)

Policy Impact: Proponents of a once-through policy argue that the U.S. adoption of a once through fuel cycle has been effective in discouraging reprocessing by demonstrating that reprocessing is not necessary for the large-scale use of nuclear power. They argue that since the United States adopted this strategy in the 1970s, no new country has begun reprocessing for civil purposes. They also note that U.S. diplomatic efforts both to discourage specific countries from reprocessing and to discourage suppliers from providing reprocessing facilities to additional countries have been strengthened by the ability to argue by example that reprocessing was not necessary for a civil nuclear power program. The United States has also been able to exercise consent rights over reprocessing of spent fuel produced through the use of nuclear material transferred from the U.S. either to block countries from reprocessing or to shape the nonproliferation conditions under which such reprocessing could take place. 85 However, others argue that economic factors may have been the underlying reason other States have not pursued reprocessing. Those factors include the high cost of building a reprocessing facility, the relatively low cost of LEU and the availability of reprocessing services from France, Russia and the United Kingdom. But the economic picture is changing and those factors may not continue to prevail.

#### The net effect of the Aff is positive for nonproliferation, even if they win their signal or diversion arguments

NNSA ‘8

(“Nonproliferation Impact Assessment for the Global Nuclear Energy Partnership Programmatic Alternatives”, December 2008, http://nnsa.energy.gov/sites/default/files/nnsa/inlinefiles/GNEP\_NPIA.pdf)

One potential drawback of deploying a full actinide recycle fuel cycle in the United States is that it might encourage countries that do not currently recycle spent fuel to start doing so. However, compared to the LWR recycle programs currently in use overseas, the technical challenges for countries considering full actinide recycle would be relatively high. It could also increase pressures for international cooperation in reprocessing R&D beyond current technology holders. Proponents of a once-through fuel cycle argue that by embarking on full actinide recycle alternatives, the United States would set an example that some countries would emulate by developing their own reprocessing programs. They argue that efforts to reinforce existing divisions between countries that have reprocessing programs and those that do not will provoke a backlash among developing countries and other aspiring nuclear states that will lead some to pursue reprocessing. However, given the economies of scale necessary to make commercial reprocessing programs cost effective, few countries would have large enough nuclear power programs to justify the expense of building their own reprocessing facilities. If the United States joined other countries that recycle spent fuel in offering back-end fuel services on attractive terms (reliable, affordable, and without onerous conditions), the net effect would be to discourage the spread of civil reprocessing. If the fuel services are structured in a way that gives customers some level of control over how they operate, 98 those customers might be more inclined to rely on such services.

### T

#### Counter-interpretation—

#### For means “in support of”

**OED 11**

(Oxford English Dictionary, "for", http://oxforddictionaries.com/definition/for?view=uk-http://oxforddictionaries.com/definition/for?view=uk)

in support of or in favour of (a person or policy):

#### Financial incentives are resource transfers to lower the cost of production – R&D meets

**EIA 1** – US Energy Information Administration

(Renewable Energy 2000: Issues and Trends, Report prepared by the US Energy Information Administration, "Incentives, Mandates, and Government Programs for Promoting Renewable Energy", http://tonto.eia.doe.gov/ftproot/renewables/06282000.pdf)

Over the years, incentives and mandates for renewable¶ energy have been used to advance different energy¶ policies, such as ensuring energy security or promoting¶ environmentally benign energy sources. Renewable¶ energy has beneficial attributes, such as low emissions¶ and replenishable energy supply, that are not fully¶ reflected in the market price. Accordingly, governments¶ have used a variety of programs to promote renewable¶ energy resources, technologies, and renewable-based¶ transportation fuels.¶ 1¶ This paper discusses: (1) financial¶ incentives and regulatory mandates used by Federal and¶ State governments and Federal research and development (R&D),¶ 2, 3¶ and (2) their effectiveness in promoting¶ renewables. ¶ A financial incentive is defined in this report as providing one or more of the following benefits:¶ A transfer of economic resources by the Government to the buyer or seller of a good or service that¶ has the effect of reducing the price paid, or,¶ increasing the price received, respectively; ¶ Reducing the cost of production of the good or¶ service; or,¶ Creating or expanding a market for producers.¶ The intended effect of a financial incentive is to increase¶ the production or consumption of the good or service¶ over what it otherwise would have been without the¶ incentive. Examples of financial incentives are: tax¶ credits, production payments, trust funds, and low-cost¶ loans. Research and development is included as a¶ support program because its effect is to decrease cost,¶ thus enhancing the commercial viability of the good(s)¶ provided.¶ 4

#### Applied R&D is uniquely T under this interpretation – we exclude basic R&D

**EIA 99** – Energy Information Administration / Federal Energy Market Interventions 1999: Primary Energy, "3. Federal Energy Research and Development", http://www.eia.gov/oiaf/servicerpt/subsidy/pdf/research.pdf)

Federal energy-related R&D can be described as falling¶ into three classes: basic research, research that seeks to¶ develop new energy technologies, and research that seeks¶ to improve existing technologies.¶ • Basic Research. The potential beneficiaries of basic¶ research could be considered to be the population of¶ the United States or the world as a whole. Basic¶ research includes research projects designed to pursue¶ the advancement of scientific knowledge and the¶ understanding of phenomena rather than specific¶ applications.¶ • Research To Develop New Technologies. The efforts¶ in this context involve attempts to discover new¶ scientific knowledge that can have commercial¶ application. Although the end objective of the research¶ is known, the research task is difficult and uncertain.¶ • Research To Improve Existing Technologies. These¶ efforts emphasize the use of scientific knowledge to¶ design and test new processes that may have¶ substantial technical and cost uncertainties. The¶ immediate beneficiaries are generally well defined:¶ current producers and consumers of particular fuels¶ or operators, and customers of the technology being¶ improved. It is easier to measure energy R&D spending than to it characterize from a subsidy perspective. R&D spending is¶ intended to create useful knowledge that benefits society. Thus, all Federal R&D spending could, in a general way,¶ be considered a subsidy to knowledge; however, the extent to which specific R&D programs actually affect energy¶ markets is more difficult to ascertain.¶ The results of research are inherently uncertain. Many programs will advance knowledge across a range of energy¶ and non-energy applications, rather than in the context of a particular fuel or form of consumption. Further, the¶ knowledge obtained may be negative, in the sense that the research may only reveal technical or economic dead ends¶ to be avoided in the future.¶ 42¶ Thus, only a portion of Federal energy R&D is likely to achieve results (in the form¶ of changes in energy costs or consumption) that can be attributed specifically to a particular R&D program.¶ Moreover, to the extent that there are attributable results, they are likely to be measurable only years after the funded¶ research effort is initiated.¶ Federal R&D is intended to support research that the private sector would not undertake. It is not supposed to¶ substitute for private-sector R&D. However, the creation of a Government-funded R&D program could, under some¶ circumstances, displace private-sector R&D. In that case, the Federal program would not produce any net new¶ knowledge but simply reduce private costs. It is impossible, however, to know with certainty what private-sector¶ firms would have done in the (hypothetical) absence of a Federal program. In general, the less “basic” the R&D¶ program and the more focused on near-term commercialization, the greater the risk that the program will be a¶ substitute for private-sector R&D.¶ There are no means to determine conclusively whether or not particular Federal energy R&D projects are substitutes¶ or complements for private-sector activities. Moreover, because research is risky, with failure an inherent part of the¶ process, the effectiveness of Federal R&D cannot easily be assessed. This report makes no judgments on either of¶ these issues. Rather, it surveys the current composition of Federal R&D spending and provides a degree of historical¶ perspective on the changing composition of Federal energy R&D efforts.¶ There is another issue that is specific to U.S. energy R&D programs: much U.S. energy R&D is aimed not at¶ producing fuels per se but at developing fuel-consuming capital equipment (particularly power generation¶ technologies). Such projects may be more properly viewed as a subsidy to capital equipment manufacturers than to¶ fuel producers or consumers. Although, in principle, all successful power generation R&D benefits electricity¶ consumers, the effects on fuel producers are more ambiguous. Because they are energy-saving technologies, the new¶ technologies will only benefit producers if they help to expand the market for their fuel. Thus, if one seeks to¶ understand the effects, rather than the intent, of R&D spending, the success of the programs must be evaluated,¶ noting that expenditures will necessarily occur long before technology adoption, and considering the competitive¶ consequences of any new technologies introduced.¶ Finally, much of the expenditure that is formally defined as “energy research and development” in the U.S.¶ Government’s budget accounts is not directly expended on energy research or development. Some of the funds are¶ expended for environmental restoration and waste management for energy (particularly nuclear) research facilities or on R&D on environmental restoration and waste management, or on overhead or difficult-to-allocate functions.¶ Such spending may not have a material impact on current or future energy markets.¶ Energy Research and Development Trends¶ Table 8 allocates Federal energy R&D by energy type and function. Currently, nearly two-thirds of Federal energy¶ R&D ($2.8 billion) is allocated to basic research. DOE’s largest single basic research program is the General Science¶ Program, funded at $1.6 billion in fiscal year 1999. Basic research is difficult to characterize as an energy subsidy,¶ however, because it cannot be allocated between energy and non-energy benefits, or among forms of energy.¶ Therefore, the balance of this chapter focuses on applied energy R&D.¶ Table 8 lists both “estimated” and “actual” research and development appropriations for fiscal year 1992. The¶ estimated appropriations are drawn from the Department of Energy’s fiscal year 1993 budget proposal, prepared in¶ early 1992, which showed appropriations by budget account for the previous fiscal year.¶ 43¶ The estimated¶ appropriations were used in EIA’s 1992 subsidy report. The actual appropriations are drawn from the Office of the¶ Chief Financial Officer’s Appropriation History Tables, prepared in early 1997, which show final appropriations by¶ budget account.¶ The differences between the two columns have multiple causes. The Department transfers (with the approval of¶ Congress) unspent monies from one account to another. This may take place well after the end of a fiscal year if the¶ Department has multi-year spending authority for a particular account. The largest difference between the two¶ columns is due to a large reprogramming of funds for fusion research. There have also been several changes of¶ classification. For example, the account “Biological and Environmental Research” has been transferred from¶ “Environment, Safety, and Health” to “General Science.” In addition, minor errors in the original 1992 report have¶ been corrected in the final appropriations column. For example, some of the expenditures on wind in the “Wind,¶ Photovoltaic, and Other Solar” category were interchanged with biomass expenditures in the 1992 report.¶ Applied R&D is aimed primarily at improving existing technology. Appropriations for applied energy R&D were¶ about $1.5 billion in fiscal year 1999. Of that amount, more than half is allocated to nuclear activities. Within the¶ range of nuclear projects, most of the money is spent on environmental management rather than R&D per se. For coal,¶ the bulk of spending supports development of clean coal technologies. Solar, photovoltaic, and wind energy absorb¶ the major share of renewable energy research funds ($134 million out of a total of $327 million). Expenditures shown¶ as “unallocated” in Table 8 are administrative and miscellaneous programs associated with R&D. For example,¶ unallocated expenditures for nuclear R&D ($143 million) in fiscal year 1999 include program termination costs and¶ program direction. For renewable energy programs, they include program direction and funding for the National¶ Renewable Energy Laboratory ($22 million in fiscal year 1999). The unallocated appropriation for basic energy¶ research ($49.8 million in fiscal year 1999) funds personnel in a variety of research centers and provides support¶ services and other related expenses. Figure 3 illustrates trends in Federal applied energy R&D¶ appropriations from fiscal year 1978 through fiscal year¶ 1998. There were sharp reductions in energy R&D¶ appropriations during the early 1980s, followed by¶ modest growth after 1992. R&D spending by fuel type is¶ dominated by nuclear power R&D, although coal R&D¶ appropriations were boosted in the late 1980s by the¶ advent of the Clean Coal Technology Program, and¶ renewable energy appropriations have risen somewhat¶ since 1990. Federal R&D spending related to oil and gas¶ is budgeted at $164 million in fiscal year 1999.¶ Another recent trend in Federal R&D is a tendency for¶ Congress to mandate research on particular projects. Title¶ XIII of the Energy Policy Act of 1992 wrote much of¶ DOE’s coal R&D program into law and added some new¶ areas of research, mandating R&D on coal-fired diesel¶ engines, nonfuel coal use, coalbed methane, metallurgical¶ coal development, coal gasification, coal liquefaction, lowrank coal use, and magnetohydrodynamic power¶ generation. There are similar detailed provisions¶ throughout the law for research on other energy sources,¶ including nuclear power, end use, and renewable energy. Figure 4 illustrates trends in DOE’s nuclear power R&D¶ Non-Defense Environmental Safety and Health¶ A substantial portion of Government-funded nuclear R&D¶ is for managing and addressing the environmental legacy¶ resulting from nuclear energy and research activities. The¶ goal is to clean up as many contaminated sites as possible¶ by 2006. For fiscal year 1999, more than one-half of nondefense environmental, safety, and health funds are¶ allocated for site closures. The Nuclear Energy Research Initiative provides funds for¶ R&D at universities, national laboratories, and industry to¶ advance nuclear power technology. It includes¶ proliferation-resistant reactor and fuel technologies, highperformance, high-efficiency reactor technology, advanced¶ nuclear fuels, and new technologies for the minimization¶ and management of nuclear waste. The fiscal year 1999¶ appropriation for this program is $19 million, out of the¶ $30 million for new or improved nuclear power plants.

#### Prefer this interpretation –

#### Limits –

**REPP ‘99** (copyright © 1999 by Renewable Energy Policy Project “Selected Finance Programs for Sustainable Energy” EPP's Mission REPP's goal is to accelerate the use of renewable energy by providing credible information, insightful policy analysis, and innovative strategies amid changing energy markets and mounting environmental needs by researching, publishing, and disseminating information, creating policy tools, and hosting highly active, on-line, renewable energy discussion groups. What REPP Does REPP supports the advancement of renewable energy technology through policy research. REPP seeks to define growth strategies for renewables that respond to competitive energy markets and environmental needs. Since its inception in 1995, REPP has investigated the relationship among policy, markets and public demand in accelerating the deployment of renewable energy, which include biomass, hydropower, geothermal, photovoltaic, solar thermal, wind and renewable hydrogen. The organization offers a platform from which experts in the field can examine issues of medium-to long-term importance to policy makers, green energy entrepreneurs, and environmental advocates. REPP Funders Energy Foundation, Oak Foundation, SURDNA Foundation, Turner Foundation, Bancker-Willimas Foundation, Joyce-Mertz-Gilmore Foundation, United States Department of Energy, National Renewable Energy Lab, and United States Environmental Protection Agency. A Sustainable Energy Industry Cluster for Mesa Del Sol 5. Selected Finance Programs for Sustainable Energy17

**This section discusses financial incentives for renewable energy development**, which are **currently offered by the federal government,** 36 states (not including New Mexico), some utilities, and several private or quasi-private entities. **Incentives include** loans, **cash payments** and tax relief. **Often, the same incentive can aid both suppliers and consumers** of renewable energy technologies-for example, tax incentives for installing a renewable energy project either for personal use, or for electricity to be sold to other end-users. In the following section, we include some incentive programs that could benefit clean energy development in Mesa del Sol, as well as approaches taken elsewhere that New Mexico might adapt. **This section does not address non-financial measures that governments may take**, such as net metering. Financial incentives for suppliers of renewable energy Because financing for suppliers is usually justified by local economic benefits, these incentives tend to come from states, rather than the federal government. Most state financing programs exist in traditional regulated electricity markets. However, as states restructure their electric systems, many may levy a "system benefits charge (SBC)" or wires fee on each kilowatt-hour of electricity distributed. Among other purposes, these funds can be used for public interest programs at risk in a market-oriented system, including those for sustainable energy development. Manufacturing: Eight states offer incentives for in-state renewable energy manufacturing. Incentives include grants, overseas marketing assistance, corporate tax exemptions, property tax exemptions, and tax credits for investors in manufacturing facilities. For example, Virginia's PV Manufacturer Grant Program offers $4.5 million annually until 2001 to companies locating and operating PV manufacturing plants in the state. The program pays firms based on their PV production, at a rate between 75 cents/watt (for in-state manufacture from raw materials to final product) and 20 cents/watt (for in-state assembly only). Firms may receive the benefits for up to five years. The incentive program attracted a $1.5 million facility owned by Atlantis Energie of Switzerland, and a $25 million Solarex (now BP Solarex) facility employing up to 100 workers. The U.S. Small Business Administration's 7(a)(12) Energy and Conservation Loan program offers loans for small businesses engaged in the design, engineering, manufacturing, distribution, marketing, installing, or servicing of energy devices or techniques that conserve U.S. energy resources. Terms for working capital are 7 years; for equipment 10 years; and for buildings 25 years. The interest rate usually cannot exceed 2.75 percent over the prime lending rate, although loans under $50,000 may have higher rates. The SBA will guarantee up to 80 percent of a loan less than $100,000, and 75 percent of a loan more than $100,000. SBA's share of a loan cannot exceed $750,000 to any business. Installation, Operation, and Research: Thirty-six states, the federal government, and private entities such as utilities offer financial incentives for renewable energy technology installation and/or operation. Incentives are targeted both at the supplier of the renewable energy technology, as well as the consumer. **For suppliers, incentives include low-interest loans, revolving loan programs dedicated to renewable energy or energy efficiency, grants, assistance in research and demonstration projects**, leasing and lease-purchase options; tax deductions, tax credits, property tax exemptions, and excise tax exemptions. For example:

#### We meet – nuclear fuel cycle counts as energy production, including electricity generation

International Trade Association ’12

(“The Nuclear Fuel Cycle”, http://trade.gov/mas/ian/nuclear/tg\_ian\_003164.asp)

The nuclear fuel cycle is the series of industrial processes which involve the production of uranium 235 for use in nuclear energy power reactors. Uranium 238 (uranium) is a relatively common element that is found throughout the world, and is mined in a number of countries. But before uranium can be used as fuel for a nuclear reactor, it must first go through a number of processes known as “enrichment.”¶ The various activities associated with the production of electricity from nuclear reactions are referred to collectively as the nuclear fuel cycle. The nuclear fuel cycle starts with the mining of uranium and ends with the disposal of nuclear waste (this is called an open fuel cycle). If the fuel is reprocessed after use, this is called a closed fuel cycle (note: even reprocessing produces a small amount of nuclear waste which cannot be re-used and must be disposed of).

#### Unlimiting is inevitable for nuclear power –

#### Massive number of Generation-III reactor designs that could be their own separate topics—not even the NRC can keep up

Union of Concerned Scientists ‘7

(“Nuclear Power in a Warming World: Assessing the Risks, Addressing the Challenges”, 2007, http://www.ucsusa.org/assets/documents/nuclear\_power/nuclear-power-in-a-warming-world.pdf)

Until recently, designers of new U.S. reactors have focused on evolutionary refinements that aim to make plants safer and less costly to build. The NRC has certified four evolutionary designs: the General Electric (GE) Advanced Boiling Water Reactor (ABWR) and the Westinghouse System-80+, AP600, and AP1000 pressurized-water reactors (PWRs). The first three reactors are sometimes referred to as Generation III, and the AP1000 as Generation III+ (see Table 1, p. 58). 114 Although GE has sold ABWRs abroad, no U.S. company has ordered any of these reactors because of their high cost. 115 The ABWR and System-80+ are very similar to existing plants, while the AP600 was designed to significantly reduce capital costs “by eliminating equipment which is subject to regulation.” 116 This means, in part, that the plant was designed to reduce the number of safetyrelated systems, structures, and components (SSCs)— those needed to mitigate design-basis accidents. 117 Such equipment must meet a much higher standard than commercial off-the-shelf equipment, and may raise its cost by a factor of 10. 118 To reduce the number of safety-related SSCs, the AP600 uses more dual-purpose systems, such as the one that provides water to steam generators during both normal operation and accidents. The AP600 also employs “passive” safety features (e.g., natural convection cooling, a reliance on gravity rather than motordriven pumps). Because concrete and steel account for over 95 percent of the capital cost of today’s reactors, Westinghouse made it a priority to reduce the size of safety-related SSCs such as the containment vessel. Westinghouse claims that this reactor reduces the probability of accidents because it has fewer active safety systems, which can be unreliable. To enhance the effectiveness of the AP600’s passive safety features, Westinghouse limited the power rating of the reactor to 600 MWe. The net result is a higher projected cost for electricity from the reactor than from the ABWR and System-80+, even though the AP600 has a lower projected capital cost. As a result, the AP600 has not proved attractive to U.S. utilities. In response, Westinghouse developed the AP1000— a scaled-up version of the AP600 with a power rating nearly twice as high (more than 1,100 MWe)—to reduce the projected cost of electricity through economies of scale. Several U.S. utilities have indicated interest in building this reactor. Designs under NRC Review As of October 2007, four other Generation III+ designs were in the NRC certification pipeline, although only one had formally begun the licensing process. 119 The others are under pre-application review, which the NRC typically uses to identify major safety and technical issues and determine what research would be needed to resolve them. 120 The one design now under certification review is GE’s 1,500 MWe Economic Simplified Boiling Water Reactor (ESBWR). Like the AP1000, it uses passive safety features and a higher power rating than U.S. plants operating today to reduce its capital cost per installed kilowatt. The three reactor designs in pre-application review are the U.S. Advanced Pressurized-Water Reactor (APWR) developed by Mitsubishi; the Evolutionary Power Reactor (EPR) developed by the French company Areva; and the Pebble Bed Modular Reactor (PBMR) developed by the South African national electric utility Eskom. The 1,700 MWe U.S. APWR is a large evolutionary variant of today’s pressurized-water reactors. Like the ABWR, it offers some incremental improvements over its Generation III counterparts, but it does not have novel features. In contrast, the EPR stands apart from other Generation III+ PWR designs. This design, a joint FrenchGerman project known in Europe as the European Power Reactor, has considerably greater safety margins than designs developed to meet only NRC standards, because it fulfills more stringent safety criteria developed jointly by France and Germany. For instance, the reactor has a double-walled containment structure, whereas the NRC requires only a single-walled one. The EPR also has systems intended to stabilize and contain the reactor core in the event that it overheats, melts, and breaches the reactor vessel. Areva plans to apply for NRC design certification in late 2007. The PBMR is distinctly different from today’s commercial light-water reactors. It uses helium gas as a coolant, a graphite moderator, and fuel consisting of very small uranium-oxide spheres coated with a corrosion-resistant material and embedded in tennis-ball-sized graphite “pebbles.” These pebbles travel from the top to the bottom of the reactor vessel as the reactor operates. Each module has a low power rating (about 150 MWe), so a typical power station would require about a dozen PBMR modules. The PBMR represents another attempt to reduce capital costs through a design intended to be safer. PBMR promoters bill the reactor as “inherently safe,” arguing that the reactor’s low power density and the hightemperature integrity of its fuel would prevent significant fuel damage, even in an accident in which the reactor lost all coolant. (If the fuel retains its integrity, there is no radioactive release.) The U.S. utility Exelon submitted the PBMR design to the NRC for pre-application review in 2000, arguing that the reactor was so safe it did not require a pressureresisting containment vessel—only a less costly “confinement” building. However, because the NRC did not have enough technical information, it had not been able to assess whether the proposed confinement building was acceptable when Exelon terminated the review in 2002. In 2004, the Pebble Bed Modular Reactor Co. (PBMR Ltd.), a consortium that includes British Nuclear Fuels and Eskom, informed the NRC that it wanted to resume the pre-application review, and intends to apply for design certification in 2007. 121 In July 2006 Eskom submitted several white papers to the NRC as part of the pre-application review process. Designs Not Yet under Review In addition to the designs under active review, the NRC has had preliminary discussions with vendors and other interested parties about three other reactor designs. The IRIS (International Reactor Innovative and Secure) design, a pressurized-water reactor with a relatively low power rating of 325 MWe, is being developed by an international consortium headed by Westinghouse. Westinghouse submitted the IRIS design to the NRC for pre-application review, but that review became inactive when the company told the NRC that it did not intend to apply for design certification until 2010. The second design is Toshiba’s 4S (Super Safe, Small, and Simple) reactor, which could also be classified as a Generation IV design (see Box 8, p. 59). This liquid sodium-cooled fast reactor would provide 10 MWe of power and have a core lifetime of 30 years. The reactor is intended for use in remote regions and is designed to operate without routine maintenance. To minimize the need for security personnel, the reactor would sit inside a sealed vault 30 meters underground. Toshiba offered to provide a free 4S reactor to the town of Galena, Alaska, as a demonstration project if the company received a license from the NRC. Although the town voted in December 2004 to accept Toshiba’s proposal, and officials from Galena and Toshiba met with the NRC in February 2005, Toshiba has not yet initiated an NRC pre-application review. Fast reactors are typically fueled with either highly enriched uranium or plutonium. The limited number of public documents describing the Galena proposal are vague or inconsistent regarding the type of fuel that would be used, but the most recent documents indicate that the fuel would consist of 17–19 percent-enriched uranium. 122 The third project is a 2006 proposal by General Atomics to build a test high-temperature gas-cooled reactor at the University of Texas–Permian Basin. General Atomics originally initiated a pre-application review of its full-scale Gas Turbine Modular Helium Reactor (GT-MHR) in 2001, but told the NRC in 2005 that it intended to terminate those discussions. Its proposal for a test reactor would require a less extensive approval process than that for a full-scale power reactor. The large number of reactor designs potentially seeking certification—some well outside the experience base of most NRC staff—and uncertainties about which proposals are serious present significant challenges to the NRC. It is difficult for the agency to justify developing the expertise to evaluate unfamiliar reactor concepts when it is unclear whether they are viable.

#### And, there will always be new reactors for the Aff to pick—DOE Generation IV research proves

Union of Concerned Scientists ‘7

(“Nuclear Power in a Warming World: Assessing the Risks, Addressing the Challenges”, 2007, http://www.ucsusa.org/assets/documents/nuclear\_power/nuclear-power-in-a-warming-world.pdf)

In addition to the Generation III and III+ designs of commercial reactor vendors, the Department of Energy is sponsoring R&D on advanced reactor systems at national laboratories and universities. This program—known as Generation IV—is nominally pursuing five systems. Two are thermal reactors: the Very High Temperature Reactor (VHTR) and the Supercritical-Water-Cooled Reactor (SCWR). 125 Three are fast reactors, which would use plutonium-based fuels: the Gas-cooled Fast Reactor (GFR), the Lead-cooled Fast Reactor (LFR), and the Sodiumcooled Fast Reactor (SFR). 126 The goals of the Generation IV program are ambitious: Generation IV . . . systems will provide sustainable energy generation . . . will minimize and manage their nuclear waste . . . will have a clear life-cycle cost advantage . . . will have a level of financial risk comparable to other energy projects . . . will excel in safety and reliability will have a very low likelihood and degree of . . . core damage . . . will eliminate the need for offsite emergency response . . . will increase the assurance that they are . . . the least desirable route for diversion or theft of weapons-usable materials and provide increased physical protection against acts of terrorism. 127

#### Counter-interpretation—energy production is the production of electricity or combustible or nuclear fuels

NASA ‘11

(NASA Scientific and Technical Information. Scope and Subject Category Guide, http://www.scribd.com/doc/80662465/sscg)

Energy Production—The production of electricity, combustible fuels, nuclear and thermonuclear fuels, and heating and cooling by renewable resources.

#### Their interp is energy conversion – that’s a subset of energy production

NASA ’11

(NASA Scientific and Technical Information. Scope and Subject Category Guide, http://www.scribd.com/doc/80662465/sscg)

Energy Conversion – The change of a working substance or natural power into a more useable form of energy such as electricity or mechanical motion. NASA Thesaurus, Washington, DC: National Aeronautics and Space Administration.

#### Our interpretation is best—

#### Has a brightline limit—it excludes “tech of the week” Affs; those are energy conversion, which is distinct from production

NASA ’11

(NASA Scientific and Technical Information. Scope and Subject Category Guide, http://www.scribd.com/doc/80662465/sscg)

Energy Conversion – The change of a working substance or natural power into a more useable form of energy such as electricity or mechanical motion. NASA Thesaurus, Washington, DC: National Aeronautics and Space Administration.

1. **Best debate—our interpretation opens the best and most real world discussions on nuclear power because each stage of the fuel cycle has different consequences. This turn any marginal limit they create**

**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

#### Best caselist—

#### Only three cases for uranium enrichment

NRC ‘12

(http://www.nrc.gov/materials/fuel-cycle-fac/ur-enrichment.html)

The uranium enriched in uranium-235 (U235) is required in commercial light-water reactors to produce a controlled nuclear reaction. Several different processes may be used to enrich uranium, as described on this page:¶ Enriching Uranium¶ Gaseous Diffusion¶ Gas Centrifuge¶ Laser Separation

#### Only three cases for reprocessing/waste management

IAEA ‘12

(http://www-pub.iaea.org/MTCD/publications/PDF/te\_1587\_web.pdf)

Three types of technologies are considered here:

− Hydrometallurgical processes (aqueous technologies) as the reference route nowadays for

industrial scale spent fuel reprocessing. They have a high potential of optimization to

further address minor actinides, global actinides or fission products partitioning. All these

issues will be covered in different sections of this TECDOC (Sections 3.2, 3.3, 3.4

respectively).

This is the only mature process (fully closed cycle) to deal both with:

• The separation of major actinides such as U and Pu;

• The treatment and conditioning of ultimate waste for long-term storage.

The processes derived from PUREX are able to deal with a large variety of spent fuels

(oxides, carbides, nitrides) whatever are the nature and shape of the fissile composite. They

can also be adapted to the co-laminated fuel (U Mo, U Si, U Al, Pu Al).

− Pyrometallurgical processes (non aqueous technologies) as another promising R&D route

for the reprocessing of:

 Metallic fuel (electro refining process);

 Very radioactive fuels (early-processing of spent fuel) or fuel with a high content of

minor actinides (transmutation fuels for ADS targets in heterogeneous recycling

mode, or fuels assemblies dedicated to transmutation in fast systems in homogeneous

recycling mode)

These methods are also aiming at the global actinide separation. This issue is addressed in a

specific section of this TECDOC (3.3).

− Other non-aqueous technologies: this section is dealing with a fluid (CO2 or Freon)

dissolution and extraction process, fluorination, etc...

### K

#### No prior questions – our justification for the 1AC is true

Owen ‘2 – reader of political theory

(David Owen, Reader of Political Theory at the Univ. of Southampton, Millennium Vol 31 No 3 2002 p. 655-7)

Commenting on the ‘philosophical turn’ in IR, Wæver remarks that ‘[a] frenzy for words like “epistemology” and “ontology” often signals this philosophical turn’, although he goes on to comment that these terms are often used loosely.4 However, loosely deployed or not, it is clear that debates concerning ontology and epistemology play a central role in the contemporary IR theory wars. In one respect, this is unsurprising since it is a characteristic feature of the social sciences that periods of disciplinary disorientation involve recourse to reflection on the philosophical commitments of different theoretical approaches, and there is no doubt that such reflection can play a valuable role in making explicit the commitments that characterise (and help individuate) diverse theoretical positions. Yet, such a philosophical turn is not without its dangers and I will briefly mention three before turning to consider a confusion that has, I will suggest, helped to promote the IR theory wars by motivating this philosophical turn. The first danger with the philosophical turn is that it has an inbuilt tendency to prioritise issues of ontology and epistemology over explanatory and/or interpretive power as if the latter two were merely a simple function of the former. But while the explanatory and/or interpretive power of a theoretical account is not wholly independent of its ontological and/or epistemological commitments (otherwise criticism of these features would not be a criticism that had any value), it is by no means clear that it is, in contrast, wholly dependent on these philosophical commitments. Thus, for example, one need not be sympathetic to rational choice theory to recognise that it can provide powerful accounts of certain kinds of problems, such as the tragedy of the commons in which dilemmas of collective action are foregrounded. It may, of course, be the case that the advocates of rational choice theory cannot give a good account of why this type of theory is powerful in accounting for this class of problems (i.e., how it is that the relevant actors come to exhibit features in these circumstances that approximate the assumptions of rational choice theory) and, if this is the case, it is a philosophical weakness—but this does not undermine the point that, for a certain class of problems, rational choice theory may provide the best account available to us. In other words, while the critical judgement of theoretical accounts in terms of their ontological and/or epistemological sophistication is one kind of critical judgement, it is not the only or even necessarily the most important kind. The second danger run by the philosophical turn is that because prioritisation **of ontology** and epistemologypromotes theory-construction from philosophical first principles, it cultivates **a** theory-driven rather than problem-driven approach to IR. Paraphrasing Ian Shapiro, the point can be put like this: since it is the case that there is always a plurality of possible true descriptions of a given action, event or phenomenon, the challenge is to decide which is the most apt in terms of getting a perspicuous grip on the action, event or phenomenon in question given the purposes of the inquiry; yet, from this standpoint, ‘theory-driven work is part of a reductionist program’ in that it ‘dictates always opting for the description that calls for the explanation that flows from the preferred model or theory’.5 The justification offered for this strategy rests on the mistaken belief that it is necessary for social science because general explanations are required to characterise the classes of phenomena studied in similar terms. However, as Shapiro points out, this is to misunderstand the enterprise of science since ‘whether there are general **explanations** for classes of phenomena **is a question** for social-scientific inquiry, not to be prejudged before conducting that inquiry’.6 Moreover, this strategy easily slips into the promotion of the pursuit of generality over that of empirical validity. The third danger is that the preceding two combine to encourage the formation of a particular image of disciplinary debate in IR—what might be called (only slightly tongue in cheek) ‘the Highlander view’—namely, an image of warring theoretical approaches with each, despite occasional temporary tactical alliances, dedicated to the strategic achievement of sovereignty over the disciplinary field. It encourages this view because the turn to, and prioritisation of, ontology and epistemology stimulates the idea that there can only be one theoretical approach which gets things right, namely, the theoretical approach that gets its ontology and epistemology right. This image feeds back into IR exacerbating the first and second dangers, and so a potentially vicious circle arises.

#### Extinction first – always VTL

Bernstein ‘2

(Richard J., Vera List Prof. Phil. – New School for Social Research, “Radical Evil: A Philosophical Interrogation”, p. 188-192)

There is a basic value inherent in **organic** being, a basic affirmation, "The Yes' of Life" (IR 81). 15 "The self-affirmation of being becomes emphatic in the opposition of life to death. Life is the explicit confrontation of being with not-being. . . . The 'yes' of all striving is here sharpened by the active `no' to not-being" (IR 81-2). Furthermore — and this is the crucial point for Jonas — this affirmation of life that is in all organic being has a binding obligatory force upon human beings. This blindly self-enacting "yes" gains obligating force in the seeing freedom of man, who as the supreme outcome of nature's purposive labor is no longer its automatic executor but, with the power obtained from knowledge, can become its destroyer as well. He must adopt the "yes" into his will and impose the "no" to not-being on his power. But precisely this transition from willing to obligation is the critical point of moral theory at which attempts at laying a foundation for it come so easily to grief. Why does now, in man, that become a duty which hitherto "being" itself took care of through all individual willings? (IR 82). We discover here the transition from is to "ought" — from the self-affirmation of life to the binding obligation of human beings to preserve life not only for the present but also for the future. But why do we need a new ethics? The subtitle of The Imperative of Responsibility — In Search of an Ethics for the Technological Age — indicates why we need a new ethics. Modern technology has transformed the nature and consequences of human action so radically that the underlying premises of traditional ethics are no longer valid. For the first time in history human beings possess the knowledge and the power to destroy life on this planet, including human life. Not only is there the new possibility of total nuclear disaster; there are the even more invidious and threatening possibilities that result from the unconstrained use of technologies that can destroy the environment required for life. The major transformation brought about by modern technology is that the consequences of our actions frequently exceed by far anything we can envision. Jonas was one of the first philosophers to warn us about the unprecedented ethical and political problems that arise with the rapid development of biotechnology. He claimed that this was happening at a time when there was an "ethical vacuum," when there did not seem to be any effective ethical principles to limit ot guide our ethical decisions. In the name of scientific and technological "progress," there is a relentless pressure to adopt a stance where virtually anything is permissible, includ-ing transforming the genetic structure of human beings, as long as it is "freely chosen." We need, Jonas argued, a new categorical imperative that might be formulated as follows: "Act so that the effects of your action are compatible with the permanence of genuine human life"; or expressed negatively: "Act so that the effects of your action are not destructive of the future possibility of such a life"; or simply: "Do not compromise **the conditions for** an indefinite continuation of humanity on earth**"; or again turned positive:** "In your present choices, include the future wholeness of Man among the objects of your will."

#### Capitalism is self-correcting and sustainable

**Matthews 11**

[Richard Matthews, eco-entrepreneur, eco-investor, sustainable writer, “Is Capitalism Sustainable?”, The Green Market, 5-12-2011, http://thegreenmarket.blogspot.com/2011/05/is-capitalism-sustainable.html]

Business has created the environmental crisis and now the same capitalist system that was behind the industrial revolution, is beginning to play a vital role in solving the problems it created. Despite the link between environmental practices and profitable, long-term business sustainability, many believe that capitalism itself is unsustainable. The Earth has finite resources, so their argument goes, but capitalism depends on ever expanding consumption. The truth is that dating back to the origins of our species, we have seen our use of resources evolve, from stone, to bronze and then iron. More recently we entered the information age which may prove to be the gateway to a more sustainable use of resources. Although we should do everything we can to preserve finite resources, human ingenuity is infinite. In this way we are slowly moving away from finite fossil fuels to infinitely renewable fuels such as wind, wave and solar. Market driven solutions can be incredibly powerful as they have the power to extend, promote and invest in sustainable innovation. Although new market based mechanisms like regulation, incentives and tradable permits are still a few years off, it is inevitable that the true cost of carbon will be made absolutely clear. As a tenant of the free market business should pay for the costs they incur. Sustainability will continue because it is an unstoppable mega-trend that is destined to keep growing at even faster rates. With the rise of the green consumer, businesses want to cash-in on the steady and growing demand for green goods and services. Various partnerships are emerging to help in the development of sustainable best practices. One such arrangement involves the new partnerships between corporations and environmental organizations.

### CP

#### Reprocessing solves Pu-238 shortages

Packard ’12 – member of the James Randi Educational Foundation

(Steven, “The U.S. Space Program’s Plutonium-238 Crisis”, Depleted Cranium, 1-6-2012, http://depletedcranium.com/americas-plutonium-238-crisis/)

The plutonium that can be extracted from light water spent fuel contains significant amounts of plutonium-238, but it’s combined with other isotopes of plutonium, making it unusable. Separating out the plutonium-238 would require a complex plutonium enrichment system, which is far less practical than simply preparing the plutonium-238 on its own.¶ To produce plutonium-238, the first thing that is required is neptunium-237. Neptunium-237 is produced as a byproduct of the reprocessing of spent fuel. When a nucleus of uranium-235 absorbs a neutron, it will usually fission. However, in a thermal spectrum reactor, some of the uranium-235 (about 18%) will absorb a neutron and not fission. Instead, the uranium-235 becomes uranium-236. Uranium-236 has a low neutron cross-section, so most of the uranium-236 generated in a reactor will just remain uranium-236, but a small amount of it does absorb a neutron and become uranium-237. Uranium-237 has a very short half-life of only six days, decaying to neptunium-237. Another source of neptunium-237 in spent fuel is the alpha decay or americium-241. Spent fuel contains about .7 grams of np-237 for every one hundred kilograms of fuel. That might not seem like much, but fuel reprocessing operations routinely go through hundreds of tons of fuel. Because Np-237 is the only isotope of neptunium present in spent fuel in any significant quantity, it does not require any enrichment. Instead, simply chemically separating the neptunium out yields nearly 100% neptunium-237.¶ After removing the neptunium-237, it is fabricated into targets which are irradiated with neutrons in a high flux reactor. The targets are then removed and processed to separate out the plutonium-238 that is produced. The plutonium-238 is then fabricated into RTG fuel tablets.¶ The United States ended the practice of spent fuel reprocessing in 1977 when it was banned by the Carter Administration because of “proliferation concerns.” Since then, the ban has been lifted, but as all reprocessing operations were shut down in the 1970’s and little support can be found for restarting the practice, the US still has no capacity to reprocess spent fuel. After 1977, some material from plutonium production reactors continued, which yielded some neptunium-237, but that also ended in 1992, with the end of the cold war.¶ Today, the United States reprocesses no fuel at all and therefore cannot produce any neptunium-237. There may still be some of the material remaining, though it’s doubtful that very much is left. It should still be possible to obtain Np-237, purchasing it from countries with major spent fuel reprocessing programs, such as Russia, France or Japan. However, this depends entirely on the willingness of such nations to provide it and may be expensive, since additional steps beyond normal reprocessing are required to produce the highly concentrated neptunium necessary for plutonium-238 production.

#### Solves planetary science

Squyres et al ’12 – Chair of the Planetary Science Decadal Survey

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Radioisotope Power Systems are necessary for powering spacecraft at large distances from the Sun; in the extreme radiation environment of the inner Galilean satellites; in the low light levels of high martian latitudes, dust storms, and night; for extended operations on the surface of Venus; and during the long lunar night. With some 50 years of technology development and use of 46 such systems on 26 previous and currently flying spacecraft, the technology, safe handling, and utility of these units are not in doubt. Of the more than 3,000 nuclides, plutonium-238 stands out as the safest and easiest to procure isotope for use on robotic spacecraft. This report’s recommended missions cannot be carried out without new plutonium-238 production or com pleted deliveries from Russia. There are no technical alternatives to plutonium-238, and the longer the restart of production is delayed, the more it will cost. The committee is alarmed at the limited availability of plutonium-238 for planetary exploration. Without a restart of domestic production of plutonium-238, it will be impossible for the United States, or any other country, to conduct certain important types of planetary missions after this decade.

#### Solves biosphere destruction

Squyres et al ’12 – Chair of the Planetary Science Decadal Survey

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In the past, scientists had only one planet to study in detail. Our Earth, however, the only place where life demonstrably exists and thrives, is a complex interwoven system of atmosphere, hydrosphere, lithosphere, and biosphere. Today, planetary scientists can apply their knowledge to the whole solar system, and to hundreds of worlds around other stars. By investigating planetary properties and processes in different settings, some of them far simpler than Earth, we gain substantial advances in understanding exactly how planets form, how the complex interplay of diverse physical and chemical processes creates the diversity of planetary environments seen in the solar system today, and how interactions between the physical and chemical processes on at least one of those planets led to the creation of conditions favoring the origin and evolution of multifarious forms of life. These basic motivational threads are built on and developed into the three principal science themes of this report—building new worlds, workings of solar systems, and planetary habitats—discussed in Chapter 3. Current understanding of Earth’s surface and climate are constrained by studies of the physical processes operating on other worlds. The destructive role of Chlorofluorocarbons in Earth’s atmosphere was recognized by a scientist studying the chemistry of Venus’s atmosphere. Knowledge of the “greenhouse” effect, a mechanism in the ongoing global warming on Earth, likewise came from studies of Venus. Comparative studies of the atmospheres of Mars, Venus, and Earth yield critical insights into the evolutionary histories of terrestrial planet atmospheres. Similarly, studies of the crater-pocked surface of the Moon led to current understanding of the key role played by impacts in shaping planetary environments. The insights derived from studies of lunar craters led to the realization that destructive impacts have wreaked havoc on Earth in the distant past, and as recently as 100 years ago a devastating blast in Siberia leveled trees over an area the size of metropolitan Washington, D.C. Three recent impacts on Jupiter provide our best laboratory for studying the mechanics of such biosphere-disrupting events. Wind-driven processes that shape Earth’s desert dunes operate on Mars and even on Saturn’s moon Titan.

#### Environmental destruction causes extinction

Coyne and Hoekstra 7 (Jerry and Hopi, \*professor in the Department of Ecology and Evolution at the University of Chicago AND Associate Professor in the Department of Organismic and Evolutionary Biology at Harvard University, New Republic, “The Greatest Dying,” 9/24, http://www.truthout.org/article/jerry-coyne-and-hopi-e-hoekstra-the-greatest-dying)

But it isn't just the destruction of the rainforests that should trouble us. Healthy ecosystems the world over provide hidden services like waste disposal, nutrient cycling, soil formation, water purification, and oxygen production. Such services are best rendered by ecosystems that are diverse. Yet, through both intention and accident, humans have introduced exotic species that turn biodiversity into monoculture. Fast-growing zebra mussels, for example, have outcompeted more than 15 species of native mussels in North America's Great Lakes and have damaged harbors and water-treatment plants. Native prairies are becoming dominated by single species (often genetically homogenous) of corn or wheat. Thanks to these developments, soils will erode and become unproductive - which, along with temperature change, will diminish agricultural yields. Meanwhile, with increased pollution and runoff, as well as reduced forest cover, ecosystems will no longer be able to purify water; and a shortage of clean water spells disaster. In many ways, oceans are the most vulnerable areas of all. As overfishing eliminates major predators, while polluted and warming waters kill off phytoplankton, the intricate aquatic food web could collapse from both sides. Fish, on which so many humans depend, will be a fond memory. As phytoplankton vanish, so does the ability of the oceans to absorb carbon dioxide and produce oxygen. (Half of the oxygen we breathe is made by phytoplankton, with the rest coming from land plants.) Species extinction is also imperiling coral reefs - a major problem since these reefs have far more than recreational value: They provide tremendous amounts of food for human populations and buffer coastlines against erosion. In fact, the global value of "hidden" services provided by ecosystems - those services, like waste disposal, that aren't bought and sold in the marketplace - has been estimated to be as much as $50 trillion per year, roughly equal to the gross domestic product of all countries combined. And that doesn't include tangible goods like fish and timber. Life as we know it would be impossible if ecosystems collapsed. Yet that is where we're heading if species extinction continues at its current pace. Extinction also has a huge impact on medicine. Who really cares if, say, a worm in the remote swamps of French Guiana goes extinct? Well, those who suffer from cardiovascular disease. The recent discovery of a rare South American leech has led to the isolation of a powerful enzyme that, unlike other anticoagulants, not only prevents blood from clotting but also dissolves existing clots. And it's not just this one species of worm: Its wriggly relatives have evolved other biomedically valuable proteins, including antistatin (a potential anticancer agent), decorsin and ornatin (platelet aggregation inhibitors), and hirudin (another anticoagulant). Plants, too, are pharmaceutical gold mines. The bark of trees, for example, has given us quinine (the first cure for malaria), taxol (a drug highly effective against ovarian and breast cancer), and aspirin. More than a quarter of the medicines on our pharmacy shelves were originally derived from plants. The sap of the Madagascar periwinkle contains more than 70 useful alkaloids, including vincristine, a powerful anticancer drug that saved the life of one of our friends. Of the roughly 250,000 plant species on Earth, fewer than 5 percent have been screened for pharmaceutical properties. Who knows what life-saving drugs remain to be discovered? Given current extinction rates, it's estimated that we're losing one valuable drug every two years. Our arguments so far have tacitly assumed that species are worth saving only in proportion to their economic value and their effects on our quality of life, an attitude that is strongly ingrained, especially in Americans. That is why conservationists always base their case on an economic calculus. But we biologists know in our hearts that there are deeper and equally compelling reasons to worry about the loss of biodiversity: namely, simple morality and intellectual values that transcend pecuniary interests. What, for example, gives us the right to destroy other creatures? And what could be more thrilling than looking around us, seeing that we are surrounded by our evolutionary cousins, and realizing that we all got here by the same simple process of natural selection? To biologists, and potentially everyone else, apprehending the genetic kinship and common origin of all species is a spiritual experience - not necessarily religious, but spiritual nonetheless, for it stirs the soul. But, whether or not one is moved by such concerns, it is certain that our future is bleak if we do nothing to stem this sixth extinction. We are creating a world in which exotic diseases flourish but natural medicinal cures are lost; a world in which carbon waste accumulates while food sources dwindle; a world of sweltering heat, failing crops, and impure water. In the end, we must accept the possibility that we ourselves are not immune to extinction. Or, if we survive, perhaps only a few of us will remain, scratching out a grubby existence on a devastated planet. Global warming will seem like a secondary problem when humanity finally faces the consequences of what we have done to nature: not just another Great Dying, but perhaps the greatest dying of them all.

#### Plan solves U.S.-China reprocessing cooperation

Lyons et al ‘9

(Blythe J. Lyons, John R. Lyman, Mihaela Carstei, and General Richard L. Lawson (USAF), “United States-China Cooperation On Nuclear Power: An Opportunity for Fostering Sustainable Energy Security”, Atlantic Council, 3-4/3-6 2009, <http://www.acus.org/files/publication_pdfs/65/AtlanticCouncil-USChinaNuclearPower.pdf>)

Cooperation on the development of advanced fuel cycle technologies, already underway in U.S.-China working groups, will provide significant opportunities to share rather than duplicate knowledge and funding. Generation IV (Gen IV) international collaboration on R&D is necessary and beneficial for all participants to share costs, facilities and experience. Specific fuel cycle R&D opportunities proposed by the State Nuclear Power Technology corporation (SNPTC) include the following: Advanced fuel, such as mixed oxide (MOX) fuel, and metal fuel; Transmutation technology, such as fast reactor and accelerator driven systems; Reprocessing technologies, such as MOX spent fuel reprocessing, dry processing, on-site recycle; and, Repository design technology. 14 . The Generation IV International Forum (GIF) will provide a good framework to deal with intellectual property issues. If prototype or demonstration plants were to be built under the aegis of the GIF, it could also provide experience in dealing with legal and regulatory issues. Issues such as design ownership, who would build the facility, cost sharing would have to be addressed. As countries have vested interests in certain types of technologies, resolution of such issues may be difficult. • • • 15 . The Global Nuclear Energy Partnership (GNEP): The U.S., which led the way in establishing the international collaborative effort to develop proliferation-resistant technologies and institutions, should take advantage of its leadership position to nurture and expand GNEP’s international activities. As in GIF, there are advantages to sharing technical expertise and pooling financial resources. GNEP is already in place and the Obama Administration can take advantage of the years of effort it took to set up the framework for international collaboration while adapting GNEP goals to current realities and domestic nuclear development policies. Consistency in U.S. nuclear energy policies, especially in relation to international efforts, is crucial to foster global acceptance of a safe, secure and sustainable nuclear power. The Chinese participants signaled their desire to improve both government-to-government cooperation and commercial sector ties. It appears that the U.S. government is equally interested in working with China to tackle the overarching challenges of developing a safe and secure commercial nuclear fuel cycle. By supporting and participating in this Dialogue, U.S. industry and government participants have demonstrated their commitment to dealing with the challenges to realize the burgeoning nuclear trade between the two countries.

#### Solves U.S.-China relations

Gardner and Rascoe 11

(Timothy Gardner and Ayesha Rascoe, “Clean energy seen as ‘bright spot’ in U.S.-China relations”, Reuters, 1-19-2011, <http://www.reuters.com/article/2011/01/19/us-usa-china-energy-idUSTRE70H5WB20110119>)

Cooperation on clean energy could be a high point in U.S.-China relations leading to benefits for both countries, government and business officials said ahead of a summit between Chinese President Hu Jintao and President Barack Obama. Disputes between the world's two largest economies and energy consumers over China's wind power subsidies and its slowdown in exports of rare earths minerals, used in everything from wind turbines to cell phones, have dominated headlines in recent months. The countries are also having wider arguments. The United States says China's currency, the yuan, is undervalued and Washington is pushing Beijing for help in persuading North Korea to abandon nuclear weapons. But with rising concerns about oil prices, now above $90 a barrel, energy security, and global warming, officials said the world's biggest developed country and the biggest developing country have much to learn from each other. Progress can be made on sharing technologies on efficiency, cleaner coal, and development of renewables like wind and solar power, they said. As China tries to transform its economy from the manufacturing of cheap goods into one developing and distributing sophisticated technologies, such as clean energy, spats over intellectual property rights have already troubled trade relations between the two countries. But pressure on both countries to reduce greenhouse gas emissions and reel in fossil fuel demand may push them to overcome these differences. Still, China's Minister of Science and Technology Wan Gang said at a forum on U.S-China clean energy cooperation hosted by the Brookings Institution that common interests between the two countries make clean energy an issue ripe for nurturing close ties. "I'm sure that this is one of the best points of convergence and cooperation between our two countries, and will be one of the bright spots in our future cooperation," Wan said on Tuesday.

#### Prevents extinction

Wittner 11 – professor of history emeritus at SUNY Albany

(Lawrence Wittner, Huffington Post World, 11-30-2011, <http://www.huffingtonpost.com/lawrence-wittner/nuclear-war-china_b_1116556.html>)

While nuclear weapons exist, there remains a danger that they will be used. After all, for centuries international conflicts have led to wars, with nations employing their deadliest weapons. The current deterioration of U.S. relations with China might end up providing us with yet another example of this phenomenon. The gathering tension between the United States and China is clear enough. Disturbed by China's growing economic and military strength, the U.S. government recently challenged China's claims in the South China Sea, increased the U.S. military presence in Australia, and deepened U.S. military ties with other nations in the Pacific region. According to Secretary of State Hillary Clinton, the United States was "asserting our own position as a Pacific power." But need this lead to nuclear war? Not necessarily. And yet, there are signs that it could. After all, both the United States and China possess large numbers of nuclear weapons. The U.S. government threatened to attack China with nuclear weapons during the Korean War and, later, during their conflict over the future of China's offshore islands, Quemoy and Matsu. In the midst of the latter confrontation, President Dwight Eisenhower declared publicly, and chillingly, that U.S. nuclear weapons would "be used just exactly as you would use a bullet or anything else." Of course, China didn't have nuclear weapons then. Now that it does, perhaps the behavior of national leaders will be more temperate. But the loose nuclear threats of U.S. and Soviet government officials during the Cold War, when both nations had vast nuclear arsenals, should convince us that, even as the military ante is raised, nuclear saber-rattling persists. Some pundits argue that nuclear weapons prevent wars between nuclear-armed nations; and, admittedly, there haven't been very many -- at least not yet. But the Kargil War of 1999, between nuclear-armed India and nuclear-armed Pakistan, should convince us that such wars can occur. Indeed, in that case, the conflict almost slipped into a nuclear war. Pakistan's foreign secretary threatened that, if the war escalated, his country felt free to use "any weapon" in its arsenal. During the conflict, Pakistan did move nuclear weapons toward its border, while India, it is claimed, readied its own nuclear missiles for an attack on Pakistan. At the least, though, don't nuclear weapons deter a nuclear attack? Do they? Obviously, NATO leaders didn't feel deterred, for, throughout the Cold War, NATO's strategy was to respond to a Soviet conventional military attack on Western Europe by launching a Western nuclear attack on the nuclear-armed Soviet Union. Furthermore, if U.S. government officials really believed that nuclear deterrence worked, they would not have resorted to championing "Star Wars" and its modern variant, national missile defense. Why are these vastly expensive -- and probably unworkable -- military defense systems needed if other nuclear powers are deterred from attacking by U.S. nuclear might? Of course, the bottom line for those Americans convinced that nuclear weapons safeguard them from a Chinese nuclear attack might be that the U.S. nuclear arsenal is far greater than its Chinese counterpart. Today, it is estimated that the U.S. government possesses over 5,000 nuclear warheads, while the Chinese government has a total inventory of roughly 300 . Moreover, only about 40 of these Chinese nuclear weapons can reach the United States. Surely the United States would "win" any nuclear war with China. But what would that "victory" entail? An attack with these Chinese nuclear weapons would immediately slaughter at least 10 million Americans in a great storm of blast and fire, while leaving many more dying horribly of sickness and radiation poisoning. The Chinese death toll in a nuclear war would be far higher. Both nations would be reduced to smoldering, radioactive wastelands. Also, radioactive debris sent aloft by the nuclear explosions would blot out the sun and bring on a "nuclear winter" around the globe -- destroying agriculture, creating worldwide famine, and generating chaos and destruction. Moreover, in another decade the extent of this catastrophe would be far worse. The Chinese government is currently expanding its nuclear arsenal, and by the year 2020 it is expected to more than double its number of nuclear weapons that can hit the United States. The U.S. government, in turn, has plans to spend hundreds of billions of dollars "modernizing" its nuclear weapons and nuclear production facilities over the next decade. To avert the enormous disaster of a U.S.-China nuclear war, there are two obvious actions that can be taken. The first is to get rid of nuclear weapons, as the nuclear powers have agreed to do but thus far have resisted doing. The second, conducted while the nuclear disarmament process is occurring, is to improve U.S.-China relations. If the American and Chinese people are interested in ensuring their survival and that of the world, they should be working to encourage these policies.

### Immigration – Impact Level <NEED THIS INSERT HERE>

**Heg doesn’t solve conflict**

**Fettweis 10** – Professor of national security affairs @ U.S. Naval War College (Chris, Georgetown University Press, “Dangerous times?: the international politics of great power peace” 173-75)

Simply stated, the hegemonic stability theory proposes that international peace is only possible when there is one country strong enough to make and enforce a set of rules. At the height of Pax Romana between 27 BC and 180 AD, for example, Rome was able to bring unprecedented peace and security to the Mediterranean. The Pax Britannica of the nineteenth century brought a level of stability to the high seas. Perhaps the current era is peaceful because the United States has established a de facto Pax Americana where no power is strong enough to challenge its dominance, and because it has established a set of rules that a generally in the interests of all countries to follow. Without a benevolent hegemony, some strategists fear, instability may break out around the globe. Unchecked conflicts could cause humanitarian disaster and, in today’s interconnected world economic turmoil that would ripple throughout global financial markets. If the United States were to abandon its commitments abroad, argued Art, the world would “become a more dangerous place” and, sooner or later, that would “rebound to America’s detriment.” If the massive spending that the United States engages in actually produces stability in the international political and economic systems, then perhaps internationalism is worthwhile. There are good theoretical and empirical reasons, however, the belief that U.S. hegemony is not the primary cause of the current era of stability. First of all, the hegemonic stability argument overstates the role that the United States plays in the system. No country is strong enough to police the world on its own. The only way there can be stability in the community of great powers is if self-policing occurs, ifs **states have decided that their interest are served by peace**. **If no pacific normative shift had occurred** among the great powers that was filtering down through the system, then **no amount of** international constabulary **work** by the United States **could maintain stability**. Likewise, if it is true that such a shift has occurred, then most of what the hegemon spends to bring stability would be wasted. The 5 percent of the world’s population that live in the United States simple could not force peace upon an unwilling 95. At the risk of beating the metaphor to death, the United States may be patrolling a neighborhood that has already rid itself of crime. Stability and unipolarity may be simply **coincidental**. In order for U.S. hegemony to be the reason for global stability, the rest of the world would have to expect reward for good behavior and fear punishment for bad. Since the end of the Cold War, the United States has not always proven to be especially eager to engage in humanitarian interventions abroad. Even rather incontrovertible evidence of genocide has not been sufficient to inspire action. Hegemonic stability can only take credit for influence those decisions that would have ended in war without the presence, whether physical or psychological, of the United States. Ethiopia and Eritrea are hardly the only states that could go to war without the slightest threat of U.S. intervention. Since most of the world today is free to fight without U.S. involvement, something else must be at work. Stability exists in many places where no hegemony is present. Second, the limited **empirical evidence** we have **suggests** that there is **little connection between** the relative level of U.S. **activism and** international **stability**. During the 1990s the United States cut back on its defense spending fairly substantially, By 1998 the United States was spending $100 billion less on defense in real terms than it had in 1990. **To** internationalists, defense hawks, and other **believers in hegemonic stability this** irresponsible "peace dividend" **endangered** both national and **global security "**No serious analyst of American military capabilities," argued Kristol and Kagan, "doubts that the defense budget has been cut much too far to meet Americas responsibilities to itself and to world peace."" If the pacific trends were due not to U.S. hegemony but a strengthening norm against interstate war, however, one would not have expected an increase in global instability and violence. The verdict from the past two decades is fairly plain: **The world grew more peaceful** while the United States cut its forces. **No state** **seemed to believe** that its **security was endangered** by a less-capable Pentagon, **or** at least none **took any action** that would suggest such a belief. No militaries were enhanced to address power vacuums; **no** **security dilemmas drove mistrust and arms races; no regional balancing occurred** once the stabilizing presence of the U.S. military was diminished. The rest of the world acted as if the threat ofinternational war was not a pressing concern, despite the reduction in U.S. capabilities. The incidence and magnitude of global conflict declined while the United States cut its military spending under President Clinton, and it kept declining as the Bush Administration ramped spending back up. No complex statistical analysis should be necessary to reach the conclusion that the two are unrelated. It is also worth noting for our purposes that the United States was no less safe. Military spending figures by themselves are insufficient to disprove a connection between overall U.S. actions and international stability. Once again, one could presumably argue that spending is not the only or even the best indication of hegemony, and that it is instead U.S. foreign political and security commitments that maintain stability. Since neither was significantly altered during this period, instability should not have been expected. Alternately, advocates of hegemonic stability could believe that relative rather than absolute spending is decisive in bringing peace. Although the United States cut back on its spending during the 1990s, its relative advantage never wavered. However, even if it is true that either U.S. commitments or relative spending account for global pacific trends, then at the very least stability can evidently be maintained at drastically lower levels of both. In other words, even if one can be allowed to argue in the alternative for a moment and suppose that there is in fact a level of engagement below which the United States cannot drop without increasing international disorder, a rational grand strategist would still recommend cutting back on engagement and spending until that level is determined. Grand strategic decisions are never final; continual adjustments can and must be made as time goes on. Basic logic suggests that the United States ought to spend the minimum amount of its blood and treasure while seeking the maximum return on its investment. And if the current era of stability is as stable as many believe it to be, no increase in conflict would ever occur irrespective of U.S. spending, which would save untold trillions for an increasingly debt-ridden nation. It is also perhaps worth noting that if opposite trends had unfolded, if other states had reacted to news of cuts in U.S. defense spending with more aggressive or insecure behavior, then internationalists would surely argue that their expectations had been fulfilled. If increases in conflict would have been interpreted as proof of the wisdom of internationalist strategies, then logical consistency demands that the lack thereof should at least pose a problem. As it stands, the only evidence we have regarding the likely systemic reaction to a more restrained United States suggests that the current peaceful trends are **unrelated** to U.S. military spending. Evidently **the rest of the world can operate** quite **effectively without the presence of a global policeman**. **Those who think otherwise base their view on faith alone.**

#### Econ resilient, US isn’t key, and impact empirically denied

**Lamy ’11**(Pascal Lamy is the Director-General of the World Trade Organization. Lamy is Honorary President of Paris-based think tank Notre Europe. Lamy graduated from the prestigious Sciences Po Paris, from HEC and ÉNA, graduating second in his year of those specializing in economics. “System Upgrade” BY PASCAL LAMY | APRIL 18, 2011)

**The** bigger **test came with** the 2008-2009 Great Recession, **the first** truly **global recession** since World War II. When the international economy went into free fall, trade went right along with it. Production and supply are today thoroughly global in nature, with most manufactured products made from parts and materials imported from many other countries. These global value chains have a multiplier effect on trade statistics, which explains why, as the global economy contracted by 2 percent in 2009, trade volume shrank by more than 12 percent. This multiplier effect works the other way around as well: **Growth returned** to 4.6 percent and trade volume grew by a record 14.5 percent over the course of 2010. **Projections for trade** in 2011 **are** also **strong**, with WTO economists predicting that trade volume will rise 6.5 percent during the current year. This sharp rebound in trade has proved two essential things: **Markets stayed open despite ever-stronger pressures** to close them, and trade is an indispensible tool for economic recovery, particularly for developing countries, which are more dependent on trade. Shortly after the crisis broke out, we in the WTO began to closely monitor the trade policy response of our member governments. Many were fearful that pressures to impose trade restrictions would prove too powerful for governments to resist. But this is not what happened. Instead, **the system of rules and disciplines**, agreed to over 60 years of negotiations, **held firm**. In **a series of reports** prepared for WTO members and the G-20, we found that **governments acted with great restraint**. At no time did the trade-restrictive measures imposed cover more than 2 percent of world imports. Moreover, the measures used -- anti-dumping duties, safeguards, and countervailing duties to offset export or production subsidies -- were those which, in the right circumstances, are permissible under WTO rules. I am not suggesting that every safeguard measure or countervailing duty imposed during those difficult days was in compliance with WTO rules, but responses to trade pressures were generally undertaken within an internationally agreed-upon framework. Countries by and large resisted overtly noncompliant measures, such as breaking legally binding tariff ceilings or imposing import bans or quotas. As **markets stayed open, trade flows began to shift**, **and countries** that shrugged off the impact of the crisis and **continued to grow** -- **notably China, India, and Brazil** -- **became ever-more attractive markets for countries that were struggling**, **including** those in Europe and **North America**. Trade has been a powerful engine for growth in the developing world, a fact reflected in the far greater trade-to-GDP ratios we see there. In 2010, developing countries' share of world trade expanded to a record 45 percent, and this trend looks set to continue. Decisions made in Brasilia, Beijing, and New Delhi to open their respective economies to trade have been instrumental in enabling these countries to lift hundreds of millions of people out of poverty.

#### Best study proves no conflict from econ decline

**Brandt and Ulfelder ‘11** (\*Patrick T. Brandt, Ph.D. in Political Science from Indiana University, is an Assistant Professor of Political Science in the School of Social Science at the University of Texas at Dallas. \*\*Jay Ulfelder, Ph.D. in political science from Stanford University, is an American political scientist whose research interests include democratization, civil unrest, and violent conflict, April, 2011, “Economic Growth and Political Instability,” Social Science Research Network)

These statements anticipating political fallout from the global economic crisis of 2008–2010 reflect a widely held view that economic growth has rapid and profound effects on countries’ political stability. When economies grow at a healthy clip, citizens are presumed to be too busy and too content to engage in protest or rebellion, and governments are thought to be flush with revenues they can use to enhance their own stability by producing public goods or rewarding cronies, depending on the type of regime they inhabit. When growth slows, however, citizens and cronies alike are presumed to grow frustrated with their governments, and the leaders at the receiving end of that frustration are thought to lack the financial resources to respond effectively. The expected result is an increase in the risks of social unrest, civil war, coup attempts, and regime breakdown. Although it is pervasive, the assumption that countries’ economic growth rates strongly affect their political stability **has not been subjected to** a great deal of careful **empirical analysis, and evidence from social science research** to date **does not** unambiguously **support it.** Theoretical models of civil wars, coups d’etat, and transitions to and from democracy often specify slow economic growth as an important cause or catalyst of those events, but empirical studies on the effects of economic growth on these phenomena have produced mixed results. Meanwhile, the effects of economic growth on the occurrence or incidence of social unrest seem to have **hardly** been **studied in recent years**, as empirical analysis of contentious collective action has concentrated on political opportunity structures and dynamics of protest and repression. This paper helps fill that gap by rigorously re-examining the effects of short-term variations in economic growth on the occurrence of several forms of political instability in countries worldwide over the past few decades. In this paper, we do not seek to develop and test new theories of political instability. Instead, we aim to subject a hypothesis common to many prior theories of political instability to more careful empirical scrutiny. The goal is to provide a detailed empirical characterization of the relationship between economic growth and political instability in a broad sense. In effect, we describe the conventional wisdom as seen in the data. We do so with statistical models that use smoothing splines and multiple lags to allow for nonlinear and dynamic effects from economic growth on political stability. We also do so with an instrumented measure of growth that explicitly accounts for endogeneity in the relationship between political instability and economic growth. To our knowledge, **ours is the first statistical study** of this relationship to simultaneously address the possibility of **nonlinearity and** problems of **endogeneity**. As such, we believe this paper offers what is probably the most rigorous general **evaluation** of this argument **to date**. As the results show, some of our findings are surprising. Consistent with conventional assumptions, we find that social unrest and civil violence are more likely to occur and democratic regimes are more susceptible to coup attempts around periods of slow economic growth. At the same time, our analysis shows no significant relationship between variation in growth and the risk of civil-war onset, and results from our analysis of regime changes contradict the widely accepted claim that economic crises cause transitions from autocracy to democracy. While we would hardly pretend to have the last word on any of these relationships, our findings do suggest that the relationship between economic growth and political stability is **neither as uniform nor as strong as** the **conventional wisdom**(s) **presume**(s). We think **these findings** also help **explain why the** global **recession** of 2008–2010 **has failed** thus far to **produce** the wave of coups and regime failures that some observers had anticipated, in spite of the expected and apparent uptick in social **unrest** associated with the crisis.

#### No internal link – legalization won’t solve the deficit

Hill et al. 10. [Laura E., research fellow at the Public Policy Institute of California, a National Institute of Aging postdoctoral fellow, Magnus Lofstrom, a research fellow at the Public Policy Institute of California, Joseph M. Hayes, a research associate at the Public Policy Institute of California, where he studies migration and population change throughout the state, “Immigrant Legalization Assessing the Labor Market Effects,” Public Policy Institute of California, www.ppic.org/content/pubs/report/R\_410LHR.pdf#ppic]

Legalization of the estimated 12 million unauthorized immigrants residing in the United States would lead to both **economic benefits and costs for the nation.** **Some arguments for comprehensive immigration reform suggest that legalizing immigrants will help end the current recession.** This seems unlikely. Our research suggests that earlier findings from the IRCA era may overstate anticipated earnings from a new reform, at least in the short run. ¶ We do expect occupational mobility to improve for formerly unauthorized immigrants with higher skill levels. When compared to the continuously legal, their occupational earnings growth was about 9 to 10 percent. These higher-skill unauthorized immigrants are more likely to be overstayers than crossers, but unauthorized immigrants with college degrees are found in both groups. **Lower-skill unauthorized immigrants are not likely to experience strong occupational mobility as a result of a legalization program** (although their occupational earnings grow over time in the United States). It will be important that any new legislation give legalized immigrants incentives to improve their skills, especially in English. ¶ The majority of studies investigating the effect of legalizing immigrants on natives’ earnings suggest that the effects are slightly negative for workers with low skill levels. Since we find no improvements in occupational mobility or wages for the lowest skill levels in the short run, we do not expect that legalizing immigrants would place any increased pressure on the wages of low-skill natives or low-skill legal immigrants. Tax revenues may increase, although **many unauthorized immigrants already file federal and state tax returns and pay sales and payroll taxes.** We found that about 90 percent of unauthorized immigrants filed federal tax returns in the year before gaining LPR status. We expect that increases in **tax revenues** resulting from increased earnings among the formerly unauthorized would be modest.

#### Won’t pass, Obama won’t use capital, and XO solves reform

**Nakamura 3-28**-13 [David, David A. Nakamura is an International Affairs Fellow for the Council on Foreign Relations, has been a staff writer for the Washington Post since 1994, and he currently covers the administration of Washington, DC, mayor Adrian M. Fenty and city government. In 2005, David headed a team that won the $35,000 Selden Ring Award for Investigative Reporting, “Guest-worker program dispute may delay immigration bill,” http://www.azcentral.com/news/politics/free/20130328immigration-reform-guest-worker-program-dispute-may-delay-bill.html]

A bipartisan deal on immigration is at risk of stalling because of a worsening dispute over a new guest-worker program, exposing fault lines between crucial interest groups and threatening to delay the unveiling of a Senate bill early next month.¶ The impasse has prompted a bitter round of name-calling between labor and business groups, both of whom accuse the other of imperiling comprehensive immigration reform.¶ As the standoff has deteriorated, the Obama administration has remained on the sidelines and declined to intervene — a calculated decision that the president’s influence would risk alienating Republican senators crucial to the process.¶ The dispute over a program for foreign workers has emerged as perhaps the most serious obstacle to a final deal from a bipartisan group of eight senators, who are attempting to fashion model legislation for broad immigration reform. The same issue helped derail the last serious attempt at reform in 2007 with help from Obama, then a U.S. senator from Illinois.¶ The current talks center on rules governing the “future flow” of migrants who come to the United States for low-paying, menial jobs. Republicans, citing business interests, want to give temporary work visas to up to 400,000 foreign workers a year, mostly at minimum wages. But unions and many Democrats, fearing the impact on American workers, want fewer workers and higher pay under the program.¶ Senators involved in the immigration talks insist they remain on schedule to complete a bill, including a path to citizenship for 11 million illegal immigrants, in early April. Obama also expressed confidence this week that the guest-workers disagreement could be solved.¶ “I don’t agree that it’s threatening to doom the legislation,” Obama said in an interview Wednesday with Telemundo, the Spanish-language TV network. “Labor and businesses may not always agree exactly on how to do this, but this is a resolvable issue.”¶ But behind the scenes, negotiations over the guest-worker program — and the White House’s refusal to take a position — have soured relations between the AFL-CIO and U.S. Chamber of Commerce, which only a month ago joined hands to publicly proclaim agreement on an overall plan.¶ “Unions say they want a guest-worker program, but their behavior is to the contrary,” said Geoff Burr, vice president for federal affairs for the Associated Builders and Contractors. “They are insisting on a program that no employer would consider using.”¶ Union officials believe they have leverage because they have publicly committed to supporting Obama’s push for a path to citizenship, a key issue for Latino voters who overwhelmingly supported the president’s reelection last year.¶ “This is not what Barack Obama campaigned on,” AFL-CIO spokesman Jeff Hauser said. “I don’t understand why people believe business has a seat at the main table after fighting for anti-citizenship candidates in 2012.”¶ As a senator eyeing union support for a White House bid, Obama voted in favor of an amendment to an immigration bill in 2007 that would have eliminated a new guest-worker program after five years. The amendment, which passed by one vote, has since been cited as a key reason that immigration legislation failed to advance that year.¶ Obama made no mention of a guest-worker program in the immigration principles he laid out in a speech in Las Vegas two months ago. The omission was notable considering the bipartisan Senate group had included the idea in its own principles that same week.¶ Instead, the White House has deferred to the Senate group — which includes four Democrats and four Republicans — to work out an agreement between the Chamber of Commerce and AFL-CIO.¶ “If it’s included in line with the other principles that the president has rolled out in terms of what should be included in comprehensive immigration reform, that’s certainly something that we could support,” White House spokesman Josh Earnest said Wednesday of a guest-worker program. “But we’re going to reserve judgment on what that looks like until it’s actually produced.”¶ Administration officials say privately that the Senate group asked the White House to give the lawmakers “space” to take the lead in finding common ground between labor and business. Obama also is mindful of causing a political firestorm if he is seen trying to big-foot the efforts of the senators, potentially angering the Republican members, officials said.¶ But Obama has also vowed to step in with his own legislative proposals if the Senate is unable to come to an agreement on a bill. The White House announced this week that the president will travel to Mexico and Costa Rica in early May to highlight cultural and economic ties.¶ One Republican Senate aide involved in the talks said the White House’s absence from negotiations has been helped ensure that the negotiations do not become “overly politicized.”¶ But, the GOP aide added: “Everyone understands this is a critical piece for future flow. It’s central. There’s been a good faith effort to get to a result, but the White House has not been involved. Eventually, the White House will have to make a choice.”¶ The senators involved maintain that the negotiations continue to move forward. Four members of the working group inspected border-control measures in Arizona on Wednesday, and Sen. Chuck Schumer, D-N.Y., said after that the group is “90 percent” complete on the legislation.¶ “There are a few little problems to work on,” he said. “We’ve been on the phone all day working with” the other members.¶ The guest-worker program is not the only contentious area of the Senate legislation. The bill is likely to include a large increase in visas for high-tech workers and the elimination of some categories of family visas, two areas that have provoked strong push back from advocates who fear it could make it harder for families to be reunited while favoring employment-based migration.¶ The guest-worker dispute broke into view last week when Chamber of Commerce officials went public with their concerns over the process, leading to angry responses from AFL-CIO officials.¶ The chamber has called for 400,000 new visas for guest workers, along with the ability for the workers to switch jobs once they are in the United States. Union officials countered with an offer of 10,000 visas and say the foreign workers should be allowed to pursue citizenship once they have entered the country.¶ The senators have reportedly agreed to cap the program at 200,000 visas per year, starting at a much lower figure and moving up as the economy improves.¶ The biggest sticking point, however, has been wages. The chamber wants to pay the foreigners the equivalent of minimum wages of American workers, and the unions are holding out for a higher pay scale based on median wages of each industry.¶ Business leaders contend that the AFL-CIO — and, by association, the White House — are not negotiating in good faith.¶ “The president is obviously close to unions on this issue. The constituencies they’re trying to keep happy with immigration reform do not care about this piece of it,” said Tamar Jacoby, president of ImmigrationWorks USA, a federation of small-business owners that supports immigration reform. “They want to keep Latino voters happy, keep unions happy — and, dare say it, who cares about the economy?”¶ Jacoby said that based on last year’s election results, the White House is calculating that “Republicans so badly need to get on the right side of history with Latino voters, they will throw business to the wolves and throw future immigrants under the bus.”

#### Obama not pushing immigration reform

ABC Local 3/28. [ABC Local, newspaper, “Obama says immigration reform bill could pass by summer” http://abclocal.go.com/wabc/story?section=news/politics&id=9044119]

While overhauling America's patchwork immigration laws is a top second term priority for the president, he has ceded the negotiations almost entirely to Congress. He and his advisers have calculated that a bill crafted by Congress stands a better chance of winning Republican support than one overtly influenced by the president.¶ In his interviews Wednesday, Obama tried to stay out of the prickly policy issues that remain unfinished in the Senate talks, though he said a split between business and labor on wages for new low-skilled workers was unlikely to "doom" the legislation.¶ "This is a resolvable issue," he said.¶ The president also spoke Wednesday with Univision. His interviews followed a citizenship ceremony conducted Monday at the White House where he pressed Congress to "finish the job" on immigration, an issue that has vexed Washington for years.¶ The president made little progress in overhauling fractured U.S. immigration laws in his first term, but he redoubled his efforts after winning re-election. The November contest also spurred some Republicans to drop their opposition to immigration reform, given that Hispanics overwhelmingly backed Obama.¶ In an effort to keep Republicans at the negotiation table, Obama has stayed relatively quiet on immigration over the last month.

#### No vote or bill – their ev is hype.

USA Today 3-25-13. ["Obama wants immigration overhaul 'as soon as possible'" -- www.usatoday.com/story/news/politics/2013/03/25/obama-immigration-naturalization-ceremony/2016247/]

Obama's hopes to get a bill done quickly might be hard to meet.¶ Last week, Sen. Patrick Leahy, D-Vt., chairman of the Senate Judiciary committee, criticized Obama and fellow lawmakers for moving too slowly on legislation. Leahy said he doubted the committee could complete work on a bill by the end of April.

#### PC not key

**Soto 1/4**, Dr. Victoria M. DeFrancesco Soto, NBC Latino and MSNBC contributor, Senior Analyst for Latino Decisions and Fellow at the Center for Politics and Governance at the LBJ School of Public Affairs at the University of Texas, at Austin, “Opinion: Immigration reform will not be easy, but it’s not impossible,” January 4th, http://nbclatino.com/2013/01/04/opinion-immigration-reform-will-not-be-easy-but-its-not-impossible/

Unlike in his first administration, the president seems to be on board and ready for rolling up his sleeves and getting into immigration reform, but **that won’t cut it**. The problem for immigration reform in 2013 is rooted in Capital Hill. The president’s support is a **necessary** condition for any major policy overhaul, **but** it is **not** a **sufficient** condition. Let’s just assume the president can arm-wrestle the Senate Democrats and a few Senate Republicans into supporting his immigration reform. Two out of three won’t cut it. The Republican-controlled House is what stands in the way of immigration reform. More specifically, the GOP’s split mindset regarding Latinos and immigration is what will likely **prevent the president from crossing off immigration reform from his 2013 to-do list**.

#### Obama has no PC

The Hill 3-20. ["Obama honeymoon may be over" -- thehill.com/homenews/administration/289179-obama-honeymoon-may-be-over]

The second-term honeymoon for President Obama is beginning to look like it is over.¶ Obama, who was riding high after his reelection win in November, has seen his poll numbers take a precipitous fall in recent weeks. ¶ A CNN poll released Tuesday showed Obama’s favorability rating underwater, with 47 percent approving and 50 percent disapproving of Obama’s handling of his job. ¶ Much of the president’s agenda is stuck, with climate change regulations delayed, immigration reform mired in committee negotiations and prospects for a grand bargain budget deal in limbo at best. ¶ On Tuesday, in a decision that underscored Obama’s depleting political capital, the White House watched as Senate Majority Leader Harry Reid (D-Nev.) announced only a watered-down version of Obama’s gun control proposals would be considered on the Senate floor. ¶ Republicans, sensing the sea change, are licking their chops. They point to the lack of movement on Obama’s signature issues, noting the contrast to the ambitious plans outlined in the early weeks of his second term.

#### Energy battles in Congress now thump the link

Geman 3-18. [Ben, Energy and environment reporter, "The week ahead: Budget battles, gas exports take center stage" The Hill -- thehill.com/blogs/e2-wire/e2-wire/288671-the-week-ahead-budget-battles-gas-exports-take-center-stage]

This week is likely to bring floor debate in the House and Senate over competing federal budget plans that offer starkly different priorities on energy.¶ The GOP-crafted House plan would mandate approval of the Keystone XL oil sands pipeline and expand federal lands available for oil-and-gas leasing.¶ Senate Democrats, in contrast, are touting their plans’ investments in green energy research and addressing climate change.¶ Energy will also take center stage at a slew of Capitol Hill hearings. Among them:¶ On Tuesday, a subpanel of the House Oversight and Government Reform Committee will look at Energy Department (DOE) review of natural-gas exports.¶ DOE is weighing an array of industry applications to greatly expand natural-gas exports — proposals that have touched off a political battle in Washington.¶ Major petroleum industry and business groups support the export plans and say they will bolster the U.S. economy.¶ But several big manufacturing companies that rely on natural gas are urging major constraints on exports, fearing they would boost domestic prices. Some environmentalists are also opposing the plans.

#### Keystone thumps –

#### Decision within weeks.

Geman 3-13. [Ben, energy and environment reporter, "Obama: Pipeline decision coming soon" The Hill -- thehill.com/blogs/e2-wire/e2-wire/287967-obama-tells-gop-that-keystone-pipeline-decision-coming-soon]

President Obama told House Republicans that a decision on the Keystone XL oil sands pipeline will arrive soon, but lawmakers emerged from their meeting with Obama split over whether or not he suggested that he’s leaning toward approval.¶ “[He] said that there was going to be a decision made soon, I think he said a couple of weeks,” said Rep. Andy Harris (R-Md.) after the House GOP conference had a wide-ranging meeting with Obama in the Capitol on Wednesday.

#### It costs capital

Walsh 3-25. [Kenneth, White House correspondent, "Domestic Backlog Greets Obama Upon Return from the Mideast" US News and World Report -- www.usnews.com/news/blogs/Ken-Walshs-Washington/2013/03/25/domestic-backlog-greets-obama-upon-return-from-the-mideast]

Keystone XL pipeline: The Senate voted 62-37 on Friday in favor of the Keystone XL pipeline, which would transport oil from Canada to Gulf Coast refineries. The vote was nonbinding, but it showed strong sentiment for the project because, advocates say, the United States needs the oil and the jobs that would be created.¶ The Obama administration has been studying the project, which environmentalists oppose because they say it would add to global warming and be prone to oil spills. Obama will cause howls of protest no matter which way his administration goes on this issue.

#### Budget thumps

Japan Times 3-25. ["Senate sets up budget battle" -- www.japantimes.co.jp/news/2013/03/25/world/senate-sets-up-budget-battle/#.UVHdIVuk8yE]

¶ The U.S. Senate reached a milestone Saturday when it overcame partisan gridlock to approve its first budget resolution in four years, setting up a political duel with the Republican-held House of Representatives.¶ ¶ The sweeping plan for the 2014 fiscal year, the first budget blueprint passed by the Democrat-led Senate under President Barack Obama since 2009, squeaked through by the narrowest of margins, 50-49.¶ ¶ “Doing this has been a Herculean feat,” said Democratic Majority Leader Harry Reid, referring to the 100 amendments that were voted on in a marathon 13-hour session known in the Senate as a “vote-a-rama.”¶ ¶ The plan, shepherded by Senate Budget Committee chairwoman Patty Murray, seeks nearly $1 trillion in new revenue over the next decade, mostly through the closure of tax loopholes that favor the wealthy and an equal amount in reductions to government spending.¶ ¶ The House on Thursday adopted its own budget resolution, which seeks to reach balance within 10 years through significant reductions in federal spending, the overhaul of entitlements such as Medicare and the repeal of Obama’s health care law.¶ ¶ The glaring partisanship of Congress ensures that neither plan will be enacted into law. Instead, they will serve as the starting points for a broader debate this year over budget policy.¶ ¶ The Senate’s budget would shrink annual federal shortfalls over the next decade to nearly $400 billion, raise unspecified taxes by $975 billion and cull modest savings from domestic programs. The House’s plan would balance the budget within 10 years without boosting taxes.¶ ¶ That blueprint— by Paul Ryan, the Republican party’s vice presidential candidate last year — claims $4 trillion more in savings over the period than Senate Democrats by digging deeply into health care and food benefits for the poor and other safety net programs. It would also transform the health care program for older Americans into a voucherlike system for future recipients.¶ ¶ Republican Minority Leader Mitch McConnell praised the comprehensive debate on the floor that allowed lawmakers to eventually reach their objective of voting on a fiscal blueprint. “This is one of the Senate’s finest days in recent years,” he said.¶ ¶ Leaders in the Senate and House are now expected to bring the chambers to conference as lawmakers head into what increasingly looks like becoming a summer showdown over the U.S. federal borrowing limit. House Speaker John Boehner has said he wants a dollar in spending cuts for every dollar rise in the debt ceiling, but Obama opposes such an approach.¶ ¶ Obama has courted Republicans in recent weeks in a bid to draw mutually acceptable outlines for deficit reduction. The president wants new revenue as part of a deal, but Boehner has stressed that the $600 billion in tax hikes from a yearend pact were the last new taxes he wanted to see.¶ ¶ Senators worked feverishly through the entire day Friday and into Saturday as the parties’ leaders contended with more than 560 filed amendments. Most fell by the wayside and were not voted on, but there were key amendments that were approved, including a repeal of an unpopular tax on medical devices that was enacted as part of “Obamacare.”¶ ¶ Symbolic amendments ranged from voicing support for letting states collect taxes on Internet sales to expressing opposition to requiring photo identification for voters.¶ ¶ Senators also went on record in support of the Keystone Pipeline, which the Obama administration has delayed due to environment concerns, and backed the withholding of wages for top White House budget staffer for every day the president fails to disclose his budget plan.¶ ¶ Obama was supposed to lay out his budget in February, but the White House now says he will do so in April.

#### Gun control thumps –

#### Pushing now

Washington Post 3/26. [“Obama to Congress: Finish the job on gun control”-- http://www.washingtonpost.com/blogs/post-politics/wp/2013/03/23/obama-to-congress-join-me-in-finishing-the-job/]

Three months after an elementary school massacre in Connecticut reignited a debate over the nation’s gun laws, President Obama is urging Congress to “join me in finishing the job” by taking swift action on gun-control legislation. Obama, in his weekly radio address released on Saturday, noted the preliminary steps taken in the Senate to advance such measures as universal background checks for all gun buyers and a federal crack-down on gun trafficking. But he chastised Congress for the slow pace of progress, contrasting their indecision with the widespread popular support across the country for strengthening the background check system and other proposals. “Today there is still genuine disagreement among well-meaning people about what steps we should take to reduce the epidemic of gun violence in this country,” Obama said. “But you – the American people – have spoken. You’ve made it clear that it’s time to do something.” Before departing on his trip to Israel and Jordan, Obama spoke with lawmakers from both parties about the gun measures under consideration, according to a White House official. The president plans to continue pressuring Congress on the issue, including additional travel outside of Washington designed to mobilize public support, said the official, who spoke only on the condition of anonymity. Obama’s remarks come after a difficult week for his gun violence agenda. After a ban on assault weapons — supported by Obama and authored by Sen. Dianne Feinstein (D-Calif.) — did not gain enough bipartisan traction on Capitol Hill, Senate Majority Leader Harry M. Reid (D-Nev.) decided not to include it as part of a bill encompassing several other gun-control proposals that the Senate is scheduled to begin debating in early April. Reid’s decision severely diminished any prospect of passing a prohibition on hundreds of specific so-called assault weapons, although Feinstein still can introduce the assault weapons ban as an amendment to the full bill. The centerpiece of Obama’s gun-control agenda is universal background checks, which has by far the most support among Americans, and appears to have more momentum in the Senate than the assault weapons ban. In his radio address, Obama urged the Senate and the House to vote on each of the proposals he is championing – from background checks to bans on assault weapons and high-capacity ammunition magazines to school safety measures to the gun trafficking bill. “These ideas shouldn’t be controversial – they’re common sense,” Obama said. “They’re supported by a majority of the American people. And I urge the Senate and the House to give each of them a vote.”

#### Costs capital

Stirewalt 2-12. [Chris, politics editor, "Gun Control Will Crowd Out Other Obama Policy Points" Fox News -- www.foxnews.com/politics/2013/02/12/gun-control-will-crowd-out-other-obama-policy-points/]

How much political capital is President Obama willing to spend to achieve gun control?¶ The choice may not be entirely up to him.¶ Obama tonight will talk about many things in his fourth State of the Union address in an effort to goad his adversaries into action or increase the political penalties for their resistance.¶ He will batter Republicans on their refusal to accept his plan to replace part of automatic cuts to federal spending that begin at the end of the month with a tax hike on top earners. Expect to hear of dire consequences that will befall the nation if spending drops by $120 billion this year: unsafe medicines, hungry children, unsecured nukes, etc.¶ Obama will denounce foes of a rapid amnesty for illegal immigrants and call for additional stimulus spending to “invest” in middle-income jobs. That jobs plea will, as it has invariably become for Obama, be tied to global warming. Obama Democrats see the fight against changes in the earth’s climate as a twofer: it’s environmentalism and a jobs subsidy program.¶ There will be all of those things and more in what promises to be a flurry of policy provisions befitting a re-elected president determined to have a transformative second term. He may not match Bill Clinton’s record for longest-ever (1 hour, 28 minutes and 49 seconds in 2000), but Obama will certainly not be wrapping up quickly.¶ But whatever Obama talks about, it is likely to be overshadowed by his call for a gun ban in response to mass shootings and a steady tide of urban shootings, particularly in his hometown of Chicago.¶ The Constitution instructs the president “from time to time” to update Congress on the state of the union and “recommend to their consideration such measures as he shall judge necessary and expedient.¶ The tradition since 1790 has been for presidents to do this once a year, but the Framers included the line in order to make sure that there was at least some communication between the legislative and executive branches.¶ Presidents since Woodrow Wilson have needed little encouragement to tell Congress what’s on their minds, especially the current chief executive. Obama talks to, about and around Congress constantly.¶ So all that Obama says tonight about immigration, taxes, stimulus and global warming will have been heard and re-heard by the lawmakers Obama is ostensibly there to talk to.¶ The real purpose of States of the Union addresses since Lyndon Johnson moved his speech to primetime from the sleepy midday affairs of his predecessors is to talk to the folks at home and to get the political press to restate your talking points.¶ The speeches are predictable news events that allow for lavish coverage and great pictures – lots of cheering, the big Stars and Stripes, etc. What the president says can be analyzed, re-analyzed and dissected for the evening, and, since Obama will give partial versions of the speech in three campaign stops, for days afterward.¶ But the full laundry list of policies won’t make it through the media wringer. Despite Obama’s claims that Washington can “walk and chew gum at the same time” he surely knows by now that it cannot.¶ In the case of this speech, it seems inevitable that his push on gun control will predominate. It’s an issue that his political base adores, it being an article of faith on the American left that limiting gun sales will reduce gun crime. Add to that the double bias in favor of the issue in the press – dramatic stories for the “if it bleeds it leads” set and a policy that fits overall view in the establishment press that firearms are bad.¶ To that end, the president will use the parents and survivors of the Newtown, Conn. tragedy and other victims of gun violence to personalize his message on gun control. Reports will follow these breadcrumbs and produce the stories that reinforce the president’s message.¶ People getting shot and killed makes for better copy than “sequestration” or “out-year entitlement reform” or “green jobs” or whatever fiscal and economic crisis the government and the nation are currently stumbling through.¶ But the risk here for Obama is that for all of his pivots and policy pounding, the speech may end up being recalled as one about gun control. On each subsequent retelling, the storyline will grow shorter and shorter but guns will never drop from the lead.¶ And given the deep resistance, even among some his own party, to gun control, in political conflict over the subject will never go away.¶ So, if Obama means to see gun control enacted in his second term, he will never have a better chance to sell it than he will tonight. But the president had better be prepared to sacrifice much of the rest of his agenda to make this a reality.

#### DOE just announced millions in SMR funding – thumps the link

**SmartMeters.com 3-21**-13 [“DOE Announces Funding for Small Modular Reactors,” http://www.smartmeters.com/the-news/renewable-energy-news/3897-doe-announces-funding-for-small-modular-reactors.html]

The United States Department of Energy (DOE) has issued a new funding opportunity to help American industry design and certify innovative small modular nuclear reactors (SMRs).¶ The initiative is part of the Obama Administration’s all-of-the-above energy strategy to drive the transition to more sustainable energy sources.¶ Energy Secretary Steven Chu notes, “As President Obama said in the State of the Union, the Administration is committed to speeding the transition to more sustainable sources of energy. Innovative energy technologies, including small modular reactors, will help provide low-carbon energy to American homes and businesses, while giving our nation a key competitive edge in the global clean energy race. The funding opportunity announced today is focused on bringing innovative small modular reactors to market, creating new jobs and businesses in the United States.”¶ The Energy Department plans to solicit proposals for cost-shared small modular reactor projects that have the potential to be licensed by the Nuclear Regulatory Commission and be operational around 2025.¶ According to the DOE, “Selected projects will span a five-year period with at least 50 percent provided by private industry. Subject to congressional appropriations, federal funding for this solicitation and the project announced last year will be derived from the total $452 million identified for the Department’s Small Modular Reactor Licensing Technical Support program.¶ Small modular reactors – which are approximately one-third the size of current nuclear power plants – have compact, scalable designs that are expected to offer a host of safety, construction, and economic benefits.”¶ The DOE is seeking 300 megawatts or smaller reactor designs that can be manufactured in factories and transported to sites where they would be plug-and-play upon arrival. The smaller size reduces costs and construction times. The compact size makes these reactors ideal for small electric grids and for locations unable to support large reactors.¶ The Energy Department previously announced plans “to accelerate commercialization of a small modular reactor design that targets a 2022 deployment date. The Department will share costs on the design, certification and licensing of the B&W mPower small modular reactor design, with B&W providing at least 50 percent of the total cost.”

#### PC theory is wrong- winners win

Hirsh, 2-7 – National Journal chief correspondent, citing various political scientists

[Michael, former Newsweek senior correspondent, "There’s No Such Thing as Political Capital," National Journal, 2-9-13, www.nationaljournal.com/magazine/there-s-no-such-thing-as-political-capital-20130207, accessed 2-8-13, mss]

**There’s No Such Thing as Political Capital**

The idea of political capital—or mandates, or momentum—is so poorly defined that presidents and pundits often get itwrong. On Tuesday, in his State of the Union address, President Obama will do what every president does this time of year. For about 60 minutes, he will lay out a sprawling and ambitious wish list highlighted by gun control and immigration reform, climate change and debt reduction. In response, the pundits will do what they always do this time of year: They will talk about how unrealistic most of the proposals are, discussions often informed by sagacious reckonings of how much “political capital” Obama possesses to push his program through. Most of **this** talk **will have no bearing on what actually happens** over the next four years. Consider this: Three months ago, just before the November election, if someone had talked seriously about Obama having enough political capital to oversee passage of both immigration reform and gun-control legislation at the beginning of his second term—even after winning the election by 4 percentage points and 5 million votes (the actual final tally)—this person would have been called crazy and stripped of his pundit’s license. (It doesn’t exist, but it ought to.) In his first term, in a starkly polarized country, the president had been so frustrated by GOP resistance that he finally issued a limited executive order last August permitting immigrants who entered the country illegally as children to work without fear of deportation for at least two years. Obama didn’t dare to even bring up gun control, a Democratic “third rail” that has cost the party elections and that actually might have been even less popular on the right than the president’s health care law. And yet, for reasons that have very little to do with Obama’s personal prestige or popularity—variously put in terms of a “mandate” or “political capital”—chances are fair that both will now happen. What changed? In the case of gun control, of course, it wasn’t the election. It was the horror of the 20 first-graders who were slaughtered in Newtown, Conn., in mid-December. The sickening reality of little girls and boys riddled with bullets from a high-capacity assault weapon seemed to precipitate a sudden tipping point in the national conscience. One thing changed after another. Wayne LaPierre of the National Rifle Association marginalized himself with poorly chosen comments soon after the massacre. The pro-gun lobby, once a phalanx of opposition, began to fissure into reasonables and crazies. Former Rep. Gabrielle Giffords, D-Ariz., who was shot in the head two years ago and is still struggling to speak and walk, started a PAC with her husband to appeal to the moderate middle of gun owners. Then she gave riveting and poignant testimony to the Senate, challenging lawmakers: “Be bold.” As a result, momentum has appeared to build around some kind of a plan to curtail sales of the most dangerous weapons and ammunition and the way people are permitted to buy them. It’s impossible to say now whether such a bill will pass and, if it does, whether it will make anything more than cosmetic changes to gun laws. But one thing is clear: The **political tectonics** have **shift**ed **dramatically in very little time**. Whole new possibilities exist now that didn’t a few weeks ago. Meanwhile, the Republican members of the Senate’s so-called Gang of Eight are pushing hard for a new spirit of compromise on immigration reform, a sharp change after an election year in which the GOP standard-bearer declared he would make life so miserable for the 11 million illegal immigrants in the U.S. that they would “self-deport.” But this turnaround has very little to do with Obama’s personal influence—his political mandate, as it were. It has almost entirely to do with just two numbers: 71 and 27. That’s 71 percent for Obama, 27 percent for Mitt Romney, the breakdown of the Hispanic vote in the 2012 presidential election. Obama drove home his advantage by giving a speech on immigration reform on Jan. 29 at a Hispanic-dominated high school in Nevada, a swing state he won by a surprising 8 percentage points in November. But the movement on immigration has mainly come out of the Republican Party’s recent introspection, and the realization by its more thoughtful members, such as Sen. Marco Rubio of Florida and Gov. Bobby Jindal of Louisiana, that without such a shift the party may be facing demographic death in a country where the 2010 census showed, for the first time, that white births have fallen into the minority. It’s got nothing to do with Obama’s political capital or, indeed, Obama at all. The point is not that “political capital” is a meaningless term. Often it is a synonym for “mandate” or “momentum” in the aftermath of a decisive election—and just about every politician ever elected has tried to claim more of a mandate than he actually has. Certainly, Obama can say that because he was elected and Romney wasn’t, he has a better claim on the country’s mood and direction. Many pundits still defend political capital as a useful metaphor at least. “It’s an unquantifiable but meaningful concept,” says Norman Ornstein of the American Enterprise Institute. “You can’t really look at a president and say he’s got 37 ounces of political capital. But the fact is, it’s a concept that matters, if you have popularity and some momentum on your side.” The real problem is that the idea of political capital—or mandates, or momentum—is so poorly defined that presidents and pundits often get it wrong. “Presidents usually over-estimate it,” says George Edwards, a presidential scholar at Texas A&M University. “The best kind of political capital—some sense of an electoral mandate to do something—is very rare. It almost never happens. In 1964, maybe. And to some degree in 1980.” For that reason, **political capital** is a concept that **misleads** far more than it enlightens. **It is** **distortionary**. It conveys the idea that we know more than we really do about the ever-elusive concept of political power, and it discounts the way unforeseen events can suddenly change everything. Instead, it suggests, erroneously, that a political figure has a concrete amount of political capital to invest, just as someone might have real investment capital—that a particular leader can bank his gains, and the size of his account determines what he can do at any given moment in history. Naturally, any president has practical and electoral limits. Does he have a majority in both chambers of Congress and a cohesive coalition behind him? Obama has neither at present. And unless a surge in the economy—at the moment, still stuck—or some other great victory gives him more momentum, it is inevitable that the closer Obama gets to the 2014 election, the less he will be able to get done. Going into the midterms, Republicans will increasingly avoid any concessions that make him (and the Democrats) stronger. But the abrupt emergence of the immigration and gun-control issues illustrates how suddenly shifts in mood can occur and how political interests can align in new ways just as suddenly. Indeed, the pseudo-concept of political capital masks a larger truth about Washington that is kindergarten simple: You just don’t know what you can do until you try. Or as Ornstein himself once wrote years ago, “**Winning wins.”** In theory, and in practice, depending on Obama’s handling of any particular issue, even in a polarized time, he could still deliver on a lot of his second-term goals, depending on his skill and the breaks. Unforeseen catalysts can appear, like Newtown. Epiphanies can dawn, such as when many Republican Party leaders suddenly woke up in panic to the huge disparity in the Hispanic vote. Some **political scientists** **who study** the elusive calculus of **how to pass legislation** and run successful presidencies **say** that **political capital is**, at best, **an empty concept**, and that **almost nothing in** the **academic literature** successfully quantifies or even defines it. “It can refer to a very abstract thing, like a president’s popularity, but there’s no mechanism there. That makes it kind of useless,” says Richard Bensel, a government professor at Cornell University. Even Ornstein concedes that the calculus is far more complex than the term suggests. **Winning** on one issue often **changes the** **calculation** for the next issue; there is never any known amount of capital. “The idea here is, if an issue comes up where **the conventional wisdom is that president is not going to get what he wants**, and [they]he gets it, then each time that happens, it changes the calculus of the **other actors**” Ornstein says. “If they think he’s going to win, they may **change positions to get on the winning side**. **It’s a bandwagon effect**.” ALL THE WAY WITH LBJ Sometimes, a clever practitioner of power can get more done just because [they’re]he’s aggressive and knows the hallways of Congress well. Texas A&M’s Edwards is right to say that the outcome of the 1964 election, Lyndon Johnson’s landslide victory over Barry Goldwater, was one of the few that conveyed a mandate. But one of the main reasons for that mandate (in addition to Goldwater’s ineptitude as a candidate) was President Johnson’s masterful use of power leading up to that election, and his ability to get far more done than anyone thought possible, given his limited political capital. In the newest volume in his exhaustive study of LBJ, The Passage of Power, historian Robert Caro recalls Johnson getting cautionary advice after he assumed the presidency from the assassinated John F. Kennedy in late 1963. Don’t focus on a long-stalled civil-rights bill, advisers told him, because it might jeopardize Southern lawmakers’ support for a tax cut and appropriations bills the president needed. “One of the wise, practical people around the table [said that] the presidency has only a certain amount of coinage to expend, and you oughtn’t to expend it on this,” Caro writes. (Coinage, of course, was what political capital was called in those days.) Johnson replied, “Well, what the hell’s the presidency for?” Johnson didn’t worry about coinage, and he got the Civil Rights Act enacted, along with much else: Medicare, a tax cut, antipoverty programs. He appeared to understand not just the ways of Congress but also the way to maximize the momentum he possessed in the lingering mood of national grief and determination by picking the right issues, as Caro records. “Momentum is not a mysterious mistress,” LBJ said. “It is a controllable fact of political life.” Johnson had the skill and wherewithal to realize that, at that moment of history, he could have unlimited coinage if he handled the politics right. He did. (At least until Vietnam, that is.)

[Matt note: gender paraphrased]

### Korea DA

#### 123 agreements are prolif-resistant enough—no ENR pledge not key

**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

Finally, while we have many ways to promote nonproliferation objectives, one important nonproliferation tool that we cannot afford to lose is our ability to enter into peaceful nuclear cooperation agreements with other countries. This capability, among others, has allowed the United States to promote widespread acceptance of nonproliferation norms and restraints, including international safeguards and physical protection measures and the NPT. U.S. agreements for cooperation in peaceful nuclear energy with other states require strict nonproliferation controls that go beyond those of other suppliers, such as consent rights on reprocessing, enrichment, and storage of weapons-usable materials subject to our agreements. They also provide a framework for establishing invaluable person-to-person and institution-to-institution contacts and collaboration that can help advance our nonproliferation objectives.

#### Completing the agreement is inevitable – and there’ll be no disagremenet

Squassoni ’13 – director and senior fellow with the Proliferation Prevention Program at the Center for Strategic and International Studies (CSIS)

(Sharon, “U.S.-South Korean Peaceful Nuclear Cooperation Agreement”, CSIS, 2-19-13, http://csis.org/publication/us-south-korean-peaceful-nuclear-cooperation-agreement)

Will the United States and South Korea overcome their differences in time so the agreement does not lapse?¶ A3: The new South Korean government under Ms. Park will enter office on February 25, 2013. It is likely that this agreement will be an early top priority. The U.S. and South Korean nuclear industries have significant business that requires the continuation of the peaceful nuclear cooperation agreement, including Westinghouse and KEPCO collaboration on South Korea’s sale of four reactors to the United Arab Emirates. A lapse of a few months would not be catastrophic, but both sides likely want to avoid that.¶ An agreement that meets all the requirements of Section 123 of the Atomic Energy Act sits before Congress for 90 continuous days of session and enters into force if Congress does not disapprove it. This means that Congress must pass an actual law if it disagrees with any of the text in the agreement. This rarely happens, although sometimes Congress has given conditioned approval. In the case of India, the Hyde Act required approval by the Nuclear Suppliers Group before Congress would approve the U.S.-India 123 agreement and in the case of China, Congress passed a law that allowed entry into force only upon China’s meeting certain requirements, which took thirteen years.

#### South Korea’s given up on pyroprocessing in the new agreement—no impact

NTI 12

[“U.S. Reluctant to Permit South Korean Fuel Reprocessing, Envoy Says”, NTI, 3-8-2012, http://www.nti.org/gsn/article/south-korea-not-expecting-us-permit-fuel-reprocessing-envoy-says/]

The United States remains reluctant to permit South Korea to recycle used atomic fuel due to "deep-rooted" fears the reprocessing technology might be turned to military use, an unidentified South Korean diplomat told the Yonhap News Agency on Thursday (see GSN, Dec. 12, 2011). Resistance on the part of U.S. officials to allowing Seoul to use pyroprocessing technology is the result of persistent "distrust" over South Korea's secret nuclear weapons program in the early 1970s, said the source who is taking part in bilateral negotiations on the matter. Faced with strong opposition from Washington, the South abandoned the weapons effort and joined the Nuclear Nonproliferation Treaty in 1975. Seoul and Washington are negotiating a bilateral civilian atomic cooperation accord to take the place of an existing deal due to expire in 2014. The two allies have conducted five sessions of official talks for the updated agreement. "In spite of our repeated willingness for nonproliferation during the talks, U.S. negotiators remain reluctant to recognize our technology due to the deep-rooted mistrust over the short-lived nuclear program under the Park Jung-hee government," the South Korean diplomat said. South Korea has decided to cease lobbying for pyroprocessing rights and to instead seek treaty provisions regarding sales of atomic energy reactors, the envoy said. "Little progress was made on the issue of whether the revised accord would include the pyroprocessing technology," he said.

#### Middle East prolif is uniquely destabilizing- causes miscalc, adventurism, first-strikes and nuclear war

**Bar ‘11** [Dr. Shmuel Bar is Director of Studies at the Institute of Policy and Strategy in Herzliya, Israel. He served for thirty years in the Israeli intelligence community, has headed research groups on proliferation and deterrence, “Can Cold War Deterrence Apply to a Nuclear Iran?” Strategic Perspectives, Jerusalem Center for Public Affairs, number 7, 2011, <http://www.herzliyaconference.org/eng/_Uploads/dbsAttachedFiles/Bar_canColdWar.pdf>]

**A nuclear Middle East will be very different from the Cold War in a wide range of aspects**. True, we may safely assume that the leaders and peoples of the region have no desire to be the targets of nuclear weapons. However, **the inherent instability of the region and its regimes, the difficulty in managing multilateral nuclear tensions, the weight of religious, emotional, and internal pressures, and the proclivity of many of the regimes in the region toward military adventurism and brinkmanship do not bode well for** the future of **this region once it enters the nuclear age. Nuclear war** need not erupt as a result of a conscious decision by a leadership to use nuclear weapons. It **is** more **likely to result from escalation scenarios, misinterpretation of intentions of the other side due to poor intelligence and lack of communication between antagonists, inadvertent use, poor command and control constraints, and underestimation of the other party’s response to nuclear brinkmanship**. Such behavior in a polynuclear environment would be tantamount to lighting a match in a gas depot. **The countries of the region will probably be more predisposed than the Cold War protagonists to brandish their nuclear weapons not only rhetorically but through nuclear alerts or nuclear tests**

**in order to deter their enemies, leading to situations of multilateral nuclear escalation**. Once one country has taken such measures, **the other nuclear countries of the region would probably feel forced to adopt defensive measures, and multilateral escalation will result**. However, **such multilateral escalation will not be mitigated by Cold War-type hotlines and means of signaling, and none of the parties involved will have escalation dominance. This and the absence of a credible second-strike capability may well strengthen the tendency to opt for a first strike**.

# 1ar

### Korea

#### Put that 2ac card back into the record

Sheen ’11 – assistant professor at Seoul National University

(Seongho, was an assistant research professor at Asia-Pacific Center for Security Studies (APCSS), Honolulu, Hawaii, and a research fellow at Institute for Foreign Policy Analysis (IFPA), “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)

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

#### Momentum for nationalists means they’d be successful in changing the South Korean public’s mind on nuclear weapons—causes breakout

**Lee ’11** – senior fellow at the Institute for Peace and Cooperation in Seoul

(Byong-chul, served on the foreign and national security policy planning staff of South Korean President Kim Young-sam, “South Korea’s Nuclear Weapons Temptation”, 10-14-2011, http://yaleglobal.yale.edu/content/south-koreas-nuclear-weapons-temptation)

This has only added to a rising chorus among the mainstream media and conservative politicians calling for review of South Korea’s “no nuke” pledge. The hardliners point out that the country’s future lies in arming South Korea with nuclear weapons, harkening the strategy of South Korean President Park Chung-hee, a keen advocate for the development of a nuclear-weapons program who was assassinated in 1979. On the face of it, their aggressive claim is persuasive. The debate attracts plenty of pundits in what is by no means a media psychodrama or tale of a distant future. That future is coming into sharp focus for four reasons. First, **fuming right-wing groups** have been calling for the South Korean Lee Myung-bak government to nullify **the Joint Declaration** of the Denuclearization of the Korean Peninsula, signed in 1992, by arguing that the hostile North had already broken the pact. In 2002, the Bush administration declared the 1994 Agreed Framework, including a series of steps for normalizing relations between the US and North Korea, null and void, in response to the North’s refusal to halt its enrichment program. So, the 1992 pact has been reduced to a plaque that gathers dust in a dark closet. As strong advocates of the South’s nuclear buildup in the wake of the North’s provocative nuclear tests, they make light of the first clause of the pact that “South and North Korea shall not test, manufacture, produce, receive, possess, store, deploy or use nuclear weapons.” The angry extremists continue to hold out hope for a nuclear-armed Korea. Apparently the diehard North Korean regime’s threats and violations have provided ample excuses for South Korean hawks to do exactly the opposite of what the clause promised. Second, North Korea’s nuclear tests in 2006 and 2009 changed the logic of the denuclearization of the peninsula, ushering in a new era marked by an asymmetrical military posture. If North Korea is discovered to have actual nuclear warheads, **South Korea would feel** compelled **to acquire a deterrent stockpile**

**independently despite America’s committed nuclear umbrella policy**. The North’s third nuclear test could possibly lead the South to reconsider the ossified denuclearization-related policy – a job requiring powerful leverage. To this end, if sufficiently intimidated, average South Koreans **could lose their reluctance over advancing nuclear capability**. While Seoul does not now harbor ambitions to develop a nuclear-weapons capability, the chance of a profound change of mind is not impossible. For want of an alternative, it would be wise not to take South Korea’s non- nuclear policy for granted. The irony is that a growing number of South Koreans also live in a nuclear-weapons-solve-everything version of Plato’s cave – the same paranoid mindset the North has insisted upon.

### Energy

#### Energy battles in Congress now thump the link

Geman 3-18. [Ben, Energy and environment reporter, "The week ahead: Budget battles, gas exports take center stage" The Hill -- thehill.com/blogs/e2-wire/e2-wire/288671-the-week-ahead-budget-battles-gas-exports-take-center-stage]

#### DOE just announced millions in SMR funding – thumps the link

**SmartMeters.com 3-21**-13 [“DOE Announces Funding for Small Modular Reactors,” http://www.smartmeters.com/the-news/renewable-energy-news/3897-doe-announces-funding-for-small-modular-reactors.html]

The United States Department of Energy (DOE) has issued a new funding opportunity to help American industry design and certify innovative small modular nuclear reactors (SMRs).¶ The initiative is part of the Obama Administration’s all-of-the-above energy strategy to drive the transition to more sustainable energy sources.¶ Energy Secretary Steven Chu notes, “As President Obama said in the State of the Union, the Administration is committed to speeding the transition to more sustainable sources of energy. Innovative energy technologies, including small modular reactors, will help provide low-carbon energy to American homes and businesses, while giving our nation a key competitive edge in the global clean energy race. The funding opportunity announced today is focused on bringing innovative small modular reactors to market, creating new jobs and businesses in the United States.”¶ The Energy Department plans to solicit proposals for cost-shared small modular reactor projects that have the potential to be licensed by the Nuclear Regulatory Commission and be operational around 2025.¶ According to the DOE, “Selected projects will span a five-year period with at least 50 percent provided by private industry. Subject to congressional appropriations, federal funding for this solicitation and the project announced last year will be derived from the total $452 million identified for the Department’s Small Modular Reactor Licensing Technical Support program.¶ Small modular reactors – which are approximately one-third the size of current nuclear power plants – have compact, scalable designs that are expected to offer a host of safety, construction, and economic benefits.”¶ The DOE is seeking 300 megawatts or smaller reactor designs that can be manufactured in factories and transported to sites where they would be plug-and-play upon arrival. The smaller size reduces costs and construction times. The compact size makes these reactors ideal for small electric grids and for locations unable to support large reactors.¶ The Energy Department previously announced plans “to accelerate commercialization of a small modular reactor design that targets a 2022 deployment date. The Department will share costs on the design, certification and licensing of the B&W mPower small modular reactor design, with B&W providing at least 50 percent of the total cost.”

### 1AR: Budget Thumper

Japan Times 3-25. ["Senate sets up budget battle" -- www.japantimes.co.jp/news/2013/03/25/world/senate-sets-up-budget-battle/#.UVHdIVuk8yE]

#### Temporary bill sets up bigger budget battle – coming now

Daily Political 3-27. ["Obama signs stopgap bill to prevent government shurtdown" -- lexis]

Barack Obama signed the temporary spending bill that will prevent a government shutdown. The Consolidated and Further Continuing Appropriations Act of 2013 funds the government for the last six months of the present fiscal year. It replaces the plan that was set to expire Wednesday. ¶ White House spokesman Jay Carney said that the new bill extends funding levels that were agreed upon by both parties. Congress approved the measure last week. It maintains sequestration, which is the $85 billion worth of automatic budget cuts that took effect March 1. It is a severe austerity drive initiated when President Obama and the Republicans can't reach an agreement on deficit cuts last February.¶ The Consolidated and Further Continuing Appropriations Act of 2013 takes steps to ease the impact of the automatic budget cuts to college assistance for active duty military personnel and food inspection. It finds the day-to-day operating budgets of every Cabinet agency until September 30, which is the end of the 2013 fiscal year. It also provides $87 billion for overseas military operations in Iraq and Afghanistan. It maintains the pay freeze for federal employees.¶ Carney added that President Obama wants to urge Republicans in Congress to replace the sequester with a more balanced debt reduction plan that is composed of more tax revenue from the rich taxpayers by removing loopholes and spending cuts. He said that the president has provided ways to remove the sequester.¶ Washington is preparing for the next budget battle. The Republican-controlled House of Representatives and the Democratic-run Senate have contradicting budgets. President Obama is set to reveal his own proposal in the week of April 8. It is expected to include more tax increases on the rick, which is something that Republicans don't want. Republicans want to slash funding for social programs that are favored by Democrats.