### Case

#### taking action now can lessen the impact

**Washington et al 9** [Warren M. Washington, 1 Reto Knutti, 2 Gerald A. Meehl, 1 Haiyan Teng, 1 Claudia Tebaldi, 3 David Lawrence, 1 Lawrence Buja, 1 and Warren G. Strand - National Center for Atmospheric Research, Boulder, Colorado, USA. and Institute for Atmospheric and Climate Science, ETH, Zurich, Switzerland. “How much climate change can be avoided by mitigation?”, GEOPHYSICAL RESEARCH LETTERS, VOL. 36, L08703, doi:10.1029/2008GL037074, 2009, Chetan]

**Avoiding the most serious climate change impacts will require informed policy decisions**. **This in turn will require information regarding the reduction of greenhouse gas emissions required to stabilize climate** in a state not too much warmer than today. **A new low emission scenario is simulated in a global climate model to show how some of the impacts from climate change can be averted through mitigation**. **Compared to a non-intervention reference scenario, emission reductions** of about 70% by 2100 are required to **prevent roughly half the change in temperature and precipitation that would otherwise occur.** By 2100, **the resulting stabilized global climate would ensure preservation of considerable Arctic sea ice and permafrost areas. Future heat waves would be 55% less intense, and sea level rise from thermal expansion would be about 57% lower than if a non-mitigation scenario was followed**

#### Zero uniqueness for their feedbacks arguments – if it was true then temperatures would be decreasing but they have no evidence supporting that it is, proves they’re not working

#### Feedbacks are net positive – additional emissions cause runaway warming

Hanson 8 (James E., Head – NASA Goddard Institute for Space Studies and Adjunct Professor of Earth and Environmental Science – Columbia University, “Tipping point: Perspective of a Scientist”, April, http://www.columbia.edu/~jeh1/2008/StateOfWild\_20080428.pdf)

Fast feedbacks—changes that occur quickly in response to temperature change—amplify the initial temperature change, begetting additional warming. As the planet warms, fast feedbacks include more water vapor, which traps additional heat, and less snow and sea ice, which exposes dark surfaces that absorb more sunlight. Slower feedbacks also exist. Due to warming, forests and shrubs are moving poleward into tundra regions. Expanding vegetation, darker than tundra, absorbs sunlight and warms the environment. Another slow feedback is increasing wetness (i.e., darkness) of the Greenland and West Antarctica ice sheets in the warm season. Finally, as tundra melts, methane, a powerful greenhouse gas, is bubbling out. Paleoclimatic records confirm that the long-lived greenhouse gases— methane, carbon dioxide, and nitrous oxide—all increase with the warming of oceans and land. These positive feedbacks amplify climate change over decades, centuries, and longer. The predominance of positive feedbacks explains why Earth’s climate has historically undergone large swings: feedbacks work in both directions, amplifying cooling, as well as warming, forcings. In the past, feedbacks have caused Earth to be whipsawed between colder and warmer climates, even in response to weak forcings, such as slight changes in the tilt of Earth’s axis.2 The second fundamental property of Earth’s climate system, partnering with feedbacks, is the great inertia of oceans and ice sheets. Given the oceans’ capacity to absorb heat, when a climate forcing (such as increased greenhouse gases) impacts global temperature, even after two or three decades, only about half of the eventual surface warming has occurred. Ice sheets also change slowly, although accumulating evidence shows that they can disintegrate within centuries or perhaps even decades. The upshot of the combination of inertia and feedbacks is that additional climate change is already “in the pipeline”: even if we stop increasing greenhouse gases today, more warming will occur. This is sobering when one considers the present status of Earth’s climate. Human civilization developed during the Holocene (the past 12,000 years). It has been warm enough to keep ice sheets off North America and Europe, but cool enough for ice sheets to remain on Greenland and Antarctica. With rapid warming of 0.6°C in the past 30 years, global temperature is at its warmest level in the Holocene.3 The warming that has already occurred, the positive feedbacks that have been set in motion, and the additional warming in the pipeline together have brought us to the precipice of a planetary tipping point. We are at the tipping point because the climate state includes large, ready positive feedbacks provided by the Arctic sea ice, the West Antarctic ice sheet, and much of Greenland’s ice. Little additional forcing is needed to trigger these feedbacks and magnify global warming. If we go over the edge, we will transition to an environment far outside the range that has been experienced by humanity, and there will be no return within any foreseeable future generation. Casualties would include more than the loss of indigenous ways of life in the Arctic and swamping of coastal cities. An intensified hydrologic cycle will produce both greater floods and greater droughts. In the US, the semiarid states from central Texas through Oklahoma and both Dakotas would become more drought-prone and ill suited for agriculture, people, and current wildlife. Africa would see a great expansion of dry areas, particularly southern Africa. Large populations in Asia and South America would lose their primary dry season freshwater source as glaciers disappear. A major casualty in all this will be wildlife.

#### Ice melting and ocean darkening accelerate warming

Hanson 8 (James E., Head – NASA Goddard Institute for Space Studies and Adjunct Professor of Earth and Environmental Science – Columbia University, “Twenty Years Later: Tipping Points Near on Global Warming”, 6-23, http://www.columbia.edu/~jeh1/2008/TwentyYearsLater\_20080623.pdf)

Climate can reach points such that amplifying feedbacks spur large rapid changes. Arctic sea ice is a current example. Global warming initiated sea ice melt, exposing darker ocean that absorbs more sunlight, melting more ice. As a result, without any additional greenhouse gases, the Arctic soon will be ice-free in the summer. More ominous tipping points loom. West Antarctic and Greenland ice sheets are vulnerable to even small additional warming. These two-mile-thick behemoths respond slowly at first, but if disintegration gets well underway it will become unstoppable. Debate among scientists is only about how much sea level would rise by a given date. In my opinion, if emissions follow a business-as-usual scenario, sea level rise of at least two meters is likely this century. Hundreds of millions of people would become refugees. No stable shoreline would be reestablished in any time frame that humanity can conceive.

#### Natural gas won’t block nuclear – prices increase coming now, only nuclear can provide stable rates

Somsel 10-13 [Joseph Somsel is a nuclear engineer with 35 years in the commercial nuclear power business, “Obama’s War on Nuclear Power” October 13th, 2012, http://www.americanthinker.com/2012/10/obamas\_war\_on\_nuclear\_power.html, Chetan]

Yet as of this writing, only four reactors have just begun physical construction, with permit approval in the spring of 2012. The rest have been either abandoned or suspended. Of course, the drop in natural gas prices had something to do with it, but investing in nuclear electricity-generation is a long-term bet against fossil fuel volatility. In other words, don't expect natural gas prices to stay this low for long. With the rapid spread of fracking and horizontal drilling technologies, a bubble of natural gas supply has hit the market, driving prices down. Current prices do not appear to support the long-term average cost of natural gas production causing financial difficulties for large producers like Chesapeake Energy. With an eventual normalization of costs to prices and the opening of export markets for America's gas, we can expect prices to show an upward climb over time. Nuclear, on the other hand, once built, is little troubled by uranium cost swings and can produce electricity at relatively stable rates. And stable electric rates have a intrinsic value to the customers by reducing the volatility of electric bills.

### 2AC – Incentives CP

#### Perm do both – the CP is the plan, the way a production cost incentive works is that there is both direct cash inducement but we only give money based on the MW production

policies should create market incentives and structures that demand and reward continual improvement in technology performance and cost.

#### Perm do the cP

#### Perm do the plan and all planks of the CP except the removal of the incentive, removing the incentive halts nuclear use

#### CP links to bubble because it still gives incentives, swezy = subsidies are unsustainable

#### No Link u for bubble – energy.gov, ptc passed, billions

#### Incentives now

Kramer 12 [David Kramer, Physics Today, Sept 2012, Romney, Obama surrogates spell out candidates’ energy policies, www.physicstoday.org/resource/1/phtoad/v65/i9/p20\_s1]

Both candidates favor growth in nuclear energy, and both support loan guarantees to back the initial deployment of advanced reactors. Stuntz said Romney would take steps to lower the cost of building new plants, “whether that means modular reactors that can be approved and rolled out in more cookie-cutter fashion . . . or whether that means smaller reactors.” The Obama administration’s support for nuclear power is evident from the $7 billion loan guarantee from DOE to back construction of two new reactors at an existing nuclear power plant in Georgia, Reicher noted. “**There’s serious money going into small modular reactors** and serious policy work going on in how to reform the licensing process” at the Nuclear Regulatory Commission to expedite approval.

#### Federal SMR loans coming—announced in September

Energy Collective 12 [Energy Collective, 7/26/12, Race for DOE SMR money heats up, theenergycollective.com/dan-yurman/97081/race-doe-smr-money-heats]

The Department of Energy is reviewing proposals from B&W and several other SMR firms to be granted up to $452 million over five years to support SMR engineering and licensing work. The agency will make up to two awards by the end of September this year.

#### Condo is a voter- results in argument irresponsibility, time and strat skews- no cost options in the 1nc make the 2ac impossible and kills in round education - dispo solves your offense

#### Competitiveness high

JP 9 (Jakarta Post, “Impact of President-Elect Obama on US Competitiveness”, 1-14, Lexis)

The United States, still in the leading position in IMD's World Competitiveness Yearbook (for the 14th consecutive year), is currently in dire straits. What could be the impact of Obama's campaign promises on U.S. competitiveness? Firstly, he will have to deal with Priority No. 1 - the consequences of the financial crisis on the American economy. President-elect Obama is supporting an important fiscal stimulus to jumpstart the economy in parallel with the monetary easing of the Fed (interest rates are approaching zero). This fiscal boost would encompass tax breaks to the middle 20% of taxpayers and roll back the tax cuts implemented under the Bush administration for families earning more than $250,000.

#### Alt causes –

#### A) Labor gaps

Bartlett 6 (David L., President – Global Economics Company, “Building a Competitive Workforce: Immigration and the US Manfacturing Sector”, 8-23, http://www.ilw.com/articles/2006,0823-bartlett.shtm)

Shortages of skilled labor constitute the foremost challenge confronting U.S. manufacturers who face growing competition from manufacturers in Asia, Eastern Europe, and elsewhere. Demand for professionals with university degrees is rising as manufacturing becomes increasingly high tech. But the U.S. educational system is not producing enough highly educated native-born manufacturing workers to meet this growing demand. Moreover, the pending retirements of Baby Boom generation workers will further constrain the growth of the manufacturing labor force. Bridging this gap between the supply and demand for skilled workers requires new investments in the U.S. educational system and the formulation of immigration policies that respond to the labor needs of the U.S. economy. Yet current immigration policies, especially since 9/11, have made it more difficult for highly skilled professionals from abroad to enter the United States.

### 2AC - CP

#### Aff solves warming better than the CP –

#### A. Modelling – the CP is only good for getting the US on board wheras there’s global adoption of SMR technology to cut emissions

#### B. Integration – even if they win that other countries model their policies, only SMR technology has the ability to integrate into smaller energy grids and electrical markets

#### Solvency ev is terrible – just affects cloud formation, super chimney.com , CO2 is key

#### increase in CO2 will overall lead to decrease in crop production and cause global starvation

Strom 7 [Robert Strom, Professor Emeritus of planetary sciences in the Department of Planetary Sciences at the University of Arizona, 2007 (studied climate change for 15 years, the former Director of the Space Imagery Center, a NASA Regional Planetary Image Facility, “Hot House”, SpringerLink, p. 211-216]

Agriculture is critical to **the survival of civilization**. Crops feed not only us but also the domestic animals we use for food. Any disruption in food production means a disruption of the economy, government, and health. The increase in CO2 will result in some growth of crops, and rising temperatures will open new areas to crop production at higher latitudes and over longer growing seasons; however, the overall result will be decreased crop production in most parts of the world. A 1993 study of the effects of a doubling of CO2 (550 ppm) above pre-industrial levels shows that there will be substantial decreases in the world food supply (Rosenzweig et al., 1993). In their research they studied the effects of global warming on four crops (wheat, rice, protein feed, and coarse grain) using four scenarios involving various adaptations of crops to temperature change and CO2 abundance. They found that the amount of world food reduction ranged from 1 to 27%. However, the optimistic value of 1% is almost certainly much too low, because it assumed that the amount of degradation would be offset by more growth from "CO2 fertilization." We now know that this is not the case, as explained below and in Chapter 7. The most probable value is a worldwide food reduction between 16 and 27%. These scenarios are based on temperature and CO2 rises that may be too low, as discussed in Chapter 7. However, even a decrease in world food production of 16% would lead to large-scale starvation in many regions of the world. Large-scale experiments called Free-Air Concentration Enrichment have shown that the effects of higher CO2 levels on crop growth is about 50% less than experiments in enclosure studies (Long et al., 2006). This shows that the projections that conclude that rising CO2 will fully offset the losses due to higher temperatures are wrong. The downside of climate change will far outweigh the benefits of increased CO2 and longer growing seasons. One researcher (Prof. Long) from the University of Illinois put it this way: Growing crops much closer to real conditions has shown that increased levels of carbon dioxide in the atmosphere will have roughly half the beneficial effects previously hoped for in the event of climate change. In addition, ground-level ozone, which is also predicted to rise but has not been extensively studied before, has been shown to result in a loss of photosynthesis and 20 per cent reduction in crop yield. Both these results show that we need to seriously re-examine our predictions for future global food production, as they are likely to be far lower than previously estimated. Also, studies in Britain and Denmark show that only a few days of hot temperatures can severely reduce the yield of major food crops such as wheat, soy beans, rice, and groundnuts if they coincide with the flowering of these crops. This suggests that there are certain thresholds above which crops become very vulnerable to climate change. The European heat wave in the summer of 2003 provided a large-scale experiment on the behavior of crops to increased temperatures. Scientists from several European research institutes and universities found that the growth of plants during the heat wave was reduced by nearly a third (Ciais et al., 2005). In Italy, the growth of corn dropped by about 36% while oak and pine had a growth reduction of 30%. In the affected areas of the mid- west and California the summer heat wave of 2006 resulted in a 35% loss of crops, and in California a 15% decline in dairy production due to the heat-caused death of dairy cattle. It has been projected that a 2 °C rise in local temperature will result in a $92 million loss to agriculture in the Yakima Valley of Washington due to the reduction of the snow pack. A 4'C increase will result in a loss of about $163 million. For the first time, the world's grain harvests have fallen below the consumption level for the past four years according to the Earth Policy Institute (Brown, 2003). Furthermore, the shortfall in grain production increased each year, from 16 million tons in 2000 to 93 million tons in 2003. These studies were done in industrialized nations where agricultural practices are the best in the world. In developing nations the impact will be much more severe. It is here that the impact of global warming on crops and domestic animals will be most felt. In general, the world's most crucial staple food crops could fall by as much as one-third because of resistance to flowering and setting of seeds due to rising temperatures. Crop ecologists believe that many crops grown in the tropics are near, or at, their thermal limits. Already research in the Philippines has linked higher night-time temperatures to a reduction in rice yield. It is estimated that for rice, wheat, and corn, the grain yields are likely to decline by 10% for every local 1 °C increase in temperature. With a decreasing availability of food, malnutrition will become more frequent accompanied by damage to the immune system. This will result in a greater susceptibility to spreading diseases. For an extreme rise in global temperature (> 6 'C), it is likely that worldwide crop failures will lead to mass starvation, and political and economic chaos with all their ramifications for civilization.

#### Only nuclear power solves runaway warming

**McCarthy, 4** – Environment Editor of 'The Independent' (Michael, 5/23. “Lovelock: 'Only nuclear power can now halt global warming'.” <http://www.energybulletin.net/node/320>)

Global warming is now advancing so swiftly that only a massive expansion of nuclear power as the world's main energy source can prevent it overwhelming civilisation, the scientist and celebrated Green guru, James Lovelock, says. His call will cause huge disquiet for the environmental movement. It has long considered the 84-year-old radical thinker among its greatest heroes, and sees climate change as the most important issue facing the world, but it has always regarded opposition to nuclear power as an article of faith. Last night the leaders of both Greenpeace and Friends of the Earth rejected his call. Professor Lovelock, who achieved international fame as the author of the Gaia hypothesis, the theory that the Earth keeps itself fit for life by the actions of living things themselves, was among the first researchers to sound the alarm about the threat from the greenhouse effect. He was in a select group of scientists who gave an initial briefing on climate change to Margaret Thatcher's Conservative Cabinet at 10 Downing Street in April 1989. He now believes recent climatic events have shown the warming of the atmosphere is proceeding even more rapidly than the scientists of the UN's Intergovernmental Panel on Climate Change (IPCC) thought it would, in their last report in 2001. On that basis, he says, there is simply not enough time for renewable energy, such as wind, wave and solar power - the favoured solution of the Green movement - to take the place of the coal, gas and oil-fired power stations whose waste gas, carbon dioxide (CO2), is causing the atmosphere to warm. He believes only a massive expansion of nuclear power, which produces almost no CO2, can now check a runaway warming which would raise sea levels disastrously around the world, cause climatic turbulence and make agriculture unviable over large areas. He says fears about the safety of nuclear energy are irrational and exaggerated, and urges the Green movement to drop its opposition. In today's Independent, Professor Lovelock says he is concerned by two climatic events in particular: the melting of the Greenland ice sheet, which will raise global sea levels significantly, and the episode of extreme heat in western central Europe last August, accepted by many scientists as unprecedented and a direct result of global warming.

### 2AC – Energy Efficiency DA

#### Sustainable energy use not coming now

The Energy Collective, 1/3/13 (“IEA: Unlocking the Potential for Energy Efficiency in 2013.” http://theenergycollective.com/petertroast/166461/iea-unlocking-potential-energy-efficiency-2013)

The International Energy Agency (IEA) recently released their annual World Energy Outlook report (the Executive Summary is available here as a PDF). Spoiler alert: the outlook isn't so good. As the IEA writes, "Taking all new developments and policies into account, the world is still failing to put the global energy system onto a more sustainable path. Global energy demand grows by more than one-third over the period to 2035 in the New Policies Scenario (our central scenario)."

#### Energy efficiency is not coming now globally and won’t solve warming – Their uniqueness is from 2010 and doesn’t say current measures would stabilize the climate – just that certain companies are making their factories more efficient – that’s not nearly large scale enough to stabilize the climate, there’s NO indication that other countries are going to or will be able to fast enough, your evidence just says Denmark and China HAVE reduced emissions before in like 2002, not that they can do it now or on a large enough scale.

#### Only we solve global adoption – our Solan evidence indicates SMRs can integrate into smaller electrical globally, our Lovering evidence indicates that the NRC is the GLOBAL GOLD STANDARD for nuclear power and they’re waiting to model SMRs.

#### Shift to renewables is a long way off

**Alic 12** – geopolitical analyst, co-founder of ISA Intel in Sarajevo and Tel Aviv, and the former editor-in-chief of ISN Security Watch in Zurich (Jen, 8/19. “We are Decades Away from a Cure for our Fossil Fuel Addiction.” http://oilprice.com/Energy/Energy-General/We-are-Decades-Away-from-a-Cure-for-our-Fossil-Fuel-Addiction.html)

With natural gas prices low and supplies high, we are decades away from being able to wean ourselves off fossil fuels and move to renewable energy, but there is no reason for dismay. There seems to be a knee-jerk reaction to render the renewable energy-versus-fossil fuels debate in black and white terms, in a one-or-the-other symposium. A sudden “switch” to clean energy is not possible; rather it must be a gradual introduction of renewable energy sources combined with an increase in domestic fossil fuels production. Renewable energy is a natural revolution that will indeed take place, however slowly. But for now, it is responsible for only a very small percentage of energy production. Renewable energy accounts for less than 12% of total energy consumption in the US, according to the Energy Information Administration (EIA). The EIA’s figures for 2010 show that natural gas and coal each accounted for 22% of US energy production, followed by crude oil at 12%, nuclear energy at 8%, biomass at 4%, natural gas plant liquids at 3%, hydroelectric power at 3%, and geothermal/solar/wind at 1%. Natural gas remains the dominant energy source and that will continue to increase in the coming decade. Fossil fuels will remain the key source of energy for decades to come, but at the same time, renewable energy will continue to develop until it can compete on the market. There is no way around the fact that market and environment must be in line in order to see a shift to renewable energy, and this alignment takes time. For now, the market favors natural gas and it is impossible to force big business to shift to renewable energy when natural gas prices are so low. It is also impossible to convince the average consumer to go along with this.

#### Their Roche link evidence is not talking about SMRs but large scale reactors – extend the Loudermilk evidence, the absence in use of nuclear power DOES NOT result in increase renewable use, but rather FOSSIL Fuel use.

#### Nuclear’s inevitable globally but won’t solve warming until the US develops SMR’s

Shellenberger 12 – et al and Ted Nordhaus—co-founders of American Environics and the Breakthrough Institute a think tank that works on energy and climate change – AND – Jesse Jenkins-Director of Energy and Climate Policy, the Breakthrough Institute (Michael, Why We Need Radical Innovation to Make New Nuclear Energy Cheap, 9/11, thebreakthrough.org/index.php/programs/energy-and-climate/new-nukes/)

Arguably, the biggest impact of Fukushima on the nuclear debate, ironically, has been to force a growing number of pro-nuclear environmentalists out of the closet, including us. The reaction to the accident by anti-nuclear campaigners and many Western publics put a fine point on the gross misperception of risk that informs so much anti-nuclear fear. Nuclear remains the only proven technology capable of reliably generating zero-carbon energy at a scale that can have any impact on global warming. Climate change -- and, for that matter, the enormous present-day health risks associated with burning coal, oil, and gas -- simply dwarf any legitimate risk associated with the operation of nuclear power plants. About 100,000 people die every year due to exposure to air pollutants from the burning of coal. By contrast, about 4,000 people have died from nuclear energy -- ever -- almost entirely due to Chernobyl. But rather than simply lecturing our fellow environmentalists about their misplaced priorities, and how profoundly inadequate present-day renewables are as substitutes for fossil energy, we would do better to take seriously the real obstacles standing in the way of a serious nuclear renaissance. Many of these obstacles have nothing to do with the fear-mongering of the anti-nuclear movement or, for that matter, the regulatory hurdles imposed by the U.S. Nuclear Regulatory Commission and similar agencies around the world. As long as nuclear technology is characterized by enormous upfront capital costs, it is likely to remain just a hedge against overdependence on lower-cost coal and gas, not the wholesale replacement it needs to be to make a serious dent in climate change. Developing countries need large plants capable of bringing large amounts of new power to their fast-growing economies. But they also need power to be cheap. So long as coal remains the cheapest source of electricity in the developing world, it is likely to remain king. The most worrying threat to the future of nuclear isn't the political fallout from Fukushima -- it's economic reality. Even as new nuclear plants are built in the developing world, old plants are being retired in the developed world. For example, Germany's plan to phase-out nuclear simply relies on allowing existing plants to be shut down when they reach the ends of their lifetime. Given the size and cost of new conventional plants today, those plants are unlikely to be replaced with new ones. As such, the combined political and economic constraints associated with current nuclear energy technologies mean that nuclear energy's share of global energy generation is unlikely to grow in the coming decades, as global energy demand is likely to increase faster than new plants can be deployed. To move the needle on nuclear energy to the point that it might actually be capable of displacing fossil fuels, we'll need new nuclear technologies that are cheaper and smaller. Today, there are a range of nascent, smaller nuclear power plant designs, some of them modifications of the current light-water reactor technologies used on submarines, and others, like thorium fuel and fast breeder reactors, which are based on entirely different nuclear fission technologies. Smaller, modular reactors can be built much faster and cheaper than traditional large-scale nuclear power plants. Next-generation nuclear reactors are designed to be incapable of melting down, produce drastically less radioactive waste, make it very difficult or impossible to produce weapons grade material, useless water, and require less maintenance. Most of these designs still face substantial technical hurdles before they will be ready for commercial demonstration. That means a great deal of research and innovation will be necessary to make these next generation plants viable and capable of displacing coal and gas. The United States could be a leader on developing these technologies, but unfortunately U.S. nuclear policy remains mostly stuck in the past. Rather than creating new solutions, efforts to restart the U.S. nuclear industry have mostly focused on encouraging utilities to build the next generation of large, light-water reactors with loan guarantees and various other subsidies and regulatory fixes. With a few exceptions, this is largely true elsewhere around the world as well. Nuclear has enjoyed bipartisan support in Congress for more than 60 years, but the enthusiasm is running out. The Obama administration deserves credit for authorizing funding for two small modular reactors, which will be built at the Savannah River site in South Carolina. But a much more sweeping reform of U.S. nuclear energy policy is required. At present, the Nuclear Regulatory Commission has little institutional knowledge of anything other than light-water reactors and virtually no capability to review or regulate alternative designs. This affects nuclear innovation in other countries as well, since the NRC remains, despite its many critics, the global gold standard for thorough regulation of nuclear energy. Most other countries follow the NRC's lead when it comes to establishing new technical and operational standards for the design, construction, and operation of nuclear plants. What's needed now is a new national commitment to the development, testing, demonstration, and early stage commercialization of a broad range of new nuclear technologies -- from much smaller light-water reactors to next generation ones -- in search of a few designs that can be mass produced and deployed at a significantly lower cost than current designs. This will require both greater public support for nuclear innovation and an entirely different regulatory framework to review and approve new commercial designs. In the meantime, developing countries will continue to build traditional, large nuclear power plants. But time is of the essence. With the lion's share of future carbon emissions coming from those emerging economic powerhouses, the need to develop smaller and cheaper designs that can scale faster is all the more important. A true nuclear renaissance can't happen overnight. And it won't happen so long as large and expensive light-water reactors remain our only option. But in the end, there is no credible path to mitigating climate change without a massive global expansion of nuclear energy. If you care about climate change, nothing is more important than developing the nuclear technologies we will need to get that job done.

#### Energy efficiency insufficient to solve warming even by the best estimates

Taylor, 99 – director of natural resource studies at the Cato Institute (Jerry, 10/20. “Energy Eff iciency No Silver Bullet for Global Warming.” http://www.cato.org/sites/cato.org/files/pubs/pdf/pa356.pdf)

To put that projection into perspective, the DOE’s own “5-Labs” study estimates that a “high-efficiency” scenario for the economy would reduce emissions by only 120 million metric tons of carbon equivalent by 2010. 43 The EIA is less bold, suggesting that reductions of only 79 million metric tons of carbon equivalent are possible under a “high-efficiency” economic scenario. 4 4 Thus, the Clinton administration is now projecting that the CCTI will lead to efficiency gains four times as large as even the most optimistic projection made by its own DOE. 4 5 The potential for new energy-efficient technologies to reduce greenhouse gas emissions—especially within a decade—is limited because new technologies are only incremental additions to the capital stock. Because capital stock turns over slowly and total capital stock increases with economic growth, even if the administration is correct about the benefits of its technology investments and promotional activities, there is only so much that those technologies can accomplish in the short term or the midterm.

#### Clean energy investment down

FA 10-9 (Financial Advisor, “RENEWABLE ENERGY INVESTMENT FALLS 20% AS WIND FINANCINGS DECLINE,” 2012, http://www.fa-mag.com/fagreen/12567-renewable-energy-investment-falls-20-as-wind-financings-decline.html)

Investment in renewable energy fell 20 percent from a year ago in the third quarter as wind farm financings dropped and the pace of spending eased in the U.S. and India, Bloomberg New Energy Finance said. The $56.6 billion injected into clean energy projects in the third quarter was down 5 percent from the second quarter and indicates that investment may fall for the first time in eight years when figures for the whole of 2012 are tallied, the London-based researcher said in a statement today. The industry is suffering from excess capacity that’s driven down prices for solar panels and wind turbines, meaning developers pay less to install each megawatt of capacity. Governments are paring support for the industry across the U.S., India and Europe after a record $280 billion was invested in clean and low-carbon technologies in 2011. “The location of some of the biggest projects financed in quarter three this year highlight the geographical shift that is taking place in clean energy, with established markets such as the U.S., Europe and China losing momentum while newer markets in South America, Asia and Africa pick up steam,” said Michael Liebreich, chief executive officer of New Energy Finance. Spending in the U.S. was $7.3 billion, down 28 percent from the previous quarter and 62 percent on the same period last year. Investment in India also slid 16 percent from the second quarter and 60 percent from a year ago. Brazil showed a 94 percent increase to $1.9 billion from the three months ended in June and a 24 percent boost from the same quarter a year ago.

#### Obama investment in SMRs now non-uniques the DA, he’s already spent 450 million dollars, that should’ve traded off

#### Nuclear’s critical to displace coal and stop catastrophic climate change

Moore 4—co-founder of Greenpeace, is chairman and chief scientist of Greenspirit Strategies Ltd. (Patrick, Going Nuclear, <http://www.washingtonpost.com/wp-dyn/content/article/2006/04/14/AR2006041401209.html>)

In the early 1970s when I helped found Greenpeace, I believed that nuclear energy was synonymous with nuclear holocaust, as did most of my compatriots. That's the conviction that inspired Greenpeace's first voyage up the spectacular rocky northwest coast to protest the testing of U.S. hydrogen bombs in Alaska's Aleutian Islands. Thirty years on, my views have changed, and the rest of the environmental movement needs to update its views, too, because nuclear energy may just be the energy source that can save our planet from another possible disaster: catastrophic climate change. Look at it this way: More than 600 coal-fired electric plants in the United States produce 36 percent of U.S. emissions -- or nearly 10 percent of global emissions -- of CO2, the primary greenhouse gas responsible for climate change. Nuclear energy is the only large-scale, cost-effective energy source that can reduce these emissions while continuing to satisfy a growing demand for power. And these days it can do so safely. I say that guardedly, of course, just days after Iranian President Mahmoud Ahmadinejad announced that his country had enriched uranium. "The nuclear technology is only for the purpose of peace and nothing else," he said. But there is widespread speculation that, even though the process is ostensibly dedicated to producing electricity, it is in fact a cover for building nuclear weapons. And although I don't want to underestimate the very real dangers of nuclear technology in the hands of rogue states, we cannot simply ban every technology that is dangerous. That was the all-or-nothing mentality at the height of the Cold War, when anything nuclear seemed to spell doom for humanity and the environment. In 1979, Jane Fonda and Jack Lemmon produced a frisson of fear with their starring roles in "The China Syndrome," a fictional evocation of nuclear disaster in which a reactor meltdown threatens a city's survival. Less than two weeks after the blockbuster film opened, a reactor core meltdown at Pennsylvania's Three Mile Island nuclear power plant sent shivers of very real anguish throughout the country. What nobody noticed at the time, though, was that Three Mile Island was in fact a success story: The concrete containment structure did just what it was designed to do -- prevent radiation from escaping into the environment. And although the reactor itself was crippled, there was no injury or death among nuclear workers or nearby residents. Three Mile Island was the only serious accident in the history of nuclear energy generation in the United States, but it was enough to scare us away from further developing the technology: There hasn't been a nuclear plant ordered up since then. Today, there are 103 nuclear reactors quietly delivering just 20 percent of America's electricity. Eighty percent of the people living within 10 miles of these plants approve of them (that's not including the nuclear workers). Although I don't live near a nuclear plant, I am now squarely in their camp. And I am not alone among seasoned environmental activists in changing my mind on this subject. British atmospheric scientist James Lovelock, father of the Gaia theory, believes that nuclear energy is the only way to avoid catastrophic climate change. Stewart Brand, founder of the "Whole Earth Catalog," says the environmental movement must embrace nuclear energy to wean ourselves from fossil fuels. On occasion, such opinions have been met with excommunication from the anti-nuclear priesthood: The late British Bishop Hugh Montefiore, founder and director of Friends of the Earth, was forced to resign from the group's board after he wrote a pro-nuclear article in a church newsletter. There are signs of a new willingness to listen, though, even among the staunchest anti-nuclear campaigners. When I attended the Kyoto climate meeting in Montreal last December, I spoke to a packed house on the question of a sustainable energy future. I argued that the only way to reduce fossil fuel emissions from electrical production is through an aggressive program of renewable energy sources (hydroelectric, geothermal heat pumps, wind, etc.) plus nuclear. The Greenpeace spokesperson was first at the mike for the question period, and I expected a tongue-lashing. Instead, he began by saying he agreed with much of what I said -- not the nuclear bit, of course, but there was a clear feeling that all options must be explored. Here's why: Wind and solar power have their place, but because they are intermittent and unpredictable they simply can't replace big baseload plants such as coal, nuclear and hydroelectric. Natural gas, a fossil fuel, is too expensive already, and its price is too volatile to risk building big baseload plants. Given that hydroelectric resources are built pretty much to capacity, nuclear is, by elimination, the only viable substitute for coal. It's that simple. That's not to say that there aren't real problems -- as well as various myths -- associated with nuclear energy. Each concern deserves careful consideration: · Nuclear energy is expensive. It is in fact one of the least expensive energy sources. In 2004, the average cost of producing nuclear energy in the United States was less than two cents per kilowatt-hour, comparable with coal and hydroelectric. Advances in technology will bring the cost down further in the future. · Nuclear plants are not safe. Although Three Mile Island was a success story, the accident at Chernobyl, 20 years ago this month, was not. But Chernobyl was an accident waiting to happen. This early model of Soviet reactor had no containment vessel, was an inherently bad design and its operators literally blew it up. The multi-agency U.N. Chernobyl Forum reported last year that 56 deaths could be directly attributed to the accident, most of those from radiation or burns suffered while fighting the fire. Tragic as those deaths were, they pale in comparison to the more than 5,000 coal-mining deaths that occur worldwide every year. No one has died of a radiation-related accident in the history of the U.S. civilian nuclear reactor program. (And although hundreds of uranium mine workers did die from radiation exposure underground in the early years of that industry, that problem was long ago corrected.) · Nuclear waste will be dangerous for thousands of years. Within 40 years, used fuel has less than one-thousandth of the radioactivity it had when it was removed from the reactor. And it is incorrect to call it waste, because 95 percent of the potential energy is still contained in the used fuel after the first cycle. Now that the United States has removed the ban on recycling used fuel, it will be possible to use that energy and to greatly reduce the amount of waste that needs treatment and disposal. Last month, Japan joined France, Britain and Russia in the nuclear-fuel-recycling business. The United States will not be far behind. · Nuclear reactors are vulnerable to terrorist attack. The six-feet-thick reinforced concrete containment vessel protects the contents from the outside as well as the inside. And even if a jumbo jet did crash into a reactor and breach the containment, the reactor would not explode. There are many types of facilities that are far more vulnerable, including liquid natural gas plants, chemical plants and numerous political targets. · Nuclear fuel can be diverted to make nuclear weapons. This is the most serious issue associated with nuclear energy and the most difficult to address, as the example of Iran shows. But just because nuclear technology can be put to evil purposes is not an argument to ban its use. Over the past 20 years, one of the simplest tools -- the machete -- has been used to kill more than a million people in Africa, far more than were killed in the Hiroshima and Nagasaki nuclear bombings combined. What are car bombs made of? Diesel oil, fertilizer and cars. If we banned everything that can be used to kill people, we would never have harnessed fire. The only practical approach to the issue of nuclear weapons proliferation is to put it higher on the international agenda and to use diplomacy and, where necessary, force to prevent countries or terrorists from using nuclear materials for destructive ends. And new technologies such as the reprocessing system recently introduced in Japan (in which the plutonium is never separated from the uranium) can make it much more difficult for terrorists or rogue states to use civilian materials to manufacture weapons. The 600-plus coal-fired plants emit nearly 2 billion tons of CO2annually -- the equivalent of the exhaust from about 300 million automobiles. In addition, the Clean Air Council reports that coal plants are responsible for 64 percent of sulfur dioxide emissions, 26 percent of nitrous oxides and 33 percent of mercury emissions. These pollutants are eroding the health of our environment, producing acid rain, smog, respiratory illness and mercury contamination. Meanwhile, the 103 nuclear plants operating in the United States effectively avoid the release of 700 million tons of CO2emissions annually -- the equivalent of the exhaust from more than 100 million automobiles. Imagine if the ratio of coal to nuclear were reversed so that only 20 percent of our electricity was generated from coal and 60 percent from nuclear. This would go a long way toward cleaning the air and reducing greenhouse gas emissions. Every responsible environmentalist should support a move in that direction.

#### Only nuclear power solves runaway warming

**McCarthy, 4** – Environment Editor of 'The Independent' (Michael, 5/23. “Lovelock: 'Only nuclear power can now halt global warming'.” <http://www.energybulletin.net/node/320>)

Global warming is now advancing so swiftly that only a massive expansion of nuclear power as the world's main energy source can prevent it overwhelming civilisation, the scientist and celebrated Green guru, James Lovelock, says. His call will cause huge disquiet for the environmental movement. It has long considered the 84-year-old radical thinker among its greatest heroes, and sees climate change as the most important issue facing the world, but it has always regarded opposition to nuclear power as an article of faith. Last night the leaders of both Greenpeace and Friends of the Earth rejected his call. Professor Lovelock, who achieved international fame as the author of the Gaia hypothesis, the theory that the Earth keeps itself fit for life by the actions of living things themselves, was among the first researchers to sound the alarm about the threat from the greenhouse effect. He was in a select group of scientists who gave an initial briefing on climate change to Margaret Thatcher's Conservative Cabinet at 10 Downing Street in April 1989. He now believes recent climatic events have shown the warming of the atmosphere is proceeding even more rapidly than the scientists of the UN's Intergovernmental Panel on Climate Change (IPCC) thought it would, in their last report in 2001. On that basis, he says, there is simply not enough time for renewable energy, such as wind, wave and solar power - the favoured solution of the Green movement - to take the place of the coal, gas and oil-fired power stations whose waste gas, carbon dioxide (CO2), is causing the atmosphere to warm. He believes only a massive expansion of nuclear power, which produces almost no CO2, can now check a runaway warming which would raise sea levels disastrously around the world, cause climatic turbulence and make agriculture unviable over large areas. He says fears about the safety of nuclear energy are irrational and exaggerated, and urges the Green movement to drop its opposition. In today's Independent, Professor Lovelock says he is concerned by two climatic events in particular: the melting of the Greenland ice sheet, which will raise global sea levels significantly, and the episode of extreme heat in western central Europe last August, accepted by many scientists as unprecedented and a direct result of global warming.

#### Nuclear power is comparably better than any renewable option – solar and wind do more environmental damage and cost trillions

**Eerkens, 6 –** adjunct research professor, Nuclear Science and Engineering Institute at the University of Missouri in Columbia,

(Jeff W., “The Nuclear Imperative: a critical look at the approaching energy crises,” Springer Press)

For the USA, replacement of primary oil and coal requires an investment of $35 trillion for solar, $25 trillion for wind, and $6 trillion for nuclear power, Besides these capital cost disincentives, the enormous land areas needed for solar and wind energy cause a disturbance of local ecologies and will spoil many scenic landscapes. Exclusive use of these sources for prime energy would make them very unpopular with environmentalists, Aside from capital costs, one must consider maintenance costs. Solar cells require constant cleaning to remove dust or bird droppings, and must be replaced every ten to twenty years due to erosion and deterioration (sand storms, etc). They are made of gallium-arsenide or copper­indium-diselenide, requiring toxic silanes, arsenic, etc. for their manufacture. Toxic wastes generated in producing solar cells for global use, dwarf the amount of nuclear fuel and waste for the nuclear option. For wind-power generation, the mechanical maintenance of thousands of turbines and protective measures to avoid killing thousands of birds, seriously effects its economics. The secret of controlled nuclear power is that it is a thousand times more concentrated than any non-nuclear method .

#### SMRs spur renewable development, and integrate all energy sources into the grid

Ruth et al 11 [Mark Ruth, Mark Antkowiak, and Scott Gossett – The Joint Institute for Strategic Energy Analysis: on behalf of the U.S. Department of Energy’s National Renewable Energy Laboratory, the University of Colorado-Boulder, the Colorado School of Mines, the Colorado State University, the Massachusetts Institute of Technology, and Stanford University - A Report Prepared for the United States Department of Energy, “Nuclear and Renewable Energy Synergies Workshop: Report of Proceedings”, December 2011, <http://www.nrel.gov/docs/fy12osti/52256.pdf>, Chetan]

The U.S. Energy Freedom Center represents the end-state vision of the Initiative that closes the nuclear and carbon fuels cycles. The Center is planned as an SMR development and demonstration complex that will utilize nuclear process heat to produce hydrocarbon, synthetic, and alternative fuels, and will spawn energy related manufacturing and other supply chain vendors in the surrounding region. Together, the Center and surrounding manufacturing facilities are intended to create sustainable manufacturing and energy production jobs in the “regional energy corridor.” 2.5 Small Reactors for Energy Supply: Islanded Generation and Load Management Philip O. Moor of High Bridge Associates, with the help of his colleague Bruce Alatary, introduced the advantages that SMRs provide for the challenges and threats of the modern power system. Moor stated that one of the challenges is that mismatches between generation and load cause frequency mismatches and require a variety of sources to generate and store power (Moor and Alatary 2011). Another challenge that Moor identified is managing disruptions. The current power system includes baseload generation, spinning reserve with rapid ramp up, and other fast-start units like simple gas turbines. Any disruption to this electricity supply chain can be costly and require long recovery times. These disruptions include natural threats like earthquakes and severe weather, as well as manmade threats such as vandalism, cyberattacks, and terrorism. Furthermore, existing energy storage options only provide short-term solutions for grid disruptions. Moor defined the Smart Grid as a collective term for communication and control enhancements to the electricity grid using digital information and advanced controls technology. It dynamically optimizes grid operations and resources to get power where it is needed, when it is needed, while minimizing peaks and spinning reserve requirements. Moor identified the challenge of protection from increased susceptibility to cyberattack due to advanced computer technology. Moor advocated for SMRs as an alternative, non-fossil fuel generation source to enhance system reliability. SMRs offer secure multi-year operation that can be run independent of the grid if desired. Like other nuclear options, SMR operations are free of greenhouse gas emissions. Like other nuclear power technologies, thermal energy from SMRs can be used for ancillary purposes like district heating and industrial process heat to enhance cycle efficiency. In addition, SMRs are compatible with renewable resources like wind, solar, biomass, and tidal power. SMRs could also form the basis of a localized or “islanded” grid that is isolated from the larger power grid either geographically or by design. Moor described hypothetical micro-grids based on paired SMRs with backup diesel generators used to guarantee power to essential services. He stated that while water-cooled SMRs require automated systems, liquid-metal cooled and gascooled SMRs inherently follow load. Thus they have advantages in an islanded grid. When electricity demand is low, the SMR could provide energy to ancillary services like water purification, district heating, and hydrogen production.

#### Manufacturing decline inevitable – electricity prices and EPA regs

McMorris 10-30 [Bill McMorris is a staff writer for the Washington Free Beacon. “U.S. Faces Regulatory Cliff”, <http://freebeacon.com/post/34654595460/u-s-faces-regulatory-cliff-looming-rules-could-drive>, Chetan]

The U.S. faces a regulatory as well as a fiscal cliff in 2013 thanks to a slew of environmental regulations that could drive up the cost of electricity and put manufacturers out of business, according to a report authored by Sen. Jim Inhofe (R., Okla.), ranking member of the Senate Committee on Environment and Public Works. Beginning in 2013, the Environmental Protection Agency (EPA) will resume its consideration of a number of stringent air and water quality regulations that threaten tens of thousands of jobs in the coal and manufacturing industries. “These rules will cost more than $300 to $400 billion a year, and significantly raise the price of gas at the pump and energy at home,” the report states. “If the Obama-EPA continues to hold reins in 2013, the outlook for jobs and economic recovery is bleak.” William Yeatman, an environmental regulation expert at the Competitive Enterprise Institute, said Inhofe’s steep price tag is no exaggeration. “This has been a very aggressive EPA that has adopted many costly rules,” he said. “These new regulations that are not yet final have the potential to be extremely onerous and extremely expensive.” The reported price tag would place additional stress on an economy already facing the $1.2 trillion in spending cuts and up to $1 trillion in tax increases set to go into effect on January 1. Many of the regulations were supposed to be finalized during President Barack Obama’s term but have been “punted” to 2013 because of campaign politics, according to Inhofe’s report. “In a thinly veiled political move, the agency has put off finalizing [regulations] until after the election,” the report says. Inhofe pointed to Obama’s decision to postpone an amended proposal of the 2008 Ozone Rule, an anti-greenhouse gas measure that was expected to cost the private sector $1 trillion. Obama postponed the updated rule in 2011 because of ”the importance of reducing regulatory burdens and regulatory uncertainty, particularly as our economy continues to recover.” EPA spokeswoman Enesta Jones denied that any politics were at play in the considerations of the Ozone Rule, adding that the agency’s decision to revisit the regulation in 2013 follows standard 5-year review timeline of the regulations. Obama’s EPA will consider several rules that would devastate an already reeling manufacturing center and threaten coal production, which serves as the lifeblood for communities in swing states such as Ohio and Virginia. The EPA finalized an update to the Boiler MACT Rule in 2011 that would force factories to abandon the use of coal in their boilers. Although the rule was set to go into effect in the spring of 2012, the EPA has yet to implement it. Don Wolf, an environmental consultant at Burns & McDonnell, said the rule would cost $1.4 billion and be targeted mostly at the manufacturing base of Ohio, Pennsylvania, and nearly every state “east of the Mississippi.” That figure is higher than Inhofe’s estimate of $1.2 billion. “Facilities that are burning coal would have to either replace or shutdown their boilers; many plants aren’t going to have the money,” Wolf said. “This is going to displace a lot of jobs.”

#### Manufacturing not key to deterrence – we still have more nukes

#### Deterrence doesn’t solve wars

Fettweis 10 (Christopher J. Professor of Political Science at Tulane, Dangerous Times-The International Politics of Great Power Peace, pg. 175-6)

If the only thing standing between the world and chaos is the US military presence, then an adjustment in grand strategy would be exceptionally counter-productive. But it is worth recalling that none of the other explanations for the decline of war – nuclear weapons, complex economic interdependence, international and domestic political institutions, evolution in ideas and norms – necessitate an activist America to maintain their validity. Were American to become more restrained, nuclear weapons would still affect the calculations of the would be aggressor; the process of globalization would continue, deepening the complexity of economic interdependence; the United Nations could still deploy peacekeepers where necessary; and democracy would not shrivel where it currently exists. More importantly,the idea that war is a worthwhile way to resolve conflict would have no reason to return. As was argued in chapter 2, normative evolution is typically unidirectional. Strategic restraint in such a world be virtually risk free.

### 2AC – Debt Ceiling

#### Obama won’t spend PC on the debt ceiling

CBS, 1/7/13 (“Obama won't battle with Congress over debt ceiling.” http://www.cbsnews.com/8301-505263\_162-57562387/obama-wont-battle-with-congress-over-debt-ceiling/)

(CBS News) As the first battle over the so-called "fiscal cliff" is laid to rest and the issue over tax rates has been resolved, both Congress and the White House are preparing for the next fight, facing a deadline of less than two months away. But **the differences are becoming apparent as the two sides can't even agree on what's up for debate**. The Republicans say the discussion on increasing federal revenue is over because the "fiscal cliff" deal raised more than $700 billion in tax increases, but President Obama wants more revenue in exchange for spending cuts. President Obama wanted an increase of $1.6 trillion in revenue as part of the first "fiscal cliff" deal so is expected to seek nearly another $1 trillion more in the second part of negotiations. As for another component of the next Congressional fight, the debt ceiling, CBS News' White House correspondent Major Garrett said "**the White House is very clear it's not going to negotiate or take any phone calls" about the issue**. Garrett noted, however, the automatic spending cuts that are set to go into place around the same time as the debt ceiling is about to be reached -- at the beginning of March -- will be a key negotiating point for Republicans. The GOP "intend[s] to drive a wedge into these negotiations" with spending, Garrett said. In short, the Republicans don't want to talk about revenue and **the White House wants no part in discussions over raising the debt ceiling**.

#### Hagel drains capital

CBS, 1/7/13 (“Obama won't battle with Congress over debt ceiling.” http://www.cbsnews.com/8301-505263\_162-57562387/obama-wont-battle-with-congress-over-debt-ceiling/)

Turning to another controversial issue, Garrett said that despite Republican opposition to the nomination of former Republican Senator Chuck Hagel for the Defense Secretary post in part because of comments he made in the past regarding Israel, the president will still nominate and fight for him. "The president wants Hagel, intends to fight for him and intends to win," Garrett said.

#### GOP aren’t crazy --- they won’t let the debt ceiling go

**Forbes**, **1/3**/2013 (Fiscal Cliff Deal Will Be the First of Many Republican Capitulations in 2013

The debt ceiling does not provide Republicans with ‘leverage’, p. <http://www.forbes.com/sites/aroy/2013/01/03/fiscal-cliff-deal-will-be-the-first-of-many-republican-capitulations-in-2013/>)

If Congress doesn’t raise the debt ceiling, the United States will be forced to default on some of its outstanding debt. Such an outcome would wreak havoc on financial markets, because U.S. treasury bonds play a critical, and very large, role in the global financial system. The stock market would crash. Interest rates on federal debt would skyrocket. The resultant economic chaos would make the fiscal cliff look like child’s play. And yet, we are to believe that a Republican party that was afraid of going over the fiscal cliff is totally fine with defaulting on the national debt? The Republican calculation appears to be that President Obama will get equally blamed for a debt default. But this seems unlikely. After all, it’s Republicans, not Democrats, who are arguing that the debt limit gives them some sort of “leverage.” It would have been unfair to blame Republicans if we had gone over the fiscal cliff; after all, Democrats are the ones who have opposed the Bush tax cuts all along. But in the case of the debt ceiling, if Republicans think they will escape blame for a default, they are delusional. Ezra Klein is one of the few people who has figured this out. “Republicans make a big show of being unreasonable,” he writes, “but they’re not nearly as crazy as the tea party would have you believe. In the end, they weren’t even willing to go over the fiscal cliff. The debt ceiling would do far more damage to the economy than the fiscal cliff, and Republicans would receive far more of the blame…No one thinks that the White House wants to breach the debt ceiling.” In 1996, when President Clinton vetoed a set of fiscal reforms from the Newt Gingrich-led Republican Congress, the resultant government shutdown forced Republicans into a free-spending crouch for the remainder of their time in the majority. A debt default would be far more damaging to the economy than that government shutdown was, and would have more far-reaching political consequences. They say that there’s no point in taking a hostage if you’re not willing to shoot the hostage. Hence, it is Republicans who will almost certainly capitulate in the 2013 debt-ceiling showdown. They’ll either do it to avoid default, or, even worse, they’ll do it after a default in which they are blamed for the turbulence that follows.

#### Sequestration cuts are weakened --- they won’t affect major programs.

**O’Connell**, 1/2/**2013** (Michael, Analysis: Sequestration postponed? What's does that mean?, Federal News Radio, p. <http://www.federalnewsradio.com/1007/3178452/Analysis-Sequestration-postponed-Whats-does-that-mean>)

Brian Friel, a federal business intelligence analyst with Bloomberg Government, told The Federal Drive with Tom Temin and Emily Kopp today that the new legislation both delayed sequestration and reduced its potential effect. "We were looking at $109 billion in potential sequestration prior to the passage of this bill," he said. "Now we're looking at $85 billion as the ceiling, because Congress took $24 billion of the original $109 billion and shifted it. So, $12 billion of that cut has now been taken care of through a change in the tax code. The other $12 billion is being dealt with by changes in the budget caps for 2013 and 2014, so kind of pushing out the potential effect of the cuts so that they can be dealt with later. It's basically a 22 percent reduction in the potential threat of sequestration, which will potentially take place in March unless Congress and the White House can agree on further reducing the potential impact of it." Currently, the government is operating under a 2012 countinuing resolution, which runs out in March. "The way they structured those cuts is they reduced what they called the discretionary spending caps for non-security and security spending both for 2013 and 2014," Friel said. "So, $8 billion of that $12 billion has been shifted out into 2014 in the form of lower overall caps for that year." That leaves only $4 billion in potential cuts for 2013, split 50-50 between defense and non-defense spending. New Congress must resolve sequestration Friel said those cuts would occur in an after-session sequestration, which the new law says will occur on March 27, the day the CR expires. "Essentially, that $4 billion would have to come through a second sort of follow-on sequestration order from the administration," he said. "One thing to keep in mind is that $2 billion on the non-defense side, the reduction in the cap, still leaves the overall cap higher than what the current spending level is for non-defense. Essentially, that's something of a phantom cut. It can be made without actually affecting any programs."

#### Link is non-unique – Obama already pushed SMRs and has taken credit for it, should’ve sapped his capital

#### SMRs have bipartisan support

Sullivan 10 (Mary Anne Sullivan – Partner in Hogan Lovells' energy practice in Washington, D.C., Daniel F. Stenger – Partner in Hogan Lovells' energy practice in Washington, D.C., Amy C. Roma – Senior associate in Hogan Lovells' energy practice in Washington, D.C., Are Small Reactors the Next Big Thing in Nuclear?, November 2010, Electric Light & Power, Nov/Dec2010, Vol. 88 Issue 6, p46)

Congress SMRs have enjoyed **bipartisan support** in Congress. The House Committee on Science and Technology and the Senate Energy and Natural Resources Committee have approved similar legislation designed to promote the development and deployment of SMRs along the lines the DOE has proposed. Promoting SMR development in legislation has its price. The Congressional Budget Office recently estimated that the Senate bill would cost $407 million over the next five years to support cost-sharing programs with private companies for the development of two standard SMR designs. Costs for the out-years were not included in the estimate, but the bill would require the DOE to obtain NRC design certifications for the reactors by 2018 and to secure combined construction and operating licenses by Jan. 1, 2021. If Congress can pass an energy bill, it seems likely the bill **will support SMRs**. Even in the absence of new authorizing legislation, however, **appropriations bills** that must be passed to **keep the government running** almost certainly will contain strong support for the DOE's research and development program for SMRs. SMRs respond to a critical suite of power needs: reliable, low-carbon, baseload generation at a manageable capital cost for even small utilities. But as with many other power solutions, much still needs to happen to realize the promise

#### Not intrinsic – a logical policymaker can do the plan and pass immigration reform

#### Obama pushing SMRs now

Ervin 12-28 [Dan Ervin is a professor of finance at Salisbury University, “Dan Ervin: Modular reactors are the future of nuclear energy”, December 28th, 2012, <http://www.delmarvanow.com/article/20121230/OPINION03/312300005>, Chetan]

The Obama administration’s decision to kick-start commercial use of small modular reactors has made one thing clear: The notion that nuclear power is slipping away is wrong. Although nuclear power faces difficult challenges, industry and government are working together to forge a new path. The Department of Energy has earmarked funds for a new public-private partnership to help develop innovative small reactors that are about one-third the size of those in large conventional nuclear plants. These small reactors are modular, meaning they will be built in factories before they are shipped and installed at nuclear sites. This production method has the potential to reduce the cost of nuclear power significantly.

#### Double bind – no PC now because Obama just used it on the fiscal cliff, and if he does it proves that winners win

#### PC not key

**Dickinson 9** – professor of political science at Middlebury College and taught previously at Harvard University where he worked under the supervision of presidential scholar Richard Neustadt (5/26/09, Matthew, Presidential Power: A NonPartisan Analysis of Presidential Politics, “Sotomayor, Obama and Presidential Power,” http://blogs.middlebury.edu/presidentialpower/2009/05/26/sotamayor-obama-and-presidential-power/, JMP)

As for Sotomayor, from here the path toward almost certain confirmation goes as follows: the Senate Judiciary Committee is slated to hold hearings sometime this summer (this involves both written depositions and of course open hearings), which should lead to formal Senate approval before Congress adjourns for its summer recess in early August. So Sotomayor will likely take her seat in time for the start of the new Court session on October 5. (I talk briefly about the likely politics of the nomination process below). What is of more interest to me, however, is what her selection reveals about the basis of presidential power. Political scientists, like baseball writers evaluating hitters, have devised numerous means of measuring a president’s influence in Congress. I will devote a separate post to discussing these, but in brief, they often center on the creation of legislative “box scores” designed to measure how many times a president’s preferred piece of legislation, or nominee to the executive branch or the courts, is approved by Congress. That is, how many pieces of legislation that the president supports actually pass Congress? How often do members of Congress vote with the president’s preferences? How often is a president’s policy position supported by roll call outcomes? These measures, however, are a misleading gauge of presidential power – they are a better indicator of congressional power. This is because how members of Congress vote on a nominee or legislative item is **rarely influenced by anything a president does.** Although journalists (and political scientists) often focus on the legislative “endgame” to gauge presidential influence – will the President swing enough votes to get his preferred legislation enacted? – **this mistakes an outcome with actual evidence of presidential influence.** Once we control for other factors – **a member of Congress’ ideological and partisan leanings, the political leanings of her constituency, whether she’s up for reelection or not – we can usually predict how she will vote without needing to know much of anything about what the president wants.** (I am ignoring the importance of a president’s veto power for the moment.) Despite the much publicized and celebrated instances of presidential arm-twisting during the legislative endgame, then, most legislative outcomes don’t depend on presidential lobbying.

#### DoD shields the link

Merchant 10 (Political & Environment Columnist-Discovery, 10/21, “How the US Military Could Bring Solar Power to Mass Market,” http://www.treehugger.com/corporate-responsibility/how-the-us-military-could-bring-solar-power-to-mass-market.html)

Furthermore, **Congress is infinitely more likely to approve funding for R&D**; and infrastructure **if the projects are military-related**. Which is depressing, but true -- the one thing that **no politician can get caught opposing is the safety of American troops.** In fact, the whole premise of the article is rather depressing, on point though it may be: The only way we may end up getting a competitive clean energy industry is through serious military investment, which is of course, serious government spending. Which **under any other guise would be vehemently opposed by conservatives**.

#### Winners Win

**Green 10** 6/11/10 – professor of political science at Hofstra University (David Michael Green, 6/11/10, " The Do-Nothing 44th President ", http://www.opednews.com/articles/The-Do-Nothing-44th-Presid-by-David-Michael-Gree-100611-648.html)

Moreover, there is a continuously evolving and reciprocal relationship between presidential boldness and achievement. In the same way that nothing breeds success like success, nothing sets the president up for achieving his or her next goal better than succeeding dramatically on the last go around**.** This is absolutely a matter of perception, and you can see it best in the way that Congress and especially the Washington press corps fawn over bold and intimidating presidents like Reagan and George W. Bush. The political teams surrounding these presidents understood the psychology of power all too well. They knew that by simultaneously creating a steamroller effect and feigning a clubby atmosphere for Congress and the press, they could leave such hapless hangers-on with only one remaining way to pretend to preserve their dignities. By jumping on board the freight train, they could be given the illusion of being next to power, of being part of the winning team. And so, with virtually the sole exception of the now retired Helen Thomas, this is precisely what they did.

#### Economic decline doesn’t cause war

Tir 10 [Jaroslav Tir - Ph.D. in Political Science, University of Illinois at Urbana-Champaign and is an Associate Professor in the Department of International Affairs at the University of Georgia, “Territorial Diversion: Diversionary Theory of War and Territorial Conflict”, The Journal of Politics, 2010, Volume 72: 413-425)]

Empirical support for the economic growth rate is much weaker. The finding that poor economic performance is associated with a higher likelihood of territorial conflict initiation is significant only in Models 3–4.14 The weak results are not altogether surprising given the findings from prior literature. In accordance with the insignificant relationships of Models 1–2 and 5–6, Ostrom and Job (1986), for example, note that the likelihood that a U.S. President will use force is uncertain, as the bad economy might create incentives both to divert the public’s attention with a foreign adventure and to focus on solving the economic problem, thus reducing the inclination to act abroad. Similarly, Fordham (1998a, 1998b), DeRouen (1995), and Gowa (1998) find no relation between a poor economy and U.S. use of force. Furthermore, Leeds and Davis (1997) conclude that the conflict-initiating behavior of 18 industrialized democracies is unrelated to economic conditions as do Pickering and Kisangani (2005) and Russett and Oneal (2001) in global studies. In contrast and more in line with my findings of a significant relationship (in Models 3–4), Hess and Orphanides (1995), for example, argue that economic recessions are linked with forceful action by an incumbent U.S. president. Furthermore, Fordham’s (2002) revision of Gowa’s (1998) analysis shows some effect of a bad economy and DeRouen and Peake (2002) report that U.S. use of force diverts the public’s attention from a poor economy. Among cross-national studies, Oneal and Russett (1997) report that slow growth increases the incidence of militarized disputes, as does Russett (1990)—but only for the United States; slow growth does not affect the behavior of other countries. Kisangani and Pickering (2007) report some significant associations, but they are sensitive to model specification, while Tir and Jasinski (2008) find a clearer link between economic underperformance and increased attacks on domestic ethnic minorities. While none of these works has focused on territorial diversions, my own inconsistent findings for economic growth fit well with the mixed results reported in the literature.15 Hypothesis 1 thus receives strong support via the unpopularity variable but only weak support via the economic growth variable. These results suggest that embattled leaders are much more likely to respond with territorial diversions to direct signs of their unpopularity (e.g., strikes, protests, riots) than to general background conditions such as economic malaise. Presumably, protesters can be distracted via territorial diversions while fixing the economy would take a more concerted and prolonged policy effort. Bad economic conditions seem to motivate only the most serious, fatal territorial confrontations. This implies that leaders may be reserving the most high-profile and risky diversions for the times when they are the most desperate

### 2AC – Oil

#### Nuclear doesn’t tradeoff with oil---electricity not liquid fuel

Styles 12 Geoffrey, Managing Director of GSW Strategy Group, LLC, an energy and environmental strategy consulting firm, "How Helpless Are We in the Face of Rising Oil Prices?", February 24, energyoutlook.blogspot.com/2012/02/how-helpless-are-we-in-face-of-rising.html

To see why requires a sense of how the oil market works, as well as the uses to which we put oil today, rather than a generation ago. For starters, although the President has worked hard to improve conditions for renewable energy sources like wind and solar power--sources that certainly have an important role to play in our long-term energy mix--these technologies, along with nuclear power, are out of place in a conversation about oil prices in 2012. That's because they produce electricity rather than liquid fuels, and less than 1% of US electricity is generated from oil today, compared to more than 10% in 1980. Electricity from renewable and nuclear power doesn't compete with imported oil or any other kind of oil; it competes with domestic energy sources like coal and natural gas, most of which now comes from conventional and unconventional gas fields, rather than as a byproduct of producing oil. So by all means lets have a conversation about renewables in the context of reducing greenhouse gas emissions today and displacing oil from transportation when there are tens of millions of electric vehicles on the road in the future, but in terms of oil prices now and in the near future, they are a rhetorical diversion.

#### Price collapse inevitable – diversification is only way to survive – their ev concedes

Paikin 12 Zach Paikin is a columnist for Canada's iPolitics and contributes research on international affairs to several Washington-based think tanks and institutes, April 11, 2012, “Coping in an increasingly competitive global economy”, http://www.ipolitics.ca/2012/04/11/zach-paikin-coping-with-less-revenues-in-an-increasingly-competitive-global-economy/

It gets worse. The price of oil is about to collapse due to the increasing extraction of unconventional oil. Roughly 250 billion barrels of oil shale — and possibly as much as twice that figure — have been discovered in Israel and will begin to flow into the global market in about a decade at an estimated $30-40 per barrel, merely one third of the current price of oil. This gives Israel the third largest oil shale reserves in the world after the United States and China. The U.S. has already become a net exporter of gasoline and could surpass both Russia and Saudi Arabia as the world’s largest supplier of oil in the near future thanks to its unconventional oil reserves. The upcoming decline in the price of oil will result in the near-total collapse of non-diversified economies, such as the Middle East’s oil-exporting countries. For instance, roughly 75 per cent of Saudi Arabia’s governmental revenue and 90 per cent of its export earnings come from the oil industry. Natural gas doesn’t provide these Mid-East states with much solace: Canadian exports of natural gas to the United States last year alone accounted for half the rate of all natural gas exports from the Middle East and North Africa.

#### Russia’s economy is resilient – oil, metals, and financial reserves

**Garrels 8** (Annie – a foreign correspondent for National Public Radio in the United States, “RUSSIAN ECONOMY STRONG DESPITE COMMODITY FALLOUT”, 9/20/08, <http://www.npr.org/templates/story/story.php?storyId=94647099>)

For the past six years**, Russia's economy has boomed in large part because of soaring prices for oil and metals.** Russia is strong in these areas ó too strong, though, for a balanced economy. Russian shares have bled almost 50 percent of their value since May, but many analysts say Russia still remains a resilient economy. And after the Georgia invasion and weeks of harsh, anti-western rhetoric, both Russian President Dmitri Medvedev and Prime Minister Vladimir Putin have tried to reassure foreign investors. When those commodities prices dropped, Russia's stock market was hit hard. "The question is if they fall significantly further," says James Fenkner with Red Star Assets in Moscow. Fenkner is one of the more cautious voices in Moscow, and other analysts like Roland Nash of Renaissance Capital look at other indicators, like direct foreign investment. "The level of foreign investment is twice the per capita of Brazil, **four times that of China**, and six times that of India this year," Nash says. "The market arguments for Russia are still very good and there is still a lot of money coming in." Too Dependent On Commodities The Russia government recognizes it is too dependent on commodities, and while their prices were high, it amassed **huge reserves as a cushion**. The country now has a balanced budget and financial analysts predict its economy will continue to grow at about six percent. Vladmir Tikhomirov, senior economist at Uralsib Financial Corporation, says this is enough to avoid a crisis, but it is not what the Kremlin hoped for. "It's not enough to make fundamental changes to the economic structures," Tikhomirov says. "Russia must have to be a more competitive and efficient economy." Moscow may now be the most expensive, glamorous city in the world, but the rest of the country lags behind. Tikhomirov says the Russia needs to improve basic infrastructure like roads as well as small and mid-size businesses. For this, Russia needs a stable global financial system

#### Econ decline won’t change Russia’s foreign policy or cause domestic unrest – empirically denied

Blackwill 9 (Robert Blackwill 2009; former associate dean of the Kennedy School of Government and Deputy Assistant to the President and Deputy National Security Advisor for Strategic Planning; RAND, "The Geopolitical Consequences of the World Economic Recession—A Caution", http://www.rand.org/pubs/occasional\_papers/2009/RAND\_OP275.pdf)

Now on to Russia. Again, fi ve years from today. Did the global recession and Russia’s present serious economic problems substantially modify Russian foreign policy? No. (President Obama is beginning his early July visit to Moscow as this paper goes to press; nothing fundamental will result from that visit). Did it produce a serious weakening of Vladimir Putin’s power and authority in Russia? No, as recent polls in Russia make clear. Did it reduce Russian worries and capacities to oppose NATO enlargement and defense measures eastward? No. Did it aff ect Russia’s willingness to accept much tougher sanctions against Iran? No. Russian Foreign Minister Lavrov has said there is no evidence that Iran intends to make a nuclear weapon.25 In sum, Russian foreign policy is today on a steady, consistent path that can be characterized as follows: to resurrect Russia’s standing as a great power; to reestablish Russian primary infl uence over the space of the former Soviet Union; to resist Western efforts to encroach on the space of the former Soviet Union; to revive Russia’s military might and power projection; to extend the reach of Russian diplomacy in Europe, Asia, and beyond; and to oppose American global primacy. For Moscow, these foreign policy first principles are here to stay, as they have existed in Russia for centuries. 26 None of these enduring objectives of Russian foreign policy are likely to be changed in any serious way by the economic crisis.