# 1AC Round 1 UNT BAYLOR EW VS UMKC DJ JUDGE- Darren Elliot, 1NC was XO CP, Immigration Politics, Space Mill DA, Renewables DA, Case

### Plan Text

**The United States federal government should procure small modular reactors for use for mission critical military installations in the United States.**

### Advantage one is Grid

#### SMRs key to prevent outage and deter cyber attack

Andres and Breetz ‘11

(Richard B. Andres is Professor of ¶ national Security Strategy at the ¶ national War College and a Senior fellow and energy and environmental ¶ Security and Policy Chair in the Center ¶ for Strategic research, institute for national Strategic Studies, at the national Defense University. Hanna L. Breetz is a doctoral candidate in the Department of Political Science at the Massachusetts institute of technology, “Small Nuclear Reactors ¶ for Military Installations:¶ Capabilities, Costs, and ¶ Technological Implications” Institute for National Strategic Studies, <http://www.ndu.edu/press/lib/pdf/strforum/sf-262.pdf>, SEH)

Grid Vulnerability**. DOD is unable to provide its ¶ bases with electricity when the civilian electrical grid is ¶ offline for an extended period of time**. Currently, **domestic military installations receive 99 percent of their ¶ electricity from the civilian power grid**. As explained in a ¶ recent study from the Defense Science Board:¶ DOD’s key problem with electricity is **that critical ¶ missions, such as national strategic awareness and ¶ national command authorities, are almost entirely ¶ dependent on the national transmission grid** . . . ¶ **[which] is fragile, vulnerable, near its capacity ¶ limit, and outside of DOD control**. In most cases, ¶ **neither the grid nor on-base backup power provides¶ sufficient reliability to ensure continuity of critical ¶ national priority functions and oversight of ¶ strategic missions in the face of** a long term (several ¶ months) **outage**.¶ 7¶ The grid’s fragility was demonstrated during the 2003 ¶ Northeast blackout in which 50 million people in the ¶ United States and Canada lost power, some for up to a ¶ week, when one Ohio utility failed to properly trim trees. ¶ The blackout created cascading disruptions in sewage ¶ systems, gas station pumping, cellular communications, ¶ border check systems, and so forth, and demonstrated the ¶ interdependence of modern infrastructural systems.¶ 8¶ More recently, awareness has been growing that ¶ **the grid is also vulnerable to purposive attacks**. A report sponsored by the Department of Homeland Security suggests **that a coordinated cyberattack on the grid ¶ could result in a third of the country losing power for ¶ a period of weeks or months**.¶ 9¶ Cyberattacks on critical ¶ infrastructure are not well understood. It is not clear, for ¶ instance, whether existing terrorist groups might be able ¶ to develop the capability to conduct this type of attack. **It ¶ is likely, however, that some nation-states either have or ¶ are working on developing the ability to take down the ¶ U.S. grid**. **In the event of a war** with one of these states, ¶ it is possible, if not likely, that **parts of the civilian grid ¶ would cease to function, taking with them military bases ¶ located in affected regions.**¶ Government and private organizations are currently ¶ working to secure the grid against attacks; however, it is ¶ not clear that they will be successful. Most military bases ¶ currently have backup power that allows them to function for a period of hours or, at most, a few days on their ¶ own. If power were not restored after this amount of time, ¶ the results could be disastrous. First, military assets taken ¶ offline by the crisis would not be available to help with disaster relief. Second, **during an extended blackout, global ¶ military operations could be seriously compromised; this ¶ disruption would be particularly serious if the blackout ¶ was induced during major combat operations.** During the ¶ Cold War, this type of event was far less likely because the United States and Soviet Union shared the common understanding that blinding an opponent with a grid blackout could escalate to nuclear war. America’s current opponents, however, may not share this fear or be deterred ¶ by this possibility.¶ In 2008, the Defense Science Board stressed that ¶ DOD should mitigate the electrical grid’s vulnerabilities by turning military installations into “islands” of ¶ energy self-sufficiency.¶ 10¶ **The department has made efforts to do so by promoting efficiency programs** that ¶ lower power consumption on bases and by constructing ¶ renewable power generation facilities on selected bases. ¶ **Unfortunately, these programs will not come close to ¶ reaching the goal of islanding the vast majority of bases. ¶ Even with massive investment in efficiency and renewables, most bases would not be able to function for more ¶ than a few days after the civilian grid went offline**. **Unlike other alternative sources of energy, small reactors have the potential to solve DOD’s vulnerability to ¶ grid outages.** **Most bases have relatively light power demands when compared to civilian towns or cities. Small ¶ reactors could easily support bases’ power demands separate from the civilian grid during crises**. In some cases, ¶ the reactors could be designed to produce enough power ¶ not only to supply the base, but also to provide critical ¶ services in surrounding towns during long-term outages.¶ Strategically, islanding bases with small reactors ¶ has another benefit. **One of the main reasons an enemy ¶ might be willing to risk reprisals by taking down the ¶ U.S. grid during a period of military hostilities would ¶ be to affect ongoing military operations. Without the ¶ lifeline of intelligence, communication, and logistics ¶ provided by U.S. domestic bases, American military operations would be compromised in almost any conceivable contingency. Making bases more resilient to ¶ civilian power outages would reduce the incentive for ¶ an opponent to attack the grid.** An opponent might ¶ still attempt to take down the grid for the sake of disrupting civilian systems, but **the powerful incentive to ¶ do so in order to win an ongoing battle or war would ¶ be greatly reduced.**

**Cyber-attack is coming ---actors are probing grid weaknesses**

**Reed ‘12**

John, Reports on the frontiers of cyber war and the latest in military technology for Killer Apps at Foreign Policy, "U.S. energy companies victims of potentially destructive cyber intrusions", 10/11, killerapps.foreignpolicy.com/posts/2012/10/11/us\_energy\_companies\_victims\_of\_potentially\_destructive\_cyber\_attacks

**Foreign actors are probing** the **networks** of key American companies **in an attempt to gain control of industrial facilities and transportation systems**, Defense Secretary Leon Panetta revealed tonight.¶ "We know that foreign **cyber actors are probing America's critical infrastructure networks**," said Panetta, disclosing previously classified information during a speech in New York laying out the Pentagon's role in protecting the U.S. from cyber attacks. "**They are targeting the computer control systems that operate** chemical, **electricity** and water plants, and those that guide transportation thorough the country."¶ He went on to say that **the U.S. government knows of "specific instances where intruders have gained access" to these systems** -- frequently known as Supervisory Control and Data Acquisition (or SCADA) systems -- **and that "they are seeking to create advanced tools to attack these systems and cause panic, destruction and even the loss of life**," according to an advance copy of his prepared remarks.¶ The secretary said that **a coordinated attack on enough critical infrastructure could be a "cyber Pearl Harbor" that would "cause physical destruction and loss of life, paralyze and shock the nation, and create a profound new sense of vulnerability.**"¶ While there have been reports of criminals using 'spear phishing' email attacks aimed at stealing information about American utilties, **Panetta's remarks** seemed to **suggest more sophisticated, nation-state backed attempts to actually gain control of and damage power-generating equipment**. ¶ **Panetta's comments** regarding the penetration of American utilities **echo those of a private sector cyber security expert** Killer Apps spoke with last week **who said that the networks of American electric companies were penetrated, perhaps in preparation for a Stuxnet-style attack**.¶ Stuxnet is the famous cyber weapon that infected Iran's uranium-enrichment centrifuges in 2009 and 2010. Stuxnet is believed to have caused some of the machines to spin erratically, thereby destroying them.¶ "**There is hard evidence that there has been penetration of our power companies, and given Stuxnet, that is a staging step before destruction" of electricity-generating equipment, the expert told K**iller **A**pps. Because uranium centrifuges and power turbines are both spinning machines, "**the attack is identical -- the one to take out the centrifuges and the one to take out our power systems is the same attack**."¶ "**If a centrifuge running at the wrong speed can blow apart" so can a power generator, said the expert. "If you do, in fact, spin them at the wrong speeds, you can blow up any rotating device**."¶ **Cyber security expert** Eugene **Kaspersky said two weeks ago that one of his greatest fears is someone reverse-engineering a sophisticated cyber weapon like Stuxnet -- a relatively easy task** -- and he noted that Stuxnet itself passed through power plants on its way to Iran. "Stuxnet infected thousands of computer systems all around the globe, I know there were power plants infected by Stuxnet very far away from Iran," Kaspersky said.

#### Grid attacks take out C and C---causes retaliation and nuclear war

Tilford ‘12

Robert, Graduate US Army Airborne School, Ft. Benning, Georgia, “Cyber attackers could shut down the electric grid for the entire east coast” 2012, <http://www.examiner.com/article/cyber-attackers-could-easily-shut-down-the-electric-grid-for-the-entire-east-coa>

To make matters worse **a cyber attack that can take out a civilian power grid, for example could also cripple the U.S. military.**¶ The senator notes that is that the same power grids that supply cities and towns, stores and gas stations, cell towers and heart monitors also power “every military base in our country.”¶ “Although bases would be prepared to weather a short power outage with **backup diesel generators, within hours, not days, fuel supplies would run out”**, he said.¶ Which means military **command and control centers could go dark**.¶ **Radar systems that detect air threats** to our country **would shut Down completely**.¶ “**Communication between commanders and their troops would also go silent. And many weapons systems would be left without either fuel or electric power”,** said Senator Grassley.¶ “**So in a few short hours or days, the mightiest military in the world would be left scrambling to maintain base functions**”, he said.¶ We contacted the Pentagon and officials confirmed the threat of a cyber attack is something very real.¶ Top national security officials—including the Chairman of the Joint Chiefs, the Director of the National Security Agency, **the Secretary of Defense, and the CIA Director— have said, “preventing a cyber attack and improving the nation’s electric grids is among the most urgent priorities of our country”** (source: Congressional Record).¶ So how serious is the Pentagon taking all this?¶ Enough to start, or end a war over it, for sure (see video: Pentagon declares war on cyber attacks http://www.youtube.com/watch?v=\_kVQrp\_D0kY&feature=relmfu ).¶ **A cyber attack today against the US could very well be seen as an “Act of War” and could be met with a “full scale” US military response.**¶ That could include the use **of “nuclear weapons**”, if authorized by the President.

#### Grid failure wrecks US critical mission operations, kills Heg

Stockton 11

Paul, assistant secretary of defense for Homeland Defense and Americas’ Security Affairs, “Ten Years After 9/11: Challenges for the Decade to Come”, <http://www.hsaj.org/?fullarticle=7.2.11>

The cyber threat to the DIB is only part of a much larger challenge to DoD. Potential **adversaries are seeking asymmetric means to cripple our force projection, warfighting, and sustainment capabilities, by targeting the critical civilian and defense supporting assets** (within the United States and abroad) on which our forces depend. This challenge is not limited to man-made threats; DoD must also execute its mission-essential functions in the face of disruptions caused by naturally occurring hazards.20 **Threats and hazards to DoD mission execution include incidents such as earthquakes, naturally occurring pandemics, solar weather events, and industrial accidents**, as well as kinetic or virtual attacks by state or non-state actors. **Threats can also emanate from insiders with ties to foreign counterintelligence organizations, homegrown terrorists, or individuals** with a malicious agenda. From a DoD perspective, this global convergence of unprecedented threats and hazards, and vulnerabilities and consequences, is a particularly problematic reality of the post-Cold War world. Successfully deploying and sustaining our military forces are increasingly a function of interdependent supply chains and privately owned infrastructure within the United States and abroad, including transportation networks, cyber systems, commercial corridors, communications pathways, and energy grids. This infrastructure largely falls outside DoD direct control. Adversary **actions to destroy, disrupt, or manipulate this highly vulnerable homeland- and foreign-based infrastructure may be relatively easy** to achieve and extremely tough to counter. Attacking such “**soft,” diffuse infrastructure systems could significantly affect our military forces globally – potentially blinding them, neutering their command and control, degrading their mobility, and isolating them from their principal sources of logistics support**. The Defense Critical Infrastructure Program (DCIP) under Mission Assurance seeks to improve execution of DoD assigned missions to make them more resilient. This is accomplished through the assessment of the supporting commercial infrastructure relied upon by key nodes during execution. By building resilience into the system and ensuring this support is well maintained, DoD aims to ensure it can "take a punch as well as deliver one."21 It also provides the department the means to prioritize investments across all DoD components and assigned missions to the most critical issues faced by the department through the use of risk decision packages (RDP).22 The commercial power supply on which DoD depends exemplifies both the novel challenges we face and the great progress we are making with other federal agencies and the private sector. Today’s commercial electric power grid has a great deal of resilience against the sort of disruptive events that have traditionally been factored into the grid’s design. Yet, the grid will increasingly confront threats beyond that traditional design basis. **This complex risk environment includes:** disruptive or deliberate attacks, either physical or cyber in nature; severe natural hazards such as geomagnetic storms and natural disasters with cascading regional and national impacts (as in NLE 11); long supply chain lead times for key replacement electric power equipment; transition to **automated control systems and other smart grid** technologies without robust security; and more frequent interruptions in fuel supplies to electricity-generating plants. **These risks are magnified by globalization, urbanization, and the highly interconnected nature of people, economies, information, and infrastructure systems.** The department is highly dependent on commercial power grids and energy sources. As the largest consumer of energy in the United States, DoD is dependent on commercial electricity sources outside its ownership and control for secure, uninterrupted power to support critical missions. In fact, approximately 99 percent of the electricity consumed by DoD facilities originates offsite, while approximately 85 percent of critical electricity infrastructure itself is commercially owned. This situation only underscores the importance of our partnership with DHS and its work to protect the nation’s critical infrastructure – a mission that serves not only the national defense but also the larger national purpose of sustaining our economic health and competitiveness. DoD has traditionally assumed that the commercial grid will be subject only to infrequent, weather-related, and short-term disruptions, and that available backup power is sufficient to meet critical mission needs. As noted in the February 2008 Report of the Defense Science Board Task Force on DoD Energy Strategy, “**In most cases, neither the grid nor on-base backup power provides sufficient reliability to ensure continuity of** critical **national priority functions and oversight of strategic** missions **in the face of a long term** (several months) outage.”23 Similarly, a 2009 GAO Report on Actions Needed to Improve the Identification and Management of Electrical Power Risks and Vulnerabilities to DoD Critical Assets stated that DoD mission-critical assets rely primarily on commercial electric power and are vulnerable to disruptions in electric power supplies.24 **Moreover, these vulnerabilities may cascade into other critical infrastructure that uses the grid – communications, water, transportation, and pipelines – that, in turn, is needed for the normal operation of the grid, as well as its quick recovery in emergency situations.** To remedy this situation, the Defense Science Board (DSB) Task Force recommended that DoD take a broad-based approach, including a focused analysis of critical functions and supporting assets, a more realistic assessment of electricity outage cause and duration, and an integrated approach to risk management that includes greater efficiency, renewable resources, distributed generation, and increased reliability. DoD Mission Assurance is designed to carry forward the DSB recommendations. Yet, for a variety of reasons – technical, financial, regulatory, and legal – DoD has limited ability to manage electrical power demand and supply on its installations. As noted above, DHS is the lead agency for critical infrastructure protection by law and pursuant to Homeland Security Presidential Directive 7. The Department of Energy (DOE) is the lead agency on energy matters. And within DoD, energy and energy security roles and responsibilities are distributed and shared, with different entities managing security against physical, nuclear, and cyber threats; cost and regulatory compliance; and the response to natural disasters. And of course, production and delivery of electric power to most DoD installations are controlled by commercial entities that are regulated by state and local utility commissions. The resulting paradox: DoD is dependent on a commercial power system over which it does not – and never will – exercise control.

#### Hegemony prevents extinction

Barnett 11

(Thomas P.M., Former Senior Strategic Researcher and Professor in the Warfare Analysis & Research Department, Center for Naval Warfare Studies, U.S. Naval War College American military geostrategist and Chief Analyst at Wikistrat., worked as the Assistant for Strategic Futures in the Office of Force Transformation in the Department of Defense, “The New Rules: Leadership Fatigue Puts U.S., and Globalization, at Crossroads,” March 7 <http://www.worldpoliticsreview.com/articles/8099/the-new-rules-leadership-fatigue-puts-u-s-and-globalization-at-crossroads>)

**Events in Libya are a further reminder for Americans** that we **stand at a crossroads in our continuing evolution as the world's sole full-service superpower**. **Unfortunately**, **we are increasingly seeking change without cost, and shirking from risk because we are tired of the responsibility**. We don't know who we are anymore, and our president is a big part of that problem. Instead of leading us, he explains to us. Barack Obama would have us believe that he is practicing strategic patience. But many experts and ordinary citizens alike have concluded that he is actually beset by strategic incoherence -- in effect, a man overmatched by the job. It is worth first examining the larger picture: **We live in a time of arguably the greatest structural change in the global order yet endured**, **with this historical moment's most amazing feature being its** relative and absolute **lack of mass violence**. That is something to consider when Americans contemplate military intervention in Libya, because if we do take the step to prevent larger-scale killing by engaging in some killing of our own, we will not be adding to some fantastically imagined global death count stemming from the ongoing "megalomania" and "evil" of American "empire." We'll be engaging in the same sort of system-administering activity that has marked our stunningly successful stewardship of global order since World War II. Let me be more blunt: **As the guardian of globalization**, **the U.S. military has been the greatest force for peace the world has ever known**. **Had America been removed from the global dynamics that governed the 20th century**, the **mass murder never would have ended**. Indeed, it's entirely conceivable **there would now be no identifiable human civilization left, once nuclear weapons entered the killing equation.**  But **the world did not keep sliding down that path of perpetual war**. **Instead, America stepped up and changed everything by ushering in our now-perpetual great-power peace**. **We introduced the international liberal trade order known as globalization** and played loyal Leviathan over its spread. **What resulted was the collapse of empires, an explosion of democracy**, the **persistent spread of human rights**, the liberation of women, **the doubling of life expectancy**, a roughly **10-fold increase in adjusted global GDP** **and a profound and persistent reduction in battle deaths from state-based conflicts.** That is what American "hubris" actually delivered. Please remember that the next time some TV pundit sells you the image of "unbridled" American military power as the cause of global disorder instead of its cure. With self-deprecation bordering on self-loathing, we now imagine a post-American world that is anything but. Just watch who scatters and who steps up as the Facebook revolutions erupt across the Arab world. While we might imagine ourselves the status quo power, we remain the world's most vigorously revisionist force. As for the sheer "evil" that is our military-industrial complex, again, let's examine what the world looked like before that establishment reared its ugly head. The last great period of global structural change was the first half of the 20th century, a period that saw a death toll of about 100 million across two world wars. That comes to an average of 2 million deaths a year in a world of approximately 2 billion souls. Today, with far more comprehensive worldwide reporting, researchers report an average of less than 100,000 battle deaths annually in a world fast approaching 7 billion people. Though admittedly crude, these **calculations suggest a 90 percent absolute drop and a 99 percent relative drop in deaths due to war. We are clearly headed for a world order characterized by multipolarity, something the American-birthed system was designed to both encourage and accommodate. But given how things turned out the last time we collectively faced such a fluid structure, we would do well to keep U.S. power, in all of its forms**, deeply embedded in the geometry to come. To continue the historical survey, after salvaging Western Europe from its half-century of civil war, the U.S. emerged as the progenitor of a new, far more just form of globalization -- one based on actual free trade rather than colonialism. America then successfully replicated globalization further in East Asia over the second half of the 20th century, setting the stage for the Pacific Century now unfolding.

### Advantage two is China

#### Global SMR development’s inevitable – only a question of whether the US leads

Hiruo 10  
(Elaine, Managing Editor of Platts, "SMR technology gives US chance at market leadership, vendors say," 9-2-10, Lexis)

**The US** **nuclear industry lost its leadership** position **in the global market for large reactors and now has the opportunity to secure that role for s**mall **m**odular **r**eactor**s,** some SMR vendors told a subcommittee of the Blue Ribbon Commission on America's Nuclear Future August 30.¶ But they stressed their **companies will need the federal government's help to beat foreign competitors to the market.**¶ **"We're at a unique crossroads right now**," Christofer Mowry, president of Babcock and Wilcox Nuclear Energy, told the reactor and fuel cycle technology subcommittee during its two-day meeting in Washington. B&W is one of several US companies — including Hyperion Power Generation, NuScale and Westinghouse — developing an SMR design.¶ "Other countries want a technology that has been built in the host country first," Paul Lorenzini, CEO of NuScale, told the panel. "**There are lots of** small reactor **designs out there,**" he said. Both the Koreans and Japanese have SMR programs, according to industry executives on the speakers panel. **The question is**, Mowry said, **who enters the** global **market first with a reactor already operating on its home turf.**

#### Obama pushing SMRs now but its not enough to beat out China

Ervin 12/28

[Dan Ervin is a professor of finance at Salisbury University. <http://www.delmarvanow.com/article/20121230/OPINION03/312300005> ETB]

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.¶ Southern Co. has begun building two new nuclear plants in Georgia using new construction techniques that could convince other companies nuclear plants are easier to build than otherwise thought.¶ Congress is planning to take up comprehensive legislation on nuclear waste next year using a “consent-based approach” to finding a site for a deep-geologic repository or an interim storage facility. Both would hold high-level waste and used fuel. Such an approach was recommended earlier in the year by a high-level blue-ribbon commission.¶ With respect to nuclear safety, American companies are adopting lessons learned from the Fukushima nuclear accident in Japan.¶ US industry is playing an active role in the global market for nuclear technology, where as much as $740 billion in business is at stake over the next decade. With 104 reactors, America still leads the world in installed nuclear capacity. This represents about 30 percent of global nuclear generation. Congress needs to authorize funds for projects to demonstrate the feasibility of small modular reactors.¶ Global electricity requirements are projected to grow by an estimated 80 percent by 2030.¶ Nuclear power remains the only proven technology capable of reliably providing zero-carbon energy on a scale that can have a meaningful impact on global warming.¶ A serious threat to the future of American nuclear power is the shortage of government research and development funds for advanced nuclear technologies. Other countries, notably China, are devoting a larger share of their energy funding to nuclear research on fast reactors and other designs that are inherently safe and produce little or no waste. The US needs to do the same.

#### Delaying commercialization allows China to solidify their lead

Wheeler 12  
(Brian, editor of Power Engineering magazine, "Developing Small Modular Reactor Designs in the U.S," 4-1-12, <http://www.power-eng.com/articles/npi/print/volume-5/issue-2/nucleus/developing-small-modular-reactor-designs-in-the-us.html>)

The development of small modular reactors in the U.S. continues to gain support as the country searches for clean energy options. Although concepts are still being designed, **the U.S. D**epartment **o**f **E**nergy **gave the sector a boost** in March **when it released** **a** Funding Opportunity Announcement to establish **cost-shared agreements** **to support the design and licensing of SMRs.** A total of $450 million will be made available to support two SMRs over five years.¶ "America's choice is clear," said Energy Secretary Steven Chu. "We can either develop the next generation of clean energy technologies, which will help create thousands of jobs and export opportunities here in America, or we can wait for other countries to take the lead."¶ The Energy Department said SMRs are about one-third the size of current nuclear power plants and are designed to offer a host of safety, siting, construction and economic benefits. The size, according to DOE, makes SMRs ideal for small electric grids and locations that cannot support large reactors. Also, the reduced cost due to factory production may make the SMR more attractive to utilities seeking to add a smaller amount of power.¶ "We really see a market right now that includes utilities that don't have a large financial base and that are interested in clean, sustainable power. They are looking at the SMR as an investment of a billion dollars versus several billion dollars for large nuclear," said John Goossen, vice president of Innovation and SMR Development at Westinghouse. "These utilities, in most cases, do not need large chunks of power and are looking to add power incrementally as part of their plans for growth." In February, the Electric Power Research Institute and the Oak Ridge National Laboratory released a study that stated the U.S. has the potential to generate 201 GW from SMRs. For their study, a small modular reactor was labeled as 350 MWe or less. The DOE defines an SMR as 300 MWe or less. The study stated that "350 MWe was considered a reasonable bounding estimate of an initial SMR installation."¶ **The U.S. is leading the world in the amount of SMR designs, but China could be the first country to have a SMR design operational.** Launched in 2011, **a** 200 MWe HTR-PM **reactor is under construction with the support of China Huaneng Group, China Nuclear Engineering and Construction, and Tsinghua University's INET,** according to the World Nuclear Association.¶ "**The U.S. needs to move faster if we are going to compete with the** South Koreans, the **Chinese** and the Russians," said Bob Prince, vice chairman and CEO, Gen4 Energy.

**Using the DOD as a first mover leads to rapid commercialization and allows the US to out-compete other countries**

Loudermilk ‘11

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

Path forward: Department of Defense as first-mover¶ Problematically, **despite the immense energy security benefits that would accompany the wide-scale adoption of small modular reactors in the US, with a difficult regulatory environment, anti-nuclear lobbying groups, skeptical public opinion, and** of course the recent **Fukushima** accident, **the nuclear industry faces a tough road in the battle for new reactors.** While President Obama and Energy Secretary Chu have demonstrated support for nuclear advancement on the SMR front, progress will prove difficult. However, **a potential route exists by which small reactors may more easily become a reality: the US military.**¶ The US Navy has successfully managed, without accident, over 500 small reactors on-board its ships and submarines throughout 50 years of nuclear operations. At the same time, serious concern exists, highlighted by the Defense Science Board Task Force in 2008, that US military bases are tied to, and almost entirely dependent upon, the fragile civilian electrical grid for 99% of its electricity consumption. To protect military bases’ power supplies and the nation’s military assets housed on these domestic installations, the Board recommended a strategy of “islanding” the energy supplies for military installations, thus ensuring their security and availability in a crisis or conflict that disrupts the nation’s grid or energy supplies.¶ DOD has sought to achieve this through decreased energy consumption and renewable technologies placed on bases, but these endeavors will not go nearly far enough in achieving the department’s objectives. However, **by placing small reactors on domestic US military bases, DOD could solve its own energy security quandary**—providing assured supplies of secure and constant energy both to bases and possibly the surrounding civilian areas as well. **Concerns over reactor safety and security are alleviated by the security already present on installations and the military’s long history of successfully operating nuclear reactors without incident.**¶ Unlike reactors on-board ships, **small reactors housed on domestic bases would undoubtedly be subject to Nuclear Regulatory Commission** (NRC) **regulation and certification, however, with strong military backing, adoption of the reactors may prove significantly easier than would otherwise be possible.** Additionally, as the reactors become integrated on military facilities, general fears over the use and expansion of nuclear power will ease, creating inroads for widespread adoption of the technology at the private utility level. Finally, and perhaps most importantly, **action by DOD as a “first mover” on small reactor technology will preserve America’s badly struggling and nearly extinct nuclear energy industry. The US** possesses a wealth of knowledge and technological expertise on SMRs and **has an opportunity to take a leading role in its adoption worldwide. With the domestic nuclear industry largely dormant** for three decades, **the US is at risk of losing its position as the global leader in the international nuclear energy market. If the current trend continues, the US will reach a point in the future where it is forced to import nuclear technologies from other countries**—a point echoed by Secretary Chu in his push for nuclear power expansion. **Action by the military to install reactors on domestic bases will guarantee the short-term survival of the US nuclear industry and will work to solidify long-term support for nuclear energy.**¶ Conclusions¶ In the end, small modular reactors present a viable path forward for both the expansion of nuclear power in the US and also for enhanced US energy security. Offering highly safe, secure, and proliferation-resistant designs, SMRs have the potential to bring carbon-free baseload distributed power across the United States. Small reactors measure up with, and even exceed, large nuclear reactors on questions of safety and possibly on the financial (cost) front as well. SMRs carry many of the benefits of both large-scale nuclear energy generation and renewable energy technologies. At the same time, they can reduce US dependence on fossil fuels for electricity production—moving the US ahead on carbon dioxide and GHG reduction goals and setting a global example. While domestic hurdles within the nuclear regulatory environment domestically have proven nearly impossible to overcome since Three Mile Island, **military adoption of small reactors on its bases would provide energy security for the nation’s military forces and may create the inroads necessary to advance the technology broadly and eventually lead to their wide-scale adoption.**

#### SMR commercialization key to nuclear leadership - recovers leadership lost to China

Rosner and Goldberg 11

(Robert Rosner, astrophysicist and founding director of the Energy Policy Institute at Chicago. He was the director of Argonne National Laboratory from 2005 to 2009, Stephen Goldberg, Special Assistant to the Director, Argonne National Laboratory ¶ Senior Fellow, Energy Policy Institute at Chicago¶ Research Coordinator, Global Nuclear Future Initiative ¶ American Academy of Arts and Sciences, “Small Modular Reactors – Key to Future Nuclear Power ¶ Generation in the U.S.” Energy Policy Institute at Chicago, <http://csis.org/files/attachments/111129_SMR_White_Paper.pdf>, SEH)

As stated earlier, SMRs have the potential to achieve significant greenhouse gas emission¶ reductions. They could provide alternative baseload power generation to facilitate the retirement¶ of older, smaller, and less efficient coal generation plants that would, otherwise, not be good¶ candidates for retrofitting carbon capture and storage technology. They could be deployed in¶ regions of the U.S. and the world that have less potential for other forms of carbon-free¶ electricity, such as solar or wind energy. There may be technical or market constraints, such as¶ projected electricity demand growth and transmission capacity, which would support SMR¶ deployment but not GW-scale LWRs. From the on-shore manufacturing perspective, a key point¶ is that the manufacturing base needed for SMRs can be developed domestically. Thus, while the¶ large commercial LWR industry is seeking to transplant portions of its supply chain from current¶ foreign sources to the U.S., **the SMR industry offers the potential to establish a large domestic¶ manufacturing base building upon already existing U.S. manufacturing infrastructure and¶ capability,** **including the Naval shipbuilding and underutilized domestic nuclear component and¶ equipment plants**. The study team learned that a number of sustainable domestic jobs could be¶ created – that is, the full panoply of design, manufacturing, supplier, and construction activities –¶ if the U.S. can establish itself as a credible and substantial designer and manufacturer of SMRs.¶ While many SMR technologies are being studied around the world, a **strong U.S.¶ commercialization** program **can enable U.S. industry to be first to market SMRs,** thereby **serving¶ as a fulcrum for** export growth as well as a lever in **influencing international decisions on¶ deploying both** nuclear **reactor and** nuclear **fuel cycle tech**nology. **A** viable **U.S.-centric SMR¶ industry would** enablethe U.S. to **recapture** technological **leadership in** commercial **nuclear¶ tech**nology, **which has been lost to** suppliers in France, Japan, Korea, Russia, and, now rapidly¶ emerging, **China**.

**Ceding nuclear leadership to China leads to unchecked Chinese agression in Asia – kills US regional leadership**

**Cullinane ‘11**

[Scott Cullinane is a graduate student at the Institute of World Politics in Washington, D.C <http://www.ensec.org/index.php?option=com_content&view=article&id=319:america-falling-behind-the-strategic-dimensions-of-chinese-commercial-nuclear-energy&catid=118:content&Itemid=376> ETB]

Due to a confluence of events the United States has recently focused more attention on nuclear weapons policy than it has in previous years; however, the proliferation of commercial nuclear technology and its implications for America’s strategic position have been largely ignored. While the Unites States is currently a participant in the international commercial nuclear energy trade, **America’s** own **domestic construction of nuclear power plants has atrophied severely and the US risks losing its competitive edge in** the **nuclear energy** arena.¶ Simultaneously, the People’s Republic of **China** (PRC) **has made great strides in closing the nuclear** energy **development gap with America**. **Through a combination of importing technology, research from within China itself, and a disciplined policy approach the PRC is increasingly able to leverage the export of commercial nuclear power as part of its national strategy**. **Disturbingly, China does not share America’s commitment to stability, transparency, and responsibility when exporting nuclear technology**. This is a growing strategic weakness and risk for the United States**. To remain competitive and to be in a position to offset the PRC when required the American government should encourage** the **domestic** use of **nuclear power and spur** the forces of **tech**nological **innovation**.¶ History has recorded well American wartime nuclear developments which culminated in the July 1945 Trinity Test, but what happened near Arco, Idaho six years later has been overlooked. In 1951, scientists for the first time produced usable electricity from an experimental nuclear reactor. Once this barrier was conquered the atom was harnessed to generate electricity and permitted America to move into the field of commercial nuclear power. In the next five years alone the United States signed over 20 nuclear cooperation agreements with various countries. Not only did the US build dozens of power plants domestically during the 1960s and 1970s, the US Export-Import Bank also distributed $7.1 billion dollars in loans and guarantees for the international sale of 49 reactors. American built and designed reactors were exported around the world during those years. Even today, more than 60% of the world’s 440 operating reactors are based on technology developed in the United States. The growth of the US civilian nuclear power sector stagnated after the Three Mile Island incident in 1979 – the most serious accident in American civilian nuclear power history. Three Mile Island shook America’s confidence in nuclear power and provided the anti-nuclear lobby ample fuel to oppose the further construction of any nuclear power plants. In the following decade, 42 planned domestic nuclear power plants were cancelled, and in the 30 years since the Three Mile Island incident the American nuclear power industry has survived only through foreign sales and merging operations with companies in Asia and Europe. Westinghouse sold its nuclear division to Toshiba and General Electric joined with Hitachi. Even the highest levels of the American government came to cast nuclear power aside. President Bill Clinton bragged in his 1993 State of the Union Address that “we are eliminating programs that are no longer needed, such as nuclear power research and development.” ¶ **America’s slow pace of reactor construction over the past three decades has stymied innovation and caused the nuclear sector and its industrial base to shrivel**. While some aspects of America’s nuclear infrastructure still operate effectively, **many critical areas have atrophied.** For example, one capability that America has entirely lost is the means to cast ultra heavy forgings in the range of 350,000 – 600,000 pounds, which impacts the construction of containment vessels, turbine rotors, and steam generators. In contrast, Japan, China, and Russia all possess an ultra heavy forging capacity and South Korea and India plan to build forges in this range. Likewise, the dominance America enjoyed in uranium enrichment until the 1970s is gone. The current standard centrifuge method for uranium enrichment was not invented in America and today 40% of the enriched uranium US power plants use is processed overseas and imported. Another measure of how much the US nuclear industry has shrunk is evident in the number of companies certified to handle nuclear material. In the 1980s the United States had 400 nuclear suppliers and 900 holders of N-stamp certificates (N-stamps are the international nuclear rating certificates issued by the American Society of Mechanical Engineers). By 2008 that number had reduced itself to 80 suppliers and 200 N-stamp holders. A recent Government Accountability Office report, which examined data from between 1994 and 2009, found the US to have a declining share of the global commercial nuclear trade. However, during that same period over 60 reactors were built worldwide. Nuclear power plants are being built in the world increasingly by non-American companies.¶ The American nuclear industry entered the 1960s in a strong position, yet over the past 30 years other countries have closed the development gap with America. **The implications of this change go beyond economics or prestige to include national security. These changes would be less threatening if friendly allies were the ones moving forward with developing a nuclear export industry; however, the quick advancement of the PRC in nuclear energy changes the strategic calculus for America.**¶ The shifting strategic landscape¶ **While America’s nuclear industry has languished, current changes in the world’s strategic layout no longer allow America the option of maintaining the status quo without being surpassed.** The drive for research, development, and scientific progress that grew out of the Cold War propelled America forward, but those priorities have long since been downgraded by the US government. **The economic development of formerly impoverished countries means that the US cannot assume continued dominance by default**. **The rapidly industrializing PRC is seeking its own place among the major powers of the world and is vying for hegemony in Asia; nuclear power is an example of their larger efforts to marshal their scientific and economic forces as instruments of national power.**¶ The rise of China is a phrase that connotes images of a backwards country getting rich off of exporting cheap goods at great social and environmental costs. Yet, this understanding of the PRC has lead many in the United States to underestimate China’s capabilities. The Communist Party of China (**CPC) has undertaken a comprehensive long-term strategy to transition from a weak state that lags behind the West to a country that is a peer-competitor to the United States. Nuclear technology provides a clear example of this.** ¶ In 1978, General Secretary Deng Xiaoping began to move China out of the destructive Mao era with his policies of 'reform and opening.' As part of these changes during the 1980s, the CPC began a concerted and ongoing effort to modernize the PRC and acquire advanced technology including nuclear technology from abroad. This effort was named Program 863 and included both legal methods and espionage. By doing this, the PRC has managed to rapidly catch up to the West on some fronts. In order to eventually surpass the West in scientific development the PRC launched the follow-on Program 973 to build the foundations of basic scientific research within China to meet the nation’s major strategic needs. These steps have brought China to the cusp of the next stage of technological development, a stage known as “indigenous innovation.”¶ ¶ In 2006 the PRC published their science and technology plan out to 2020 and defined indigenous innovation as enhancing original innovation, integrated innovation, and re-innovation based on assimilation and absorption of imported technology in order improve national innovation capability. The Chinese seek to internalize and understand technological developments from around the world so that they can copy the equipment and use it as a point to build off in their own research. This is a step beyond merely copying and reverse engineering a piece of technology. The PRC sees this process of absorbing foreign technology coupled with indigenous innovation as a way of leapfrogging forward in development to gain the upper hand over the West. **The PRC’s official statement on energy policy lists nuclear power as one of their target fields. When viewed within this context, the full range of implications from China’s development of nuclear technology becomes evident**. **The PRC is** now **competing with the U**nited **St**ates **in the areas of innovation and high-technology, two fields that have driven American power since World War Two**. **China’s economic appeal** is no longer merely the fact that it has cheap labor, but **is expanding its economic power in a purposeful way that directly challenges America’s position in the world**.¶ ¶ **The CPC uses the market to their advantage to attract nuclear technology and intellectual capital to China**. The PRC has incentivized the process and encouraged new domestic nuclear power plant construction with the goal of having 20 nuclear power plants operational by 2020. The Chinese Ministry of Electrical Power has described PRC policy to reach this goal as encouraging joint investment between State Owned Corporations and foreign companies. 13 reactors are already operating in China, 25 more are under construction and even more reactors are in the planning stages. ¶ In line with this economic policy, China has bought nuclear reactors from Westinghouse and Areva and is cooperating with a Russian company to build nuclear power plants in Taiwan. By stipulating that Chinese companies and personnel be involved in the construction process, China is building up its own domestic capabilities and expects to become self-sufficient. **China’s** State Nuclear Power Technology Corporation has **partnered with Westinghouse to build a new and larger reactor** based on the existing Westinghouse AP 1000 reactor. **This will give the PRC a reactor design of its own to then export**. **If the CPC is able to combine their control over raw materials, growing technical know-how, and manufacturing base, China will not only be a powerful economy, but be able to leverage this power to service its foreign policy goals as well.**¶ Even though the PRC is still working to master third generation technology, their scientists are already working on what they think will be the nuclear reactor of the future. China is developing Fourth Generation Fast Neutron Reactors and wants to have one operational by 2030. Additionally, a Chinese nuclear development company has announced its intentions to build the “world’s first high-temperature, gas-cooled reactor” in Shandong province which offers to possibility of a reactor that is nearly meltdown proof. A design, which if proved successful, could potentially redefine the commercial nuclear energy trade.¶ The risk to America¶ **The international trade of nuclear material is hazardous in that every sale and transfer increases the chances for an accident or for willful misuse of the material. Nuclear commerce must be kept safe in order for the benefits of nuclear power generation to be realized. Yet, China has a record of sharing dangerous weapons and nuclear material with unfit countries**. **It is a risk for America to allow China to become a nuclear exporting country with a competitive technical and scientific edge. In order to limit Chinese influence and the relative attractiveness of what they can offer, America must ensure its continuing and substantive lead in reactor technology.**¶ ¶ The PRC’s record of exporting risky items is well documented. It is known that during the 1980s **the Chinese shared nuclear weapon designs with Pakistan and continues to proliferate WMD-related material.** According to the Office of the Director of National Intelligence to Congress, **China sells technologies and components in the Middle East and South Asia that are dual use and could support WMD and missile programs.** Jane’s Intelligence Review reported in 2006 that China,¶ Despite a 1997 promise to Washington to halt its nuclear technology sales to Iran, such assistance is likely to continue. In 2005, Iranian resistance groups accused China of selling Iran beryllium, which is useful for making nuclear triggers and maraging steel (twice as hard as stainless steel), which is critical for fabricating centrifuges needed to reprocess uranium into bomb-grade material. ¶ **China sells dangerous materials in order to secure its geopolitical objectives, regardless if those actions harm world stability. There is little reason to believe China will treat the sale of nuclear reactors any differently. Even if the PRC provides public assurances that it will behave differently in the future, the CPC has not been truthful for decades about its nuclear material and weapons sales and hence lacks credibility**. For example, in 1983 Chinese Vice Premier Li Peng said that China does not encourage or support nuclear proliferation. In fact, it was that same year that China contracted with Algeria, then a non-NPT [Non-Proliferation Treaty] state, to construct a large, unsafeguarded plutonium production reactor. In 1991 a Chinese Embassy official wrote in a letter to the The Washington Post that 'China has struck no nuclear deal with Iran.' In reality, China had provided Iran with a research reactor capable of producing plutonium and a calutron, a technology that can be used to enrich uranium to weapons-grade. It has been reported that even after United Nation sanctions were put on Iran, Chinese companies were discovered selling “high-quality carbon fiber” and “pressure gauges” to Iran for use in improving their centrifuges.¶ In 2004 the PRC joined the Nuclear Suppliers Groups (NSG), gaining international recognition of their growing power in the nuclear field. In spite of this opportunity for China to demonstrate its responsibility with nuclear energy, it has not fulfilled it NSG obligations. The PRC has kept the terms of its nuclear reactor sale to Pakistan secret and used a questionable legal technicality to justify forgoing obtaining a NSG waiver for the deal. Additionally, China chose to forgo incorporating new safety measures into the reactors in order to avoid possible complications.¶

**U.S. leadership in Asia checks escalation in multiple hostpots**

**Goh 8**

(Evelyn, Lecturer in International Relations in the Department of Politics and International Relations at the Univ of Oxford, International Relations of the Asia-Pacific, “Hierarchy and the role of the United States in the East Asian security order,” 2008 8(3):353-377, Oxford Journals Database)

This is the main structural dilemma: **as long as the U**nited **S**tates **does not give up its primary position in the Asian regional hierarchy**, China is very unlikely to act in a way that will provide comforting answers to the two questions. Yet**, the East Asian regional order has been and still is constituted by US hegemony**, and **to change that could be extremely disruptive and may lead to regional actors acting in highly destabilizing ways**. **Rapid Japanese remilitarization, armed conflict across the Taiwan Straits, Indian nuclear brinksmanship directed toward Pakistan, or a highly destabilized Korean peninsula are all illustrative of potential regional disruptions**. 5 Conclusion To construct a coherent account of East Asia’s evolving security order, I have suggested that the United States is the central force in constituting regional stability and order. **The major patterns of equilibrium and turbulence in the region since 1945 can be explained by the relative stability of the US position at the top of the regional hierarchy**, **with periods of greatest insecurity being correlated with greatest uncertainty over the American commitment to managing regional order**. Furthermore, relationships of hierarchical assurance and hierarchical deference explain the unusual character of regional order in the post-Cold War era. However, **the greatest contemporary challenge to East Asian order is the potential conflict between China and the United States over rank ordering in the regional hierarchy**, a contest made more potent because of the intertwining of regional and global security concerns. Ultimately, though, investigating such questions of positionality requires conceptual lenses that go beyond basic material factors because it entails social and normative questions. How can China be brought more into a leadership position, while being persuaded to buy into shared strategic interests and constrain its own in ways that its vision of regional and global security may eventually be reconciled with that of the United States and other regional players? How can Washington be persuaded that its central position in the hierarchy must be ultimately shared in ways yet to be determined? The future of the East Asian security order is tightly bound up with the durability of the United States’ global leadership and regional domination. **At the regional level, the main scenarios of disruption are an outright Chinese challenge to US leadership, or the defection of key US allies, particularly Japan**. Recent history suggests, and the preceding analysis has shown, that challenges to or defections from **US leadership will come at junctures where it appears that the US commitment to the region is in doubt**, which in turn destabilizes the hierarchical order. At the global level, American geopolitical over-extension will be the key cause of change. This is the one factor that Hierarchy and the role of the United States in the East Asian security order 373lead to both greater regional and global turbulence, if only by the attendant strategic uncertainly triggering off regional challenges or defections. However, it is notoriously difficult to gauge thresholds of over-extension. More positively, East Asia is a region that has adjusted to previous periods of uncertainty about US primacy. Arguably, the regional consensus over the United States as primary state in a system of benign hierarchy could accommodate a shifting of the strategic burden to US allies like Japan and Australia as a means of systemic preservation. **The alternatives that could surface as a result of not doing so would appear to be much worse.**

**Those go nuclear**

**Landy 2k**

National Security Expert @ Knight Ridder, 3/10 ¶ (Jonathan, Knight Ridder, lexis)

Few if any experts think China and Taiwan, North Korea and South Korea, or India and Pakistan are spoiling to fight. But **even a minor miscalculation** by any of them **could destabilize Asia,** jolt the global economy **and** even **start** a **nuclear war. India, Pakistan and** **China all have nuclear weapons, and North Korea** may have a few, **too. Asia lacks the** kinds of organizations, negotiations and diplomatic **relationships that helped keep** an uneasy **peace** for five decades **in Cold War Europe. “Nowhere else** on Earth **are the stakes as high and relationships so fragile,”** said Bates Gill, director of northeast Asian policy studies at the Brookings Institution, a Washington think tank. “We see the convergence of great power interest overlaid with lingering confrontations with no institutionalized security mechanism in place. There are elements for potential disaster.” In an effort to cool the region’s tempers, President Clinton, Defense Secretary William S. Cohen and National Security Adviser Samuel R. Berger all will hopscotch Asia’s capitals this month. For America, the stakes could hardly be higher. **There are 100,000 U.S. troops in Asia** committed to defending Taiwan, Japan and South Korea, and **the U**nited **St**ates **would instantly** **become embroiled** if Beijing moved against Taiwan or North Korea attacked South Korea. While Washington has no defense commitments to either **India or Pakistan**, a conflict between the two **could end the** global **taboo against using nuclear weapons** and demolish the already shaky international nonproliferation regime. In addition, globalization has made a stable Asia \_ with its massive markets, cheap labor, exports and resources \_ indispensable to the U.S. economy. Numerous U.S. firms and millions of American jobs depend on trade with Asia that totaled $600 billion last year, according to the Commerce Department.

#### China will assert leadership in the South China Sea

Hung December ‘12

[Nguyen Manh Hung is associate professor of government and international politics, and faculty associate of the Center of Global Studies, George Mason University. <http://www.globalasia.org/V7N4_Winter_2012/Nguyen_Manh_Hung.html> ETB]¶

|  |
| --- |
| By 2009-2010, the heightened tension between China and the ASEAN claimants over the contested islands led to an internationalization of the conflict, with the US and other powers beginning to express a view on the disputes. That’s understandable, given that the South China Sea is the world’s second-busiest sea-lane, with more than half of the world’s super tankers and $5.3 trillion in annual trade passing through the area (US trade alone accounts for $1.2 trillion of that figure). The concern over China’s claims and assertive behavior, coupled with China’s lack of transparency in its military modernization program, have created an arms race in Southeast Asia and elicited strong reactions from major powers worried about the situation. India and Japan, for their part, are also concerned over freedom of navigation. Both countries have advocated peaceful resolution of the disputes, but have also increased their diplomatic, economic and naval presence in the area. The US, meanwhile, is in the midst of a policy pivot to the Asia-Pacific, committing 60 percent of its naval assets to the Pacific Ocean, and taking actions to strengthen and modernize “historic alliances” with Japan, South Korea, Australia, the Philippines and Thailand, as well as building “robust partnerships” throughout the region.4 Russia has also begun to voice its concern over the issue of freedom of navigation and “outside meddling” in the South China Sea. In May 2009, as the deadline for claims based on the United Nations Convention on the Law of the Sea (UNCLOS) approached, China was forced to put its cards on the table and Beijing officially presented its nine-dashed-line map, claiming control over 80 percent of the South China Sea and encroaching on territories claimed by other Southeast Asian countries. Almost immediately, the US Senate held a hearing on the South China Sea and in June unanimously passed a resolution “deploring China’s use of force in the South China Sea and supporting the continuation of operations by US armed forces in support of freedom of navigation rights in international water and air space in the South China Sea.” In June 2010, at the Shangri-La Dialogue in Singapore, heated exchanges over the South China Sea took place between China and the US, joined by other ASEAN countries. A month earlier, at the Strategic and Economic Dialogue between the US and China in Beijing, Chinese officials, in a move viewed as raising the stakes in the conflict, declared the country’s claims in the South China Sea to be a “core interest.”5 Influential elites in China view the South China Sea as “blue territory” — that is, as much a part of China’s sovereign territory as Tibet, Xinjiang or Taiwan.6 The US response came in the form of a speech by US Secretary of State Hillary Clinton at the ASEAN Regional Forum (ARF) in Hanoi in July, in which she made it clear that “The United States has a national interest in freedom of navigation, open access to Asia’s maritime commons and respect for international law in the South China Sea.” Significantly, American and Chinese understandings of “freedom of navigation” differ. The US believes it includes the right to conduct military exercises and collect intelligence and militarily useful data, while China wants foreign naval ships and aircraft to seek China’s permission before entering its “internal waters” in the South China Sea.7 Since conflicts of national interests between major world powers can easily lead to friction and war, the escalating tensions between China and the US over these maritime disputes should be a serious cause for concern. The Systemic Conflict From a systemic perspective, the US-China conflict over the South China Sea may be seen as conflict between a rising power and a status quo power. For decades the US, through its Seventh Fleet and its Pacific Command, was the undisputed naval power in the Pacific. The American defeat in Vietnam in the 1970s and its later involvement in the wars in Afghanistan and Iraq have changed the situation. While the US reduced its military presence in Asia and got bogged down in two costly and draining wars, China’s economy was growing and its military modernization program was gaining momentum; Beijing, as a result, has become a dominant regional power economically, politically and militarily. Chinese leaders departed from Deng Xiaoping’s famous dictum to “hide your intention, bide for time,” and began to flex China’s muscles, particularly over the South China Sea. China’s assertion of its “historical right” to claim the sea is weak and doesn’t conform to either UNCLOS or customary international law. What China has been doing represents nothing less than an attempt to rewrite international law and impose its will on the region, shape global political realities and influence the “rules of the road” for the international order.8 The US, in both words and deeds, has signaled that it does not accept this. It has strengthened its military presence in Asia, revitalized its strategic relations with old allies and helped improve the defense capabilities of small countries in the region. In July 2012, when China created a prefectural-level city at Sansha, a small island in the South China Sea, and established a military garrison there to “exercise sovereignty over all land features inside the South China Sea,” the US State Department reacted by publicly denouncing China’s action as “counter to collaborative diplomatic efforts to resolve differences and risks further escalating tensions in the region,” while Congressman Howard Berman, a leading member of the House Committee on Foreign Relations, confirmed that the administration of US President Barack Obama had “repeatedly made clear to Beijing that the US will not allow China to assert hegemony over the region.”9 Conflicts of interests between rising powers and status quo powers have in the past accelerated arms races and led to war. The key questions are, can such a collision course be altered, and can the core conflicts between the two powers be resolved? **Possible End Games** There are a number of possible scenarios for resolving the South China Sea disputes. The first is that China moderates its excessive claims and strikes a deal with other coastal nations, with third-party arbitration or adjudication if necessary, based on recognized international law on territorial seas, exclusive economic zones and continental shelves. Before adopting its nine-dashed line, China had drawn an eleven-dashed line map, two lines of which were in the Gulf of Tonkin.10 This, however, did not prevent China and Vietnam from achieving an agreement on the demarcation of sea borders in that gulf. Moreover, Chinese officials have repeatedly denied that China has officially declared the South China Sea its “core interest,” leaving open the possibility of coming to an understanding regarding conflicting claims. Some Chinese scholars and experts working in government think tanks have privately acknowledged “the problematic nature of China’s policy in the South China Sea,” particularly with regard to “the status of the nine-dotted line.” These analysts and strategic thinkers have expressed concern that the tense situation in the South China Sea could sidetrack China’s “course of reform.”11 This leaves the door open for discussion and provides the space in which China might entertain possible concessions that would avoid embroiling China and its Southeast Asian neighbors in a long argument over China’s excessive claims. The second scenario is one in which China, taking advantage of the differential in power between it and other rival claimants, relies on a combination of unilateral actions, brinkmanship, piecemeal advances and divide-and-conquer tactics to gradually and steadily establish actual control of the sea area within the nine-dashed line. The standoff between China and the Philippines at Scarborough Shoal was a perfect example of how this possible scenario might unfold. The Scarborough Shoal standoff began in May 2012 when a Philippine Navy frigate was sent to investigate the area and boarded Chinese fishing boats in an area it claimed belonged to the Philippines’ EEZ. China responded by sending two unarmed China Maritime Surveillance vessels to interpose themselves between the frigate and the fishing boats and let them escape. Both sides sent in reinforcements. At the height of the standoff, there were a handful of Philippine boats facing almost 100 Chinese vessels. Faced with the overwhelming number of Chinese ships and without international support, the Philippine had to cut a deal in which both sides withdrew their ships. But after all the Philippine boats had withdrawn, China roped off the entrance to the shoal, effectively establishing its de facto control over the contested area. With that fait accompli, a new status quo in favor of China was established. This tactic of resorting to low-grade pressure to create a series of new “facts” may lead to what Toshi Yoshihara termed “strategic fatigue,” which could, in the long run, weaken resistance by rival claimants and lead to a grudging acceptance by the US of China’s claims.12 With this achieved, China would have effective control of navigation in the South China Sea and could dictate the use of that important sea-lane of communication. This approach is being resisted by ASEAN claimants and by other major powers that share the Pacific Ocean. Its success or failure will depend on two things: 1) whether China succeeds in its “divide-and-conquer” approach to ASEAN; and 2) whether ASEAN can summon the determination and capacity to act with a united front to resist China’s pressure and involve other major powers, especially the US. China’s current aggressive approach has caused friction and tension and, if unrestrained, may lead to military conflicts.13 In the long run, it will push many Asian countries closer to the US and may lead to a new kind of Cold War and containment, pitting a bloc of countries supporting the American vision of an Asian regional order against a group supporting the Chinese vision of an Asian regional order. This scenario is a nightmare for Southeast Asian countries that have worked so hard to strengthen ASEAN solidarity and promote the concept of ASEAN centrality, in order to avoid being caught up in the rivalry between the US and China. The third scenario is that China reaches an accommodation with the US, based on American recognition of China as an undisputed leader in the South China Sea, and a peaceful transition of leadership in the Asia-Pacific area from the US to China occurs. If this were to happen, it would unsettle all other Asian nations, big and small, but once the US began the accommodation process, other countries would simply have to fall in line. This process, however, would be dangerous globally and regionally. There is no guarantee, however, that if China were to dominate Asia, she would stop there. In response to the reality of a spectacularly rising China and an America burdened with economic problems and a dysfunctional government, scholars such as Adam Quinn have focused on the beginning of a power transition from the US, a declining power, to China, a rising power.14 Chinese strategic thinkers have not missed the possibility that the current contest over the South China Sea may represent the first steps toward this transition. Ding Gang, a senior editor at the Communist Party’s People’s Daily, commented: “It’s still unknown if the US plans to input equally massive manpower and financial resources as China has injected into this region. It’s very likely that the US lacks the motivation to do this in the long run. And China may become the strongest economic, political and military power in Asia.”15 The problem with this scenario is that it neglects the extent to which the two key players involved in this transition — China and the US — are regimes that represent incompatible visions of the future of the region and the world. A peaceful transition of power took place from the British Empire to the American Empire, largely because it was a case of one democracy replacing another, trading roles as the sentinels of shared regional interests. The British were willing to relinquish their dominance and were assured that, with another democracy taking the helm, its security and wellbeing were not threatened. But the clash between undemocratic revisionist powers (Germany, Italy and Japan) and democratic powers in the 1930s led to the Second World War. Regionally, this scenario would be most undesirable for smaller ASEAN countries and is unlikely to occur so long as the US has the capacity and the determination to maintain its supremacy in the Asia-Pacific region, a determination that has been strongly restated by US leaders, from the president to the secretaries of defense and state as well as by leading members of Congress.16 Aaron Friedberg points out that the ideological gap between China and the US is too great and the level of trust too low to facilitate an accommodation. He makes the case that China’s ultimate goal of regional hegemony would run counter to the US “grand strategy, which has remained constant for decades: to prevent the domination of either end of the Eurasian landmass by one or more potentially hostile powers.”17 |

#### Emerging dynamics means conflict will escalate- 6 reasons

- no cooling off periods

- New ASEAN secretary general is anti-China

- New ASEAN chair is too weak to hammer out a deal

- India getting involved

- more resources will be found

- new Chinese leadership won’t back down

Kurlantzick 12/6/12

[Joshua Kurlantzick, Fellow for Southeast Asia @ Council on Foreign Relations. <http://blogs.cfr.org/asia/2012/12/06/south-china-sea-going-to-get-worse-before-it-might-gets-better/> ETB]

This week’s latest South China Sea incident, in which a Chinese fishing boat cut a Vietnamese seismic cable —at least according to Hanoi— is a reminder that, despite the South China Sea dominating nearly every meeting in Southeast Asia this year, the situation in the Sea appears to be getting worse. This is in contrast to flare-ups in the past, when after a period of tension, as in the mid-1990s, there was usually a cooling-off period. Although there have been several brief cooling-off periods in the past two years, including some initiated by senior Chinese leaders traveling to Southeast Asia, they have not stuck, and the situation continues to deteriorate and get more dangerous.¶ In the new year, it will likely get even worse. Here’s why:¶ The new Association of Southeast Asian Nations (ASEAN) secretary-general comes from Vietnam. Over the past three years, a more openly forceful China has found it difficult to deal with ASEAN leaders who even voice ASEAN concerns. But these leaders, like former Thai foreign minister and ASEAN Secretary-General Surin Pitsuwan, were nothing compared to the new ASEAN secretary-general, Vietnamese Deputy Foreign Minister Le Luong Minh. Although he is a career diplomat and certainly can be suave and attentive, he is still a former Vietnamese official, and undoubtedly will bring with him some of the Vietnamese perspective toward China, which is quickly turning more acrid.¶ This year’s ASEAN chair is Brunei. Keeping to its tradition of rotating the chair every year, in 2013 ASEAN will be headed by Brunei. Although some might think Brunei’s leadership will be better for stability than the 2012 ASEAN leadership of Cambodia, perceived by many other ASEAN members as carrying China’s water, the fact that Brunei is just as much of a diplomatic minnow as Cambodia will mean there is no powerful wrangler in the chair’s seat to hammer out a common ASEAN perspective. Were Indonesia or Singapore the chair, the situation might be different.¶ India is playing a larger and larger role in the South China Sea, adding even more potential players to the mix, and more powerful navies. The recent warning by Beijing that India and Vietnam should not engage in joint exploration is only going to lead to a harsher Indian response, since Indian elites pay far more attention to —and are more easily aggrieved by— China than the reverse.¶ The more they look, the more likely they will find. As reported by the New York Times, “On Monday, China’s National Energy Administration named the South China Sea as the main offshore site for natural gas production. Within two years, China aims to produce 150 billion cubic meters of natural gas from fields in the sea, a significant increase from the 20 billion cubic meters produced so far, the agency said.” Although I do not think that the oil and gas potential in the Sea is the biggest driver of conflict, compared to its strategic value, the more China (and anyone else) explores for energy in the Sea, the more likely they will (eventually) come up with potential deposits that will only raise the stakes, if the forecasts of the Sea’s petroleum potential are to be believed.¶ A new Chinese leadership is unlikely to want to show any weakness. With the leadership of this generation even more split than in the past, following a contentious Party Congress, continued infighting among acolytes of the major Chinese leaders, and the Bo Xilai fiasco, the new leadership is in no position, with Party members and the general educated public, to give any room on a contentious issue like the South China Sea.¶ The Obama administration has passed its period of focusing on more effective dialogue and crisis mediation with China. Officials from the administration’s first term, who naturally had the highest hopes for better dialogue, are gone, with many of them leaving just as convinced as their Bush predecessors that real dialogue was difficult if not impossible. Don’t expect a second term to yield better results with such a dialogue.

#### South China Sea is on the brink of conflict- Chinese provocations mean risk of miscalc and escalation are high- even Chinese security experts agree

Pradhan 12/11/12

[S D Pradhan has served as chairman of India's Joint Intelligence Committee. He has also been the country's deputy national security adviser. He was chairman of the Task Force on Intelligence Mechanism (2008-2010), which was constituted to review the functioning of the intelligence agencies. He has taught at the departments of defence studies and history at the Punjabi University, Patiala. He was also a visiting professor at the University of Illinois, US, in the department of arms control and disarmament studies. <http://blogs.timesofindia.indiatimes.com/ChanakyaCode/entry/china-pushes-south-china-sea-closer-to-a-conflict> ETB]

China following a well-crafted strategy is systematically moving to establish its control over the area it claims in SCS. As a first step, it formed a Committee of thirteen agencies/departments in February 2012 to fabricate evidence and publicise its claims over the most area in SCS shown through the nine dotted lines. After it made recommendations, China in its new biometric passports projected all the areas in the SCS as belonging to China. These passports also show parts of India as belonging to China. This act of China generated a strong reaction in the neighbouring countries as also in other countries using SCS for trade. While both Vietnam and the Philippines refused to stamp the Chinese travel documents, India began to stamp its own version of the Indian Territory. Jakarta called the Chinese act as counter-productive and the US described these Chinese passports as unhelpful to the resolution of disputes. The second step was the establishment of the prefectural level city of Sansha to administer the Paracel and Spratly Islands in June 2012. Soon after this, China created a military command base there. And as the third step of its strategy, China declared that its police in the Southern Chinese Island of Hainan on the SCS has been authorised to board and search any ship they deem illegal in the "Chinese waters". The new regulations are to be enforced from the 1st January 2013. All these acts of China are in fact potential triggers for conflicts in the region. China is also continuing with its provocative actions. On 30th November, 2012 Vietnam accused a Chinese fishing boat for cutting the cables of its exploration vessel Binh Minh 02. On expected lines, China on the other hand stated that Vietnam expelled its fishing vessels from its waters. The cutting of cables by China has been criticised even by Chinese security experts like Professor Zhu Feng of International Relations at Peking University. China has also stated that its patrol boats would be around Scarborough Shoal. Such provocative acts can result into a conflict. China is now seen as creator of hurdles in the steps being taken by ASEAN to resolve the issue peacefully. The Chinese reluctance to discuss the issue at multilateral forums continues. The ASEAN July meeting in Cambodia clearly established that China keeps on using its influence on Cambodia, the present Chair of ASEAN to ensure that the SCS disputes are not properly discussed. Even the recent ASEAN Summit reflected that the issue remains hostage to the Chinese policy of not allowing proper discussion and projection of the disputes. The neighbours of China also see that the Chinese modernisation of the armed forces at a break-neck speed is not meant to defend its interests but to threaten them into submission. The recent landing of J 15 on the newly acquired air-craft carrier has alarmed the powers interested in the region. They also note that Chinese official defence budget has crossed $106 bn this year. The Chinese policies and posture are causing an armed race in the SCS region. While Vietnam and Philippines are looking to acquire arms to counter the Chinese activities, Japan is also re-orienting its defence policy. Outside powers are now becoming more assertive in stating that they intend to protect the freedom of navigation. In addition, they are also guided by their strategic objectives. US not only have Asia pivot policy but are clearly taking steps to protect the US interests by enhancing their presences in this region. The situation can be rightly termed as alarming. The security experts in China's neighbouring nations are getting seriously concerned about the Chinese activities. Their security experts point out that modernisation of the Chinese Navy is a major security concern. They point out that the Chinese rise is not peaceful. They are suggesting that suitable up-gradation of their armed forces is imperative in view of developing security environment. An assessment of the situation reveal clearly that the Chinese posturing and activities have moved up from being merely "a concern" to "a serious threat" to the region's stability. Such Chinese activities have made the situation highly explosive. Even an unintended incident can act as a trigger for a conflict. Today the South China Sea stands very close to a conflict than ever before. The moot question is whether something can be done at this stage or not to save the world from a conflict. The Chinese leaders, who have great sense for learning from historical experiences, should be able to see that their activities are not in their interests. They are getting marginalised in the International Community. The present policy of International Community of managing and engaging China has limits and the moment China crosses the proverbial Rubicon, the concerned powers would abandon this policy and resort to arms to protect their interests. It may be recalled that before the Second World War, UK had adopted the policy of "Appeasement" which was also followed by France and others to a point but when Hitler's Germany decided to attack Poland, they abandoned it and the war followed. Peace loving people do not like to hear the "sound of cannons" but when it comes to protecting their national interests, they would not mind listening to cancerous sound of guns.

**Territorial disputes snowball - causes nuclear conflict**

**Chakraborty 10**

(Tuhin Subhro Chakraborty, Research Associate at Rajiv Gandhi Institute for Contemporary Studies (RGICS), his primary area of work is centered on East Asia and International Relations. His recent work includes finding an alternative to the existing security dilemma in East Asia and the Pacific and Geo Political implications of the ‘Rise of China’. Prior to joining RGICS, he was associated with the Centre for Strategic Studies and Simulation, United Service Institution of India (USI) where he examined the role of India in securing Asia Pacific. He has coordinated conferences and workshops on United Nation Peacekeeping Visions and on China’s Quest for Global Dominance. He has written commentaries on issues relating to ASEAN, Asia Pacific Security Dilemma and US China relations. He also contributed in carrying out simulation exercise on the ‘Afghanistan Scenario’ for the Foreign Service Institute (FSI). Tuhin interned at the Indian Council of World Affairs (ICWA), Sapru House, wherein he worked on the Rise of People’s Liberation Army (PLA) military budget and its impact on India. He graduated from St. Stephen’s College, Delhi and thereafter he undertook his masters in East Asian Studies from University of Delhi. His areas of interest include China, India-Japan bilateral relations, ASEAN, Asia Pacific security dynamics and Nuclear Issues, The United States Service Institution of India, 2010, “The Initiation & Outlook of ASEAN Defence Ministers Meeting (ADMM) Plus Eight”, <http://www.usiofindia.org/Article/?pub=Strategic%20Perspective&pubno=20&ano=739>)

The first ASEAN Defence Ministers Meeting Plus Eight (China, India, Japan, South Korea, Australia, New Zealand, Russia and the USA) was held on the 12th of October. When this frame work of ADMM Plus Eight came into news for the first time it was seen as a development which could be the initiating step to a much needed security architecture in the Asia Pacific. Asia Pacific is fast emerging as the economic center of the world, consequently securing of vulnerable economic assets has becomes mandatory. The source of threat to economic assets is basically unconventional in nature like natural disasters, terrorism and maritime piracy. This coupled with the conventional security threats and **flashpoints** **based on territorial disputes** and political differences **are** very much a part of the region posing **a major security challenge.¶** As mentioned ADMM Plus Eight can be seen as the first initiative on such a large scale where the security concerns of the region can be discussed and areas of cooperation can be explored to keep the threats at bay. The defence ministers of the ten ASEAN nations and the eight extra regional countries (Plus Eight) during the meeting have committed to cooperation and dialogue to counter insecurity in the region. One of the major reasons for initiation of such a framework has been the new face of threat which is non-conventional and transnational which makes it very difficult for an actor to deal with it in isolation. Threats related to violent extremism, maritime security, vulnerability of SLOCs, transnational crimes have a direct and indirect bearing on the path of economic growth. Apart from this the existence of **territorial** **disputes** especially **on the maritime** **front** **plus** **the** issues related to political differences, **rise of China** and dispute on the Korean Peninsula **has aggravated the security dilemma** in the region **giving rise to** areas of **potential** **conflict**. This can be seen as a more of a conventional threat to the region.¶ The question here is that how far this ADMM Plus Eight can go to address the conventional security threats or is it an initiative which would be confined to meetings and passing resolution and playing second fiddle to the ASEAN summit. It is very important to realize that when one is talking about effective security architecture for the Asia Pacific one has to talk in terms of addressing the conventional issues like the **territorial** and political **disputes**. These issues **serve as bigger flashpoint which can snowball into** a major conflict which has the possibility of turning into a **nuclear conflict.**

#### US gets drawn in

Peimani ‘12

[Dr Hooman Peimani is head of the Energy Security Division and a principal fellow at the Energy Studies Institute, National University of Singapore. <http://www.scmp.com/comment/insight-opinion/article/1102286/indias-claim-south-china-sea-further-polarises-rows> ETB]

Any conflict between China, the Philippines and Vietnam over the disputed South China Sea islands would inevitably damage all three parties. That may well lead to intervention by an outsider, particularly the US, given its interests in the region. This would internationalise the dispute and legitimise a long-term US military presence in China's proximity, which Beijing has sought to avoid.¶ Within this context, any deployment of the Indian navy in the South China Sea in defence of its oil interests would also contribute to such "internationalisation" while increasing the possibility of naval clashes.¶ The ownership disputes are already having a polarising effect in the region, along pro-China and pro-US lines, and the Indian navy's announcement will only intensify this. And that can't be good news for Beijing, which has been trying to prevent the US from further upsetting the regional balance of power, which is already in Washington's favour.

**US-China war goes nuclear**

**Hunkovic ‘09**

Lee J. Hunkovic -- professor at American Military University, 09, [“The Chinese-Taiwanese Conflict Possible Futures of a Confrontation between China, Taiwan and the United States of America”, American Military University, p.54]

**A war between China**, Taiwan **and the U**nited **S**tates **has the potential to escalate into a nuclear conflict and a third world war**, therefore, **many countries other than the primary actors could be affected by such a conflict, including Japan, both Koreas, Russia, Australia, India and Great Britain,** if they were drawn into the war, as well as all other countries in the world that participate in the global economy, in which the United States and China are the two most dominant members. If China were able to successfully annex Taiwan, the possibility exists that they could then plan to attack Japan and begin a policy of aggressive expansionism in East and Southeast Asia, as well as the Pacific and even into India, which could in turn create an international standoff and deployment of military forces to contain the threat. In any case, **if China and the U**nited **S**tates **engage in** a full-scale **conflict, there are few countries** in the world **that will not be** economically and/or militarily **affected by it.** However, China, Taiwan and United States are the primary actors in this scenario, whose actions will determine its eventual outcome, therefore, other countries will not be considered in this study.

### Solvency

#### DoD acquisition of SMR’s ensures rapid military adoption, commercialization, and U.S. leadership

Andres and Breetz ‘11

Richard Andres, Professor of National Security Strategy at the National War College and a Senior Fellow and Energy and Environmental Security and Policy Chair in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University, and Hanna Breetz, doctoral candidate in the Department of Political Science at The Massachusetts Institute of Technology, Small Nuclear Reactorsfor Military Installations:Capabilities, Costs, andTechnological Implications, [www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf](http://www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf)

Thus far, this paper has reviewed two of DOD’s most pressing energy vulnerabilities—grid insecurity and fuel convoys—and explored how they could be addressed by small reactors. We acknowledge that there are many uncertainties and risks associated with these reactors. On the other hand, failing to pursue these technologies raises its own set of risks for DOD, which we review in this section: first, small reactors may fail to be commercialized in the United States; second, the designs that get locked in by the private market may not be optimal for DOD’s needs; and third, expertise on small reactors may become concentrated in foreign countries. By taking an early “first mover” role in the small reactor market, DOD could mitigate these risks and secure the long-term availability and appropriateness of these technologies for U.S. military applications. The “Valley of Death.” Given the promise that small reactors hold for military installations and mobility, DOD has a compelling interest in ensuring that they make the leap from paper to production. However, if DOD does not provide an initial demonstration and market, there is a chance that the U.S. small reactor industry may never get off the ground. The leap from the laboratory to the marketplace is so difficult to bridge that it is widely referred to as the “Valley of Death.” Many promising technologies are never commercialized due to a variety of market failures— including technical and financial uncertainties, information asymmetries, capital market imperfections, transaction costs, and environmental and security externalities— that impede financing and early adoption and can lock innovative technologies out of the marketplace. 28 In such cases, the Government can help a worthy technology to bridge the Valley of Death by accepting the first mover costs and demonstrating the technology’s scientific and economic viability.29 [FOOTNOTE 29: There are numerous actions that the Federal Government could take, such as conducting or funding research and development, stimulating private investment, demonstrating technology, mandating adoption, and guaranteeing markets. Military procurement is thus only one option, but it has often played a decisive role in technology development and is likely to be the catalyst for the U.S. small reactor industry. See Vernon W. Ruttan, Is War Necessary for Economic Growth? (New York: Oxford University Press, 2006); Kira R. Fabrizio and David C. Mowery, “The Federal Role in Financing Major Inventions: Information Technology during the Postwar Period,” in Financing Innovation in the United States, 1870 to the Present, ed. Naomi R. Lamoreaux and Kenneth L. Sokoloff (Cambridge, MA: The MIT Press, 2007), 283–316.] Historically, nuclear power has been “the most clear-cut example . . . of an important general-purpose technology that in the absence of military and defense related procurement would not have been developed at all.”30 Government involvement is likely to be crucial for innovative, next-generation nuclear technology as well. Despite the widespread revival of interest in nuclear energy, Daniel Ingersoll has argued that radically innovative designs face an uphill battle, as “the high capital cost of nuclear plants and the painful lessons learned during the first nuclear era have created a prevailing fear of first-of-a-kind designs.”31 In addition, Massachusetts Institute of Technology reports on the Future of Nuclear Power called for the Government to provide modest “first mover” assistance to the private sector due to several barriers that have hindered the nuclear renaissance, such as securing high up-front costs of site-banking, gaining NRC certification for new technologies, and demonstrating technical viability.32 It is possible, of course, that small reactors will achieve commercialization without DOD assistance. As discussed above, they have garnered increasing attention in the energy community. Several analysts have even argued that small reactors could play a key role in the second nuclear era, given that they may be the only reactors within the means of many U.S. utilities and developing countries.33 However, given the tremendous regulatory hurdles and technical and financial uncertainties, it appears far from certain that the U.S. small reactor industry will take off. If DOD wants to ensure that small reactors are available in the future, then it should pursue a leadership role now. Technological Lock-in. A second risk is that if small reactors do reach the market without DOD assistance, the designs that succeed may not be optimal for DOD’s applications. Due to a variety of positive feedback and increasing returns to adoption (including demonstration effects, technological interdependence, network and learning effects, and economies of scale), the designs that are initially developed can become “locked in.”34 Competing designs—even if they are superior in some respects or better for certain market segments— can face barriers to entry that lock them out of the market. If DOD wants to ensure that its preferred designs are not locked out, then it should take a first mover role on small reactors. It is far too early to gauge whether the private market and DOD have aligned interests in reactor designs. On one hand, Matthew Bunn and Martin Malin argue that what the world needs is cheaper, safer, more secure, and more proliferation-resistant nuclear reactors; presumably, many of the same broad qualities would be favored by DOD.35 There are many varied market niches that could be filled by small reactors, because there are many different applications and settings in which they can be used, and it is quite possible that some of those niches will be compatible with DOD’s interests.36 On the other hand, DOD may have specific needs (transportability, for instance) that would not be a high priority for any other market segment. Moreover, while DOD has unique technical and organizational capabilities that could enable it to pursue more radically innovative reactor lines, DOE has indicated that it will focus its initial small reactor deployment efforts on LWR designs.37 If DOD wants to ensure that its preferred reactors are developed and available in the future, it should take a leadership role now. Taking a first mover role does not necessarily mean that DOD would be “picking a winner” among small reactors, as the market will probably pursue multiple types of small reactors. Nevertheless, DOD leadership would likely have a profound effect on the industry’s timeline and trajectory. Domestic Nuclear Expertise. From the perspective of larger national security issues, if DOD does not catalyze the small reactor industry, there is a risk that expertise in small reactors could become dominated by foreign companies. A 2008 Defense Intelligence Agency report warned that the United States will become totally dependent on foreign governments for future commercial nuclear power unless the military acts as the prime mover to reinvigorate this critical energy technology with small, distributed power reactors.38 Several of the most prominent small reactor concepts rely on technologies perfected at Federally funded laboratories and research programs, including the Hyperion Power Module (Los Alamos National Laboratory), NuScale (DOE-sponsored research at Oregon State University), IRIS (initiated as a DOE-sponsored project), Small and Transportable Reactor (Lawrence Livermore National Laboratory), and Small, Sealed, Transportable, Autonomous Reactor (developed by a team including the Argonne, Lawrence Livermore, and Los Alamos National Laboratories). However, there are scores of competing designs under development from over a dozen countries. If DOD does not act early to support the U.S. small reactor industry, there is a chance that the industry could be dominated by foreign companies. Along with other negative consequences, the decline of the U.S. nuclear industry decreases the NRC’s influence on the technology that supplies the world’s rapidly expanding demand for nuclear energy. Unless U.S. companies begin to retake global market share, in coming decades France, China, South Korea, and Russia will dictate standards on nuclear reactor reliability, performance, and proliferation resistance.

#### Military procurement solves commercial use and avoids regulations

Andres and Loudermilk ‘10

(Richard B. Andres, Professor of ¶ national Security Strategy at the ¶ national War College and a Senior fellow and energy and environmental ¶ Security and Policy Chair in the Center ¶ for Strategic research, institute for national Strategic Studies, at the national Defense University, Micah J, Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, “Small Reactors and the Military’s Role in Securing America’s Nuclear IndustryPosted” <http://robertmayer.wordpress.com/2010/08/28/small-reactors-and-the-militarys-role-in-securing-americas-nuclear-industryposted/>, SEH)

Unlike private industry, the military does not face the same regulatory and congressional hurdles to constructing reactors and would have an easier time in adopting them for use. By integrating small nuclear reactors as power sources for domestic U.S. military bases, three potential energy dilemmas are solved at the same time. First, by incorporating small reactors at its bases, the military addresses its own energy security quandary. The military has recently sought to “island” its bases in the U.S. -protecting them from grid outages, be they accidental or intentional. The Department of Defense has promoted this endeavor through lowering energy consumption on bases and searching for renewable power alternatives, but these measures alone will prove insufficient. Small reactors provide sufficient energy output to power military installations and in some cases surrounding civilian population centers.¶ Secondly, as the reactors become integrated on military facilities, the stigma on the nuclear power industry will ease and inroads will be created for the adoption of small-scale reactors as a viable source of energy. Private industry and the public will see that nuclear reactors can indeed be utilized safely and effectively, resulting in a renewed push toward the expansion of nuclear power. Although many of the same hurdles will still be in place, a shift in public opinion and a stronger effort by utilities, coupled with the demonstrated success of small reactors on military bases, could prove the catalysts necessary for the federal government and the NRC to take more aggressive action.¶ Finally, while new reactors are not likely in the near future, the military’s actions will preserve, for a while longer, the badly ailing domestic nuclear energy industry. Nuclear power is here to stay around the globe, and the United States has an opportunity to take a leading role in supplying the world’s nuclear energy and reactor technology. With the U.S. nuclear industry dormant for three decades, much of the attention, technology, and talent have concentrated overseas in countries with a strong interest in nuclear technology. Without the United States as a player in the nuclear energy market, it has little say over safety regulations of reactors or the potential risks of proliferation from the expansion of nuclear energy. If the current trend continues, the U.S. will reach a point where it is forced to import nuclear technology and reactors from other countries. Action by the military to install reactors on domestic bases will both guarantee the survival of the American nuclear industry in the short term, and work to solidify support for it in the long run.¶ Ultimately, between small-scale nuclear reactors and the U.S. military, the capability exists to revitalize America’s sleeping nuclear industry and promoting energy security and clean energy production. The reactors offer the ability to power domestic military bases, small towns, and other remote locations detached from the energy grid. Furthermore, reactor sites can house multiple units, allowing for greater energy production – rivaling even large reactors. Small reactors offer numerous benefits to the United States and a path initiated by the military presents a realistic route by which their adoption can be achieved.

#### SMRs are cost-effective, safe, and can be quickly deployed

Szondy 12

David, freelance writer based in Monroe, Washington. An award-winning playwright, he has contributed to Charged and iQ magazine and is the author of the website Tales of Future Past, February 16, "Feature: Small modular nuclear reactors - the future of energy?", [www.gizmag.com/small-modular-nuclear-reactors/20860/](http://www.gizmag.com/small-modular-nuclear-reactors/20860/)

One way of getting around many of these problems is through the development of small modular reactors (SMR). These are reactors capable of generating about 300 megawatts of power or less, which is enough to run 45,000 US homes. Though small, SMRs are proper reactors. They are quite different from the radio-thermal generators (RTG) used in spacecraft and remote lighthouses in Siberia. Nuclear reactors such as SMRs use controlled nuclear fission to generate power while RTGs use natural radioactive decay to power a relatively simple thermoelectric generator that can only produce, at most, about two kilowatts.¶ In terms of power, RTGs are the equivalent of batteries while small nuclear reactors are only "small" when compared to conventional reactors. They are hardly the sort that you would keep in the garage. In reality, SMR power plants would cover the area of a small shopping mall. Still, such an installation is not very large as power plants go and a reactor that only produces 300 megawatts may not seem worth the investment, but the US Department of Energy is offering US$452 million in matching grants to develop SMRs and private investors like the Bill Gates Foundation and the company of Babcock and Wilcox are putting up money for their own modular reactor projects.¶ The 60-year old breakthrough¶ One reason for government and private industry to take an interest in SMRs is that they've been successfully employed for much longer than most people realize. In fact, hundreds have been steaming around the world inside the hulls of nuclear submarines and other warships for sixty years. They've also been used in merchant ships, icebreakers and as research and medical isotope reactors at universities. There was even one installed in the Antarctic at McMurdo Station from 1962 to 1972. Now they're being considered for domestic use.¶ The case for SMRs¶ SMRs have a number of advantages over conventional reactors. For one thing, SMRs are cheaper to construct and run. This makes them very attractive to poorer, energy-starved countries; small, growing communities that don't require a full-scale plant; and remote locations such as mines or desalination plants. Part of the reason for this is simply that the reactors are smaller. Another is that, not needing to be custom designed in each case, the reactors can be standardized and some types built in factories that are able to employ economies of scale. The factory-built aspect is also important because a factory is more efficient than on-site construction by as much as eight to one in terms of building time. Factory construction also allows SMRs to be built, delivered to the site, and then returned to the factory for dismantling at the end of their service lives - eliminating a major problem with old conventional reactors, i.e. how to dispose of them.¶ SMRs also enjoy a good deal of design flexibility. Conventional reactors are usually cooled by water - a great deal of water - which means that the reactors need to be situated near rivers or coastlines. SMRs, on the other hand, can be cooled by air, gas, low-melting point metals or salt. This means that SMRs can be placed in remote, inland areas where it isn't possible to site conventional reactors.¶ Safety¶ This cooling system is often passive. In other words, it relies more on the natural circulation of the cooling medium within the reactor's containment flask than on pumps. This passive cooling is one of the ways that SMRs can improve safety. Because modular reactors are smaller than conventional ones, they contain less fuel. This means that there's less of a mass to be affected if an accident occurs. If one does happen, there's less radioactive material that can be released into the environment and makes it easier to design emergency systems. Since they are smaller and use less fuel, they are easier to cool effectively, which greatly reduces the likelihood of a catastrophic accident or meltdown in the first place.¶ This also means that accidents proceed much slower in modular reactors than in conventional ones. Where the latter need accident responses in a matter of hours or minutes, SMRs can be responded to in hours or days, which reduces the chances of an accident resulting in major damage to the reactor elements.¶ The SMR designs that reject water cooling in favor of gas, metal or salt have their own safety advantages. Unlike water-cooled reactors, these media operate at a lower pressure. One of the hazards of water cooling is that a cracked pipe or a damaged seal can blow radioactive gases out like anti-freeze out of an overheated car radiator. With low-pressure media, there's less force to push gases out and there's less stress placed on the containment vessel. It also eliminates one of the frightening episodes of the Fukushima accident where the water in the vessel broke down into hydrogen and oxygen and then exploded.¶ Another advantage of modular design is that some SMRs are small enough to be installed below ground. That is cheaper, faster to construct and less invasive than building a reinforced concrete containment dome. There is also the point that putting a reactor in the ground makes it less vulnerable to earthquakes. Underground installations make modular reactors easier to secure and install in a much smaller footprint. This makes SMRs particularly attractive to military customers who need to build power plants for bases quickly. Underground installation also enhances security with fewer sophisticated systems needed, which also helps bring down costs.¶ SMRs can help with proliferation, nuclear waste and fuel supply issues because, while some modular reactors are based on conventional pressurized water reactors and burn enhanced uranium, others use less conventional fuels. Some, for example, can generate power from what is now regarded as "waste", burning depleted uranium and plutonium left over from conventional reactors. Depleted uranium is basically U-238 from which the fissible U-235 has been consumed. It's also much more abundant in nature than U-235, which has the potential of providing the world with energy for thousands of years. Other reactor designs don't even use uranium. Instead, they use thorium. This fuel is also incredibly abundant, is easy to process for use as fuel and has the added bonus of being utterly useless for making weapons, so it can provide power even to areas where security concerns have been raised.¶ But there's still the sticking point that modular reactors are, by definition, small. That may be fine for a submarine or the South Pole, but what about places that need more? Is the alternative conventional nuclear plants? It turns out that the answer is no. Modular reactors don't need to be used singly. They can be set up in batteries of five or six or even more, providing as much power as an area needs. And if one unit needs to be taken off line for repairs or even replacement, it needn't interfere with the operation of the others.

#### Nuclear power is inevitable

IAEA applications

Middle class

Population growth

Urbanization

Warming

Desal

Ebinger and Squassoni ‘11

Charles K Ebinger and Sharon Squassoni 11, Charles is senior fellow and director of the Energy Security Initiative at the Brookings Institution, Sharon is senior fellow and director of the Proliferation Prevention Program at the Center for Strategic and International Studies, “Industry and Emerging Nuclear Energy Markets” in “Business and Nonproliferation”, googlebooks

As mentioned previously, a notable feature of the nuclear renaissance is the widespread interest in nuclear power, especially in countries without a commercial nuclear infrastructure. According to the International Atomic Energy Agency (IAEA), at least sixty-five countries have expressed such interest, most from outside the industrialized economies of the Organization of Economic Cooperation and Development (OECD), the main locus of nuclear power capacity at present. Most of the capacity growth up to 2030 is expected to occur in the Middle East, South Asia, Southeast Asia, and the Far East. As part of this growth, eleven developing countries are serious candidates for first reactors, although progress in carrying out their plans varies widely (see table 4-1). These countries are drawing new suppliers into the nuclear market (notably China, India, and South Korea) and sparking activity among existing suppliers such as Russia and Japan. Overall, however, many countries will not be able to follow through on growth plans owing to cost, limited grid capacity, and perhaps public resistance. Countries are moving toward nuclear energy, not the mention other sources of primary fuel, in large part because of mounting demand: between 2008 and 2035 global electricity consumption is expected to increase 80 percent, and 80 percent of that growth will take place in non-OECD countries. Underlying this large increase in electricity demand are population growth, urbanization, concerns about CO2 emissions from fossil fuel combustion, energy security, and pressure from a growing middle class for goods and services using or produced by electricity. Over this period, global population will rise from 6.7 billion to 8.5 billion, with 7.2 billion of the total living in non-OECD countries. Most of this increase will take place in China, India, and the Middle East, with the balance in the rest of the developing world, while the share of the global population in the OECD and Russia will decline. Today nearly 1.4 billion people have no electricity, a figure that may well increase with further population growth, despite movement into the modern energy economy. Urbanization will undoubtedly push demand up as well. For the first time in history, a majority of the world’s population is living in urban areas, a trend likely to continue, especially in developing countries. With the movement of hundreds of millions of people from rural areas to cities, more communities will turn from traditional and often free fuels (wood, forest residues, agricultural wastes, bagasse, and dung) to modern fuels such as electricity, natural gas, and petroleum products. The dramatic growth of the middle class in a number of emerging market nations is also having a large impact on energy consumption. The World Bank predicts that by 2030 the middle class in these nations will jump to 1.2 billion from 430 million in 2000. It is estimated that in India alone, a country that before Fukushima was developing plans for nuclear power, the number of households with an annual disposal income of $5,000-$15,000 will increase from 36 percent of the population in 2010 to more than 58 percent by 2020. Climate change, too, will have some of its largest impact in developing countries, which, according to the International Energy Agency (IEA), will be responsible for nearly all of the projected global increase in CO2 emissions by 2035. In large part, the cause of this rise is coal-fired power in China and India. The urgency of finding alternatives to coal is recognized by others as well, including Indonesia, Pakistan, Poland, South Africa, and Russia. Compared with developed countries, developing nations rely far more on imported fossil fuels, especially oil, to generate power. When the price of oil on the world market rose to $147 a barrel in 2008, it became clear that dependence on imported fossil fuels for electricity generation can destroy a nation’s economy and that fuel diversification is vital for energy security. As prices climbed beyond $100 a barrel, Jordan, a country committed to introducing civilian nuclear energy, was particularly hard hit: 99 percent of its electricity is generated from either oil or gas, 96 percent of which is imported. Developing countries also see nuclear energy as a possible source of power for desalination plants, especially in the Gulf Cooperation Council (GCC) countries and elsewhere in the Middle East. As the demand for freshwater supplies increases – along with the emphasis on limited the use of fossil fuels to generates electricity because of the impact of emissions, price volatility, and supply disruptions – the nuclear option will be considered even more viable. Moreover, some countries with large resources of oil or gas, such as the United Arab Emirates (UAE) and Saudi Arabia, are hoping nuclear power will help reduce their domestic use of these fuels in generating power and will boost the financial benefits of exporting them. For some developing countries, status and geopolitics are undoubtedly important factors in considering the development or expansion of a civilian nuclear energy program. In the view of Turkey’s energy minister Hilmi Guler, for instance, nuclear technology is a requirement for a seat at the table with the ten most developed countries in the world.

# 2AC Block was Immigration Politics, Case

### Grid

#### Cyber offense outpaces defense

Zach 3/28

(“U.S. Outgunned in Hacker War: WSJ” http://blog.cybersecuritylaw.us/?p=85, SEH)

On March 27th, 2012, Devlin Barret reported for the Wall Street Journal on comments made by Shawn Henry, the FBI's departing cyber head. Notably, Mr. Henry said that in the context of cyber-espionage, the current public and private approach to trying to stop hackers is "unsustainable." It's unsustainable in the sense that the U.S. can "never get ahead, never become secure, [and] never have a reasonable expectation of privacy or security."¶ The WSJ article noted that Mr. Henry criticized the lax cybersecurity efforts of company executives. Over the course of FBI investigations, some companies have discovered that they've been breached for not only months, but years. This, according to Mr. Henry, gave the hackers "full visibility into everything occurring on that network, potentially." However, some company executives still don't recognize that there is a problem. Even if a company decides to build cyber-defenses, Mr. Henry explained that "[y]ou can only build a fence so high . . . the offense outpaces the defense, and the offense is better than the defense."

### China

#### Licensing quick

NEI ‘11

Nuclear Energy Institute, “Myths and Facts about Small Modular Reactors (SMRs)”, June 7 2011 is last date cited, [www.nei.org/filefolder/MythsFacts.pdf](http://www.nei.org/filefolder/MythsFacts.pdf)

UCS statement: “The distributed deployment of small reactors would put great strains on licensing and inspection resources. Nuclear reactors are qualitatively different from other types of generating facilities, not least because they require a much more intensive safety and security inspection regime.”¶ The Facts: This is speculation that is not supported by any measure of NRC’s past and present resources. NRC has consistently been appropriated sufficient resources, and licensees then reimburse the agency for all licensing and inspection costs, so there is no factual evidence that deployment of SMRs would place any strain on NRC resources.

### Solvency

#### No workforce shortage

ITA ‘11

(International Trade Administration, “The Commercial Outlook for U.S. Small Modular Nuclear Reactors” Manufacturing and Services Competitiveness Report, February 2011, US Department of Commerce)

A serious obstacle to the resurgence of traditional nuclear power in the United States is the eroded domestic manufacturing capacity for the major nuclear components. A robust program of building SMRs, however, could make use of existing domestic capacity that is already capable of completely constructing most proposed SMR designs. SMRs would not require the ultra-heavy forgings that currently can only be made overseas. U.S. suppliers say that firms could retool using existing capabilities and resources and could source most of the components of SMRs here in the United States. This ability could mean tremendous new commercial opportunities for U.S. firms and workers. A substantial SMR deployment program in the United States could result in the creation of many new jobs in manufacturing, engineering, transportation, construction (for site preparation and installation) and craft labor, professional services, and ongoing plant operations. As SMR manufacturers prove their designs in the domestic market, they will likely consider export opportunities. The modular nature of SMRs and their relative portability means that locating export-oriented SMR manufacturing and assembly could make sense for U.S. companies, as opposed to the localiza-tion that is typically necessary for building larger reactors

### 2AC XO

#### DOD is the only one that can avoid regulations

Butler ‘11

(LtCol Butler is currently assigned to Headquarters, North American Air Defense Command-U.S. Northern Command/J594 (Strategy, Policy, and Plans Directorate), Security Cooperation ntegration Branch. This article was his Chase Prize Essay Contest entry. “Why the Marine Corps should lead the environmental and energy way forward and how to do it” March 18, 2011 accessed online September 15, 2012 at <http://www.mca-marines.org/gazette/not-green-enough>)

Fifth, the cumbersome, bureaucratic certification process of the Nuclear Regulatory Commission (NRC), often enough to scare away potential entrepreneurs and investors, is not necessarily a roadblock to success. The NRC is “responsible for licensing and regulating the operation of commercial nuclear power plants in the United States.” Military installations offer unique platforms that could likely bypass an extended certification process. With established expertise and a long safety record in nuclear reactor certification, operations, training, and maintenance, the Naval Nuclear Propulsion Program comprises the civilian and military personnel who:¶ . . . design, build, operate, maintain, and manage the nuclear-powered ships and the many facilities that support the U.S. nuclear-powered naval fleet.”34¶ Bypassing the NRC and initiating SMR experimentation under ADM Hyman Rickover’s legacy umbrella of naval reactors could shorten the process to a reasonable level for Marine and naval installations.35¶ ¶ Finally, Marine Corps-SMR technology opens the pathway for related endeavors and synergetic undertakings. The Army has several smart and influential individuals poised to partner in nuclear energy endeavors, and our naval brethren enjoy a long history of nuclear reactor expertise. Partnerships and enhanced use leases to support SMR deployments should be leveraged.36 As the collective military expertise in SMR technology grows, additional capabilities, such as expeditionary and vehicular power sources, could be explored. And related technologies, such as hybrid/electric vehicle power storage and recharging facilities and water desalination plants, could collocate with nuclear plants on installations to both use the energy.37

**executive orders create a lightning rod on the whitehouse—cp links to politics**

**Cooper 97** [Phillip, Prof of Public Administration @ Portland State, Nov 97, “Power tools for an effective and responsible presidency” Administration and Society, Vol. 29, p. Proquest]

Interestingly enough, **the effort to avoid opposition from Congress or agencies can have the effect of turning the White House itself into a lightning rod.** When an administrative agency takes action under its statutory authority and responsibility, **its opponents generally focus their conflicts as limited disputes aimed at the agency involved**. **Where the White House employs an executive order, for example, to shift critical elements of decision making from the agencies to the executive office of the president, the nature of conflict changes and the focus shifts to 1600 Pennsylvania Avenue** or at least to the executive office buildings. The saga of the OIRA battle with Congress under regulatory review orders and the murky status of the Quayle Commission working in concert with OIRA provides a dramatic case in point.

#### Executive power and secrecy decreases public support and international relations.

**Paul,** 19**98** [Joel R., Professor at University of Connecticut School of Law, “The Geopolitical Constitution: Executive Expediency and Executive Agreements,” California Law Review, 86 Calif. L. Rev. 671, July, lexis, accessed 7/27/07]

First, **the shift in power from the Congress to the President has diminished the degree of democratic accountability in foreign policy.** **[31](http://www.lexis.com/research/retrieve?_m=3b0ca20d4a10e6ab6d2ca44c3bf3ce6e&docnum=1&_fmtstr=FULL&_startdoc=1&wchp=dGLbVtb-zSkAt&_md5=afc0419513df45ee82787f9c1c0eb727&focBudTerms=&focBudSel=all" \l "n31" \t "_self)** While the executive may be no less "representative" than Congress as an institution, **accountability results from the way in which Congress operates, which tends to be more open than the executive.** **Congressional business is conducted on the record and in public**. With rare exceptions, all of the information available to members of Congress is also available to the public. By comparison, the executive operates behind closed doors. The executive has access to information that is unavailable to the public, and only when a decision is reached is the policy outcome known to the public. **The executive can often justify its decisions by claiming to know something the public does not know, which makes it more difficult to challenge the executive's decision. For these reasons, the shift of foreign relations power from Congress to the executive has shrouded the policy-making process from public view and diluted democratic accountability.**

Second, **the growth of executive power has created a bias in favor of internationalism that has often led to failure. Possessing a virtual monopoly power over foreign relations has tempted presidents to send troops abroad or to make foreign commitments. Time and again the executive has stumbled into foreign conflicts, like Bosnia, Lebanon, Iran and Somalia, with tragic results**. 32 At a minimum, **congressional** [\*680] **participation might have slowed decision-making, leaving time for public deliberation**. 33 Third, **the absence of congressional debate has often accounted for the lack of public support for foreign commitments. When U.S. forces have suffered casualties,** such as in Somalia or Beirut, **public opinion turned against the executive**. Without the popular will to stay the course, presidents have withdrawn U.S. forces in some cases. As a result, U.S. policy has often lacked coherence. Though Congress was blamed for this inconsistency in many cases, one reason members of Congress so readily changed their minds was that they were not politically invested in the policy.

### 2AC Immigration Polt

#### Gun fights make immigration impossible

Price 1/3

[Bob, Bob Price is a political commentator for TexasGOPVote.com. He is an expert about issues related to border security and illegal immigration. “Immigration Reform Program Announced by Obama Administration” <http://texasgopvote.com/issues/fix-immigration/immigration-reform-program-announced-obama-administration-004981>]

The order in which these two issues are addressed could have a lot to do with their outcome. If the President pushes for gun control first, he will fire up many Democrats and nearly all Republicans against him at the expense of much political capital making immigration reform almost impossible as a next step. However,  if he pushes the immigration reform first, he may well re-awaken the Tea Party groups causing them to become mobilized and activated which would further endanger any gun control legislation.

#### Immigration reform won’t pass – not at the top of the docket, Obama focused on energy

Munro 12/31/12

(Neil Munro “Obama promises new immigration plan but keeps endgame close to his vest” 1:44 AM 12/31/2012 <http://dailycaller.com/2012/12/31/obama-promises-new-immigration-plan-but-keeps-endgame-close-to-his-vest/?print=1>, TSW)

“I’ve said that fixing our broken immigration system is a top priority,” he told interviewer David Gregory, who is now under police investigation for violating D.C. law by brandishing a 30-bullet magazine on his Dec. 23 show.¶ “I will introduce legislation in the first year to get that done,” Obama said.¶ “I think we have talked about it long enough. We know how we can fix it. We can do it in a comprehensive way that the American people support. That’s something we should get done.”¶ Gregory did not challenge any of Obama’s claims, nor did he question Obama about how his bill would impact the high unemployment rate among low-skilled Americans, especially African-Americans, in a an increasingly high-tech economy.¶ However, Obama’s language suggested that increased Latino immigration is a lower priority for him than other measures, and that he’s concerned any revamp would fail because of public opposition.¶ Many previous immigration reform bills have died when leading supporters quietly backed away amid furious public opposition to what was perceived as an attempt at a general amnesty. In 2007, then-Sen. Obama voted against a temporary-worker provision in a pending immigration bill, helping kill the overall legislation.¶ During his first term as president, Obama declined to push a comprehensive immigration bill, despite promising such a revamp while on the 2008 campaign trail.¶ In his NBC interview, Obama showed more enthusiasm about other priorities.¶ “We’ve got a huge opportunity around energy,” he said, “The most immediate thing I’ve got to do … is make sure that taxes are not going up on middle class families,” he claimed. Another priority, he added, is “rebuilding our infrastructure, which is broken.”¶ Obama also touted his new project to counter gun-violence. “Anybody who was up in Newtown, who talked to the parents, who talked to the families, understands that, you know, something fundamental in America has to change … you know, that was the worst day of my presidency,” he told Gregory.¶ “I will put forward a very specific [anti-violence] proposal based on the recommendations that Joe Biden’s task force is putting together as we speak,” he said.¶

#### Bipart support for SMR’s in Congress

E&E News 9-24

“DOE Funding for Small Reactors Languishes as Parties Clash on Debt,” <http://www.eenews.net/public/Greenwire/2012/09/24/3>

Some of the nation's largest nuclear power companies are anxious to hear whether they will get a share of a $452 million pot from the Department of Energy for a new breed of reactors that the industry has labeled as a way to lessen the safety risks and construction costs of new nuclear power plants.¶ The grant program for these "small modular reactors," which was announced in January, would mark the official start of a major U.S. foray into the technology even as rising construction costs -- especially when compared to natural-gas-burning plants -- cause many power companies to shy away from nuclear plants.¶ DOE received four bids before the May 21 deadline from veteran reactor designers Westinghouse Electric Co. and Babcock & Wilcox Co., as well as relative newcomers Holtec International Inc. and NuScale Power LLC. Now the summer has ended with no announcement from DOE, even though the agency said it would name the winners two months ago.¶ As the self-imposed deadline passed, companies started hearing murmurs that a decision could come in September, or perhaps at the end of the year. To observers within the industry, it seems that election-year calculations may have sidelined the contest.¶ "The rumors are a'flying," said Paul Genoa, director of policy development at the Nuclear Energy Institute, in an interview last week. "All we can imagine is that this is now caught up in politics, and the campaign has to decide whether these things are good for them to announce, and how."¶ Small modular reactors do not seem to be lacking in political support. The nuclear lobby has historically courted both Democrats and Republicans and still sees itself as being in a strong position with key appropriators on both sides of the aisle.¶ Likewise, top energy officials in the Obama administration have hailed the promise of the new reactors, and they haven't shown any signs of a change of heart. DOE spokeswoman Jen Stutsman said last week that the department is still reviewing applications, but she did not say when a decision will be made.¶ "This is an important multiyear research and development effort, and we want to make sure we take the time during the review process to get the decision right," she wrote in an email.¶ That the grants haven't been given out during a taut campaign season, even as President Obama announces agency actions ranging from trade cases to creating new national monuments to make the case for his re-election, may be a sign that the reactors are ensnared in a broader feud over energy spending.¶ Grant recipients would develop reactor designs with an eye toward eventually turning those into pilot projects -- and the loan guarantees that these first-of-a-kind nuclear plants are using today to get financing would be blocked under the "No More Solyndras" bill that passed the House last week (Greenwire, Sept. 14).

#### Winners win

Marshall and Prins, 2011

Bryan W. MARSHALL AND PRINS 11, Miami University, Department of Political Science AND Brandon C. PRINS, University of Tennessee & Howard H. Baker, Jr. Center for Public Policy, September 2011 “Power or Posturing? Policy Availability and Congressional Inﬂuence on U.S. Presidential Decisions to Use Force”, Presidential Studies Quarterly, http://onlinelibrary.wiley.com/doi/10.1111/j.1741-5705.2011.03885.x/pdf, [Stolarski]

Presidents rely heavily on Congress in converting their political capital into real policy success. Policy success not only shapes the reelection prospects of presidents, but it also builds the president’s reputation for political effectiveness and fuels the prospect for subsequent gains in political capital (Light 1982). Moreover, the president’s legislative success in foreign policy is correlated with success on the domestic front. On this point, some have largely disavowed the two-presidencies distinction while others have even argued that foreign policy has become a mere extension of domestic policy (Fleisher et al. 2000; Oldﬁeld and Wildavsky 1989) Presidents implicitly understand that there exists a linkage between their actions in one policy area and their ability to affect another. The use of force is no exception; in promoting and protecting U.S. interests abroad, presidential decisions are made with an eye toward managing political capital at home (Fordham 2002).

#### DOD energy programs don’t link---conservative won’t oppose

Davenport 12

Coral Davenport, energy and environment correspondent for National Journal. Prior to joining National Journal in 2010, Davenport covered energy and environment for Politico, and before that, for Congressional Quarterly. In 2010, she was a fellow with the Metcalf Institute for Marine and Environmental Reporting. From 2001 to 2004, Davenport worked in Athens, Greece, as a correspondent for numerous publications, including the Christian Science Monitor and USA Today, covering politics, economics, international relations and terrorism in southeastern Europe. She also covered the 2004 Olympic Games in Athens, and was a contributing writer to the Fodor’s, Time Out, Eyewitness and Funseekers’ guidebook series. Davenport started her journalism career at the Daily Hampshire Gazette in Northampton, Massachusetts, after graduating from Smith College with a degree in English literature. National Journal, 2/10/12, White House Budget to Expand Clean-Energy Programs Through Pentagon, ProQuest

The White House believes it has figured out **how to get more money for clean-energy** programs touted by President Obama **without having it become political roadkill** in the wake of the Solyndra controversy: **Put it in the Pentagon**. While details are thin on the ground, **lawmakers who work on both energy- and defense-spending** policy **believe the fiscal 2013 budget** request to be delivered to Congress on Monday probably **won't include** big **increases** for wind and solar power **through the Energy Department, a** major target for Republicans since solar-panel maker Solyndra defaulted last year on a $535 million loan guarantee. But **they** do **expect to see increases in spending on alternative energy in** the **Defense** Department, such as programs to replace traditional jet fuel with biofuels, supply troops on the front lines with solar-powered electronic equipment, build hybrid-engine tanks and aircraft carriers, and increase renewable-energy use on military bases. **While Republicans will** instantly **shoot down requests for fresh spending on Energy Department programs that could be likened to** the one that funded **Solyndra**, **many support** **alternative-energy programs for the military**. "I do expect to see the spending," said Rep. Jack Kingston, R-Ga., a member of the House Defense Appropriations Subcommittee, when asked about increased investment in alternative-energy programs at the Pentagon. "I think in the past three to five years this has been going on, but that it has grown as a culture and a practice - and it's a good thing." "If Israel attacks Iran, and we have to go to war - and the Straits of Hormuz are closed for a week or a month and the price of fuel is going to be high," Kingston said, "the question is, in the military, what do you replace it with? It's not something you just do for the ozone. It's strategic." Sen. **Lindsey Graham**, R-S.C., who sits on both the Senate Armed Services Committee and the Defense Appropriations Subcommittee, **said, "I don't see what they're doing in DOD as being Solyndra**." "We're not talking about putting $500 million into a goofy idea," Graham told National Journal . "We're talking about taking applications of technologies that work and expanding them. I wouldn't be for DOD having a bunch of money to play around with renewable technologies that have no hope. But from what I understand, there are renewables out there that already work." A senior House Democrat noted that **this wouldn't be the first time** that **the Pentagon has been utilized to advance policies that wouldn't otherwise be supported**. "They did it in the '90s with medical research," said Rep. Henry Waxman, D-Calif., ranking member of the House Energy and Commerce Committee. In 1993, when funding was frozen for breast-cancer research programs in the National Institutes of Health, Congress boosted the Pentagon's budget for breast-cancer research - to more than double that of the health agency's funding in that area. **Politically, the strategy makes sense**. **Republicans are ready to fire at the first sign of any pet Obama program, and renewable programs at the Energy Department are an exceptionally ripe target**. That's because of Solyndra, but also because, in the last two years, the Energy Department received a massive $40 billion infusion in funding for clean-energy programs from the stimulus law, a signature Obama policy. When that money runs out this year, a request for more on top of it would be met with flat-out derision from most congressional Republicans. **Increasing renewable-energy initiatives at the Pentagon can** also **help Obama advance his** broader, national **goals** for transitioning the U.S. economy from fossil fuels to alternative sources. As the largest industrial consumer of energy in the world, the U.S. military can have a significant impact on energy markets - if it demands significant amounts of energy from alternative sources, it could help scale up production and ramp down prices for clean energy on the commercial market. Obama acknowledged those impacts in a speech last month at the Buckley Air Force Base in Colorado. "The Navy is going to purchase enough clean-energy capacity to power a quarter of a million homes a year. And it won't cost taxpayers a dime," Obama said. "What does it mean? It means that the world's largest consumer of energy - the Department of Defense - is making one of the largest commitments to clean energy in history," the president added. "That will grow this market, it will strengthen our energy security." Experts also hope that Pentagon engagement in clean-energy technology could help yield breakthroughs with commercial applications. Kingston acknowledged that the upfront costs for alternative fuels are higher than for conventional oil and gasoline. For example, the Air Force has pursued contracts to purchase biofuels made from algae and camelina, a grass-like plant, but those fuels can cost up to $150 a barrel, compared to oil, which is lately going for around $100 a barrel. Fuel-efficient hybrid tanks can cost $1 million more than conventional tanks - although in the long run they can help lessen the military's oil dependence, Kingston said Republicans recognize that the up-front cost can yield a payoff later. "It wouldn't be dead on arrival. But we'd need to see a two- to three-year payoff on the investment," Kingston said. Military officials - particularly Navy Secretary Ray Mabus, who has made alternative energy a cornerstone of his tenure - have been telling Congress for years that the military's dependence on fossil fuels puts the troops - and the nation's security - at risk. Mabus has focused on meeting an ambitious mandate from a 2007 law to supply 25 percent of the military's electricity from renewable power sources by 2025. (Obama has tried and failed to pass a similar national mandate.) Last June, the **DOD rolled out its first department-wide energy policy to coalesce alternative and energy-efficient initiatives across the military services**. In January, the department announced that a study of military installations in the western United States found four California desert bases suitable to produce enough solar energy - 7,000 megawatts - to match seven nuclear power plants. And so far, those **moves have met with approval from congressional Republicans**. Even so, any request for new Pentagon spending will be met with greater scrutiny this year. The Pentagon's budget is already under a microscope, due to $500 billion in automatic cuts to defense spending slated to take effect in 2013. But **even with** those **challenges**, **clean-energy spending** probably **won't stand out** as much **in** the **military budget as it would in the Energy Department budget**. Despite its name, the Energy Department has traditionally had little to do with energy policy - its chief portfolio is maintaining the nation's nuclear weapons arsenal. Without the stimulus money, last year only $1.9 billion of Energy's $32 billion budget went to clean-energy programs. A spending increase of just $1 billion would make a big difference in the agency's bottom line. But **it would** probably **be easier to tuck another** $1 billion or $**2 billion** **on clean-energy spending into the Pentagon's $518 billion budget**. **Last year**, **the Pentagon spent** about $**1 billion on renewable energy** and energy-efficiency programs across its departments.

#### Disad’s non-intrinsic to the plan - can pass the plan and vote to raise the pass the fiscal cliff – rational decisionmaker calculus

#### Introduction of the plan should have caused the link – controversy happens even if you vote neg

#### The squo has triggered the link Obama has already pushed policy work not just budget that’s 1AC Kramer ’12

#### Political capital isn’t key

Dickinson ‘09 professor of political science at Middlebury College (Matthew, “Sotomayor, Obama and Presidential Power,” May 26, 2009 Presidential Power <http://blogs.middlebury.edu/presidentialpower/2009/05/26/sotamayor-obama-and-presidential-power/>]

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. But this is not to say that presidents lack influence. Instead, the primary means by which presidents influence what Congress does is through their ability to determine the alternatives from which Congress must choose. That is, presidential power is largely an exercise in agenda-setting – not arm-twisting. And we see this in the Sotomayer nomination. Barring a major scandal, she will almost certainly be confirmed to the Supreme Court whether Obama spends the confirmation hearings calling every Senator or instead spends the next few weeks ignoring the Senate debate in order to play Halo III on his Xbox. That is, how senators decide to vote on Sotomayor will have almost nothing to do with Obama’s lobbying from here on in (or lack thereof). His real influence has already occurred, in the decision to present Sotomayor as his nominee. If we want to measure Obama’s “power”, then, we need to know what his real preference was and why he chose Sotomayor. My guess – and it is only a guess – is that after conferring with leading Democrats and Republicans, he recognized the overriding practical political advantages accruing from choosing an Hispanic woman, with left-leaning credentials. We cannot know if this would have been his ideal choice based on judicial philosophy alone, but presidents are never free to act on their ideal preferences. Politics is the art of the possible. Whether Sotomayer is his first choice or not, however, her nomination is a reminder that the power of the presidency often resides in the president’s ability to dictate the alternatives from which Congress (or in this case the Senate) must choose. Although Republicans will undoubtedly attack Sotomayor for her judicial “activism” (citing in particular her decisions regarding promotion and affirmative action), her comments regarding the importance of gender and ethnicity in influencing her decisions, and her views regarding whether appellate courts “make” policy, they run the risk of alienating Hispanic voters – an increasingly influential voting bloc (to the extent that one can view Hispanics as a voting bloc!) I find it very hard to believe she will not be easily confirmed. In structuring the alternative before the Senate in this manner, then, Obama reveals an important aspect of presidential power that cannot be measured through legislative boxscores.

#### Reforms ineffective ICE lag time and overstretched

Valencia and Sacchetti ‘12

(Valencia covers the federal courts and law enforcement for the Metro desk. He has been with the Globe since 2007, as a regional reporter and as a general assignment reporter on the morning and night shifts. His stories focus on quality-of-life issues, while also analyzing crime trends and law enforcement policies. Sacchetti covers immigration for the Metro desk. A Lawrence native, she lived for almost six years in Latin America and has a master’s degree in Latin American studies. She is fluent in Spanish. “Out of sight, detainees struggle to be heard” DECEMBER 10, 2012http://bostonglobe.com/metro/2012/12/10/secret-prisoners-insensitivity-and-little-public-accountability-lead-misery-immigration-detention/AZ3wnUXvtmUaGDybDHYG5J/story.html, TSW)

Despite the official secrecy, however, immigration detention stories do surface, making it clear why the acronym ICE strikes fear into so many immigrants’ hearts:¶ ■ A Texas father disappeared for four days into the detention system after a call to tell his family he had been arrested by border agents on the way home from work one night earlier this year. Only after a Globe reporter began asking questions about Jesus Tovar’s whereabouts did the family learn that he had been shuffled from jail to jail and pressured to accept deportation back to his native Mexico.¶ Tovar, whose children include US citizens though he has been here illegally since 2001, was eventually freed, but few immigrants have journalists making calls about them.¶ ■ An Arizona mother, brought here from Mexico as a baby, was locked up for seven months in an immigration prison, away from her children, after one of the nation’s best known anti-illegal immigration crusaders raided the restaurant where she worked. Luz Tamayo now faces deportation to a country she scarcely knows.¶ ■ A Massachusetts man faced deportation and was jailed after he attempted to do what the government asked in 2003, voluntarily reporting that he was here illegally. By the time immigration officials finally sent ­Elmaati Hachani a deportation hearing notice almost eight years later, he had moved and the notice went to the wrong address. Hachani then was dramatically arrested in front of his pregnant wife and locked up for the next two months; she miscarried days later.¶ Immigration officials dropped the case against Hachani on Friday after numerous questions from the Globe.¶ Although only about one in 30,000 detainees dies in custody, Irene Bamenga’s case was in no way isolated: 10 other detainees died in immigration custody in 2011, including 55-year-old Jose Aguilar-Espinoza, who died of heart problems in California. Aguilar’s family contended in a lawsuit that his death could have been prevented, arguing that jail officials should have known that he had a pacemaker and that authorities failed to render immediate care for his serious medical needs.¶ Meanwhile, in Pennsylvania, a 47-year-old detainee from China hanged himself with a bed sheet, one of perhaps a dozen suicides in custody since 2003, based on ICE records.¶ Media reports about deaths in custody have spurred attempts at making the system more transparent, such as publicly listing the names and causes of death of the 131 detainees who have died in detention since 2003. President Obama has tried to lift the veil further, while pushing immigration to focus enforcement on criminals rather than the majority of the nation’s 11.5 million undocumented immigrants. Immigration officials’ own reports have concluded that locking up most illegal immigrants is both unnecessary and expensive — $122 a night per detainee.¶ LAURA SEGALL FOR THE BOSTON GLOBE¶ Luz Tamayo, 28, of Glendale, Ariz., here with her two children, was brought to the United States illegally from Mexico when she was a baby. In 2010 she was caught working illegally with a fake Social Security card. She is currently out on bail awaiting a hearing.¶ But reforms have been slow to catch on in a system that has become the nation’s largest law enforcement network. About 90,000 federal employees work for the four main agencies that make up the immigration system, with a combined budget of $20 billion — dwarfing even the $10 billion and 40,000 employees in combined resources of the FBI and the US Marshals Service.¶ Last year, ICE detained a record 429,247 foreign nationals — more than double 2001 levels — and deported 396,906 immigrants, at least 180,000 of whom may have been here illegally but had no criminal record. By ICE’s own estimate, many thousands of them could have been spared deportation under its 2011 policy of “prosecutorial discretion,” or selectively enforcing the law.¶ In Irene Bamenga’s case, records show that the border agents had filled out a form that could have cleared the way to let her go. On the form, they listed no threat posed by Bamenga except that she was “likely to add to the illegal population.” But agents did not list her medical condition, which could have been a reason to let her fly to France on her own rather than face detention. The agents detained her anyway. Their names have been blacked out in records obtained by the Globe under a Freedom of Information Act request.¶ ICE, which took responsibility for Bamenga from the border agents, says they acted correctly, noting in a statement that Bamenga knew that she would be subject to immediate deportation without right of appeal if she stayed in the United States longer than 90 days. She had been here since 2005, and ICE officials said that deportation of people who overstay their visa waivers is essential, or else everyone would feel free to stay indefinitely.

#### Europe tanks economy

CNN 1-1

“Economy Will Limp Along in 2013,” <http://www.cnn.com/2013/01/01/opinion/galbraith-economy-2013/index.html>

In Europe, where the fiscal fools are in complete control, things will get worse. Europe does not have a government that can run a deficit covering the entire union. So the pain falls on Greece, Spain, Portugal, Ireland and Italy. These countries are being forced to damage and even destroy themselves with spending cuts and tax increases, mainly to satisfy the Germans. And the German powers-that-be will argue that Germany too must now face "iron austerity" even though it has no financing or competitiveness problem. If that argument prevails, the European Union will take another step toward ruin. The model of Yugoslavia comes to mind.

### 2AC Renewable Energy Trade Off

#### Renewable investment declining now

Yahoo Finance 10/11/12

http://finance.yahoo.com/news/investment-renewable-energy-projects-declining-122000388.html ETB

Recent data from Bloomberg New Energy Finance (BNEF) has showed that investment in clean energy projects may fall for the first time in eight years as the industry continues to struggle with excess capacity. The PowerShares Wilderhill Clean Energy Portfolio (PBW) -- which is designed to deliver capital appreciation through the selection of companies that focus on greener and generally renewable sources of energy and technologies that facilitate cleaner energy -- has fallen over 20 percent year-to-date. The Paragon Report examines investing opportunities in the Renewable Energy Industry and provides equity research on Broadwind Energy Inc. ( NASDAQ : BWEN ) and Capstone Turbine Corporation ( NASDAQ : CPST ). According to BNEF investment in renewable energy during the third quarter fell by 20 percent, when compared to a year ago, led by a decline in wind farm financing. Investment by the U.S. in the third quarter totaled $7.3 billion, a 28 percent sequential decline, and a 62 percent decline year-over-year.¶ "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, CEO of New Energy Finance.

#### SMRs Key to revive renewable market

Loudermilk ‘11

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

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

#### Only trades off with FF

Loudermilk ‘11

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

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

### 2AC Space Lasers

#### Space lasers decades away

Birdsall ‘01

Graham W. Birdsall . <http://www.karenlyster.com/ufomag.html> ETB

The US Air Force recently claimed that its programme to create an airborne laser to sit atop the body of a Boeing 747 will not be completed until 2008. The Air Force then went on to say that space-based laser weapons ‘are decades away’.

#### Air force wont deploy and if they did it would solve missile prolif

Missilethreat.com 11/5/12

MissileThreat.com is a project of The Claremont Institute devoted to understanding and promoting the requirements for the strategic defense of the United States¶ http://www.missilethreat.com/missiledefensesystems/id.57/system\_detail.asp ETB

Despite its manifest advantages, the future of SBL remains uncertain. In 2002, MDA suspended research and development in order to concentrate on other components of the Ballistic Missile Defense System. At present, no decision has been made to deploy an operational SBL as part of a nationwide missile shield. Yet the fact remains that SBL’s potential to instantaneously destroy almost all missiles launched against the United States would force terrorists and aggressive nations to abandon their ballistic missile programs—since SBL would render them essentially useless.

**Unchecked missile prolif causes extinction—only space-based BMD solves**

Cooper, 11

(Frmr. DOD Deputy Exec and Chairman-High Frontier (Defense Tech Think-Tank), “Increasing the Military Uses of Space,” http://www.ndu.edu/press/lib/pdf/spacepower/spacepower.pdf)

**A limited strike capability from space would allow for the engagement of the highest threat and the most fleeting targets wherever they presented themselves on the globe**, regardless of the intention of the perpetrator. **The case of a ballistic missile carrying nuclear warheads is exemplary**. Two decades ago, the most dangerous threat facing America (and the world) was a massive exchange of nuclear warheads that could destroy all life on the planet. Since a perfect defense was not achievable, negotiators agreed to no defense at all, on the assumption that reasonable leaders would restrain themselves from global catastrophe. **Today**, a massive exchange is less likely than at any period of the Cold War, in part because of significant reductions in the primary nations' nuclear arsenals. **The most likely and most dangerous threat comes from a single or limited missile launch, and from sources that are unlikely to be either rational or predictable**. The first is an accidental launch, a threat we avoided making protections against due to the potentially destabilizing effect on the precarious Cold War balance. That an accidental launch, by definition undeterrable, would today hit its target is almost incomprehensible. More likely than an accidental launch is **the intentional launch of one or a few missiles, either by a nonstate actor** (a terrorist or "rogue boat captain" as the scenario was described in the early 1980s) **or a rogue state attempting to maximize damage as a prelude to broader conflict**. This is especially likely in the underdeveloped theories pertaining to deterring third-party states. **The United States can do nothing today to prevent India from launching a nuclear attack against Pakistan (or vice versa) except threaten retaliation. If Iran should launch a nuclear missile at Israel**, or in a preemptory strike Israel should attempt the reverse, **America and the world could only sit back and watch,** hoping that **a potentially world-destroying conflict** did not spin out of control. When President Reagan announced his desire for a missile shield in 1983, critics pointed out that even if a 99-percent-reliable defense from space could be achieved, a 10,000 warhead salvo by the Soviet Union still allowed for the detonation of 100 nuclear bombs in American cities—and both we and the Soviets had enough missiles to make such an attack plausible. But if **a single missile were launched out of the blue from deep within the Asian landmass today**, for whatever reason, **a space-based missile defense system with 99-percent reliability would be a godsend**. **And if a U.S. space defense could intercept a single Scud missile launched by terrorists from a ship near America's coasts before it detonated** a nuclear warhead 100 miles up—creating **an electromagnetic pulse that shuts down America's powergrid**, halts America's banking and commerce, **and reduces the battlefield for America's military to third world status —it might provide for the very survival of our way of life.**

**Solves asteroids—key to detect and deflect**

**ANI, ‘07**

(Asian News International, “Lightweight lasers can eliminate Earth-striking asteroids,” 3/20, http://news.webindia123.com/news/articles/world/20070320/618874.html)

Researchers at the University of Alabama in Huntsville have claimed that **a** lightweight, **space-based laser has the potential to eliminate dangerous asteroids** posing a threat to Earth. According to says Richard Fork, the head of the Laser Science and Engineering Group at the university, **the technique could detect and deflect space rock away**. "Though the technology may take two decades or so to mature, this is something that is doable," Fork is quoted, as saying. **One of the great advantages of using lasers is that their beams remain relatively tightly focused over long distances, allowing them to study asteroids from farther away than is currently possible.** Previously, researchers had proposed several methods to save Earth from an asteroid impact. These included blowing it up with a nuclear bomb or putting a spacecraft beside it so the craft's gravity could tug the asteroid off course. But these solutions had their drawbacks. **A laser,** on the other hand, **could give researchers an advance warning of the asteroid's likely composition and exact shape, which would help them figure out how to move it.** In fact, **the laser itself could also do the moving. If its short pulses were focused on a centimetre-sized spot on the asteroid, they would repeatedly pulverise material,** ejecting tiny bits of space rock at 10 kilometres per second. **This would function as the asteroid's propellant, pushing it into a different orbit - and safely away from Earth.**

**Extinction – magnitude overwhelms probability**

**Garshnek 2k**

[ Victoria Garshnek, Global Human Futures Research Associates, David Morrison, NASA Ames Research Center, Frederick M. Burkle Jr, Division of Emergency Medicine, Department of Surgery, John A. Burns School of Medicine “ The mitigation, management, and survivability of asteroid/comet impact with Earth,” Space Policy 16 (2000) 213 - 222]

As far as we know, **impacts are randomly distributed in time**. Of the roughly 1500 (in number) kilometer-scale NEOs currently in Earth crossing orbits, some 30% have been found. Although **we feel confident that Earth will not be struck in the foreseeable future by any of the known objects, we cannot say anything about the 70% that are not yet discovered**. **A comprehensive search has not yet been carried out and we must often speak in terms of probabilities. The chances of one of the undetected NEOs with a diameter of 1 km or more colliding with Earth in the next 50 years is about 1 in 20,000** [32]. **The consequences would be catastrophic and global: there would be an impact winter, a collapse of agriculture and,** possibly, **the end of our civilization**. However, **chance is not really at work here**. **There either is or is not a NEO aimed to hit Earth in the next year or in the next century. T**here are those who believe that there is no escape from a large asteroid impact that would have global effects. A large object filling the atmosphere with dust, blotting sunlight, causing extreme cold and killing plants presents a complex emergency of unprecedented proportions. The disaster response problem can be immense. **Smaller objects could cause continent wide destruction** necessitating evacuation plans, which can be the ultimate logistic and public health nightmare. Staying in the projected area of devastation and being comfortable to the end does not "t with the human innate instinct to survive and most likely would not be the popular course of action. Hoping not to know about the impact coming is also not a solution. Other thoughts may center on hoping it does not hit in our lifetime \* let it be a problem for future generations to deal with. All of these viewpoints are missing the key issue: **is human civilization worth saving?** Is everything we have been a part of in our lifetime and historically evolved from worth preserving? It is the collapse of civilization \* the loss of thousands of years of the fruits of the arts, religion, and the sciences \* that we should fear the most. In his opening statement to the Congressional hearings on the NEO threat on 24 March 1993 [32], the late US Congressman George E. Brown Jr. stated: `**If some day an asteroid does strike the Earth, killing not only the human race but millions of other species as well, and we could have prevented it but did not because of indecision,** unbalanced priorities**, imprecise risk definition** and incomplete planning, then it **will be the greatest abdication in all of human history not to use our gift of rational intellect and conscience to shepherd our own survival**, and that of all life on Eartha.

# 1AR 2NR was Immigration Politics, Case

### Politics

#### Immigration reform won’t pass – Democratic strategy to intentionally fail

Munro 12/31/12

(Neil Munro “Obama promises new immigration plan but keeps endgame close to his vest” 1:44 AM 12/31/2012 <http://dailycaller.com/2012/12/31/obama-promises-new-immigration-plan-but-keeps-endgame-close-to-his-vest/?print=1>, TSW)

President Barack Obama promised Dec. 30 to introduce an immigration bill during 2013, but activists on all sides of the debate are trying to understand his strategy.¶ He may be gunning for a victory in the mid-term elections by introducing a bill so radical that it will spark an emotional controversy from whites, which would then spur many angry Latinos to vote Democratic in the 2014 midterm elections, said Robert de Posada, former head of a GOP-affiliated group, The Latino Coalition.¶ “The word that I’ve heard from many, is [that he will] submit a very, very liberal plan that most Republicans will not support, that most southern and moderate Democrats will not support,” he said.¶ When the bill fails, “they can announce once again that they tried [and that Latinos] need to rally in the next election,” said Posada, who helped President George W. Bush win 40 percent of the Latino vote in 2004, during the housing boom.¶

#### Immigration won’t pass-atmosphere

CQ Weekly 12-31

“To the Cliff and Beyond,”

Obama’s partner in a deal was to have been Boehner, who would have cemented his grip on his fractious conference and laid claim to a remarkable legislative achievement. Instead, he emerges weaker than ever. While he is likely to be re-elected speaker on Jan. 3, it comes at a high price, with the problems he has herding his caucus laid bare and the clout that comes with deal-making further diminished.¶ Public's View of the Cliff: Click Here to View Chart¶ As Obama and Boehner traded proposals after the election, it looked as if the two figures were approaching a historic deal that would reduce the government’s expectations for accumulated red ink by roughly $2 trillion over 10 years.¶ “It could be a huge victory for the speaker,” says Ron Bonjean — a GOP strategist and aide to former House Speaker J. Dennis Hastert of Illinois and Senate Majority Leader Trent Lott of Mississippi — during the midst of negotiations. “If there’s a deal that can get done, it will show that Boehner’s clearly in charge of his conference.”¶ But Bonjean also cautions, “He will not move forward unless his conference stands behind him. The speaker knows that the strength lies with his members.”¶ Those members, Boehner found, were also the source of his biggest weakness and biggest loss. When he realized his latest offer to Obama, which would have raised $1 trillion in revenue, couldn’t win support from his conference, Boehner ended negotiations with the president and sought to pass what he called Plan B, which would raise tax rates on incomes of more than $1 million a year.¶ But Boehner had still misread his members. His backup plan backfired when a sufficient number of Republican lawmakers refused to vote for it. Boehner pulled the bill from the floor in a stunning reversal that only strengthened Obama’s position.¶ Having refrained from making his caucus compromise ahead of the cliff, Boehner limps away still the nominal leader of the House but having shown little ability to advance his policy priorities or corral his members when it counts. It also suggests he will struggle to make any deal with the president in the 113th Congress, meaning the confrontation and lack of legislative productivity of the last two years will continue, much to the public’s dismay.¶ “The Plan B debacle suggests a very tough terrain for policy compromise in the 113th on other big issues — immigration, gun control, et al,” says Binder. “It’s hard to see how bipartisan compromises will make it to the House floor on these contentious issues.”

#### SMR incentives are bipartisan---recent bills prove

King et al 11

Marcus, Associate Director of Research at The George Washington University's Elliott School of International Affairs, with a concurrent appointment as Associate Research Professor of International Affairs, LaVar Huntzinger and Thoi Nguyen, "Feasibility of Nuclear Power on U.S. Military Installations", March, www.cna.org/sites/default/files/research/Nuclear Power on Military Installations D0023932 A5.pdf

Favorable public perception has contributed to bipartisan congressional interest in building new nuclear capacity. Congress has introduced several bills that provide funding for new nuclear research and incentives for the nuclear industry. The Enabling the Nuclear Renaissance Act (ENRA) under consideration by the Senate contains many of the nuclear provisions found in previously introduced bills. In the area of small reactor technology, the legislation directs the Department of Energy (DOE) to develop a 50 percent cost-sharing program with industry, and it provides government funding at the rate of $100 million per year for 10 years. The bill also calls for the establishment of a program office within DOE to manage community led initiatives to develop “energy parks” on former DOE sites. The energy parks may include nuclear power plants [11

#### Labor unions support nuclear power -- that shields political backlash.

Kosterlitz, 08

(Julie, National Journal, 5/3, “Yes to Nukes,” lexis)

As it plots a comeback in the United States, the nuclear power industry is cultivating a critical ally: organized labor.The reasons are both practical and political. The industry's plan to build dozens of power plants requires thousands of workers, many of them with special skills that have become scarce during a more than 20-year hiatus in major construction. Good relations with unions could pave the way to steady labor supplies, smooth relations with workers, and more training programs to provide skilled labor. Perhaps more important, the industry could use labor's clout with Democrats to help ensure support in Congress--and in a White House that could soon be home to a Democrat--for the substantial federal backing needed to help get plant construction rolling again.

#### DOD energy spending doesn’t cause any political fights within Congress. The GOP supports the plan. That’s Davenport 12

#### And, Extend that DOD policies are done in the background, which meant they don’t spur any sort of political fight.

#### Can’t capitalize---plan spun as a pro-troop measure

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.

#### DOD spending is insulated from politics

Appelbaum 12

Binyamin Appelbaum 12, Defense cuts would hurt scientific R%26D, experts say, The New York Times, 1-8-12, <http://hamptonroads.com/2012/01/defense-cuts-would-hurt-scientific-rd-experts-say>

Sarewitz, who studies the government's role in promoting innovation, said the Defense Department had been more successful than other federal agencies because it is the main user of the innovations that it finances. The Pentagon, which spends billions each year on weapons, equipment and technology, has an unusually direct stake in the outcome of its research and development projects.¶ "The central thing that distinguishes them from other agencies is that they are the customer," Sarewitz said. "You can't pull the wool over their eyes."¶ Another factor is the Pentagon's relative insulation from politics, which has allowed it to sustain a long-term research agenda in controversial areas. No matter which party is in power, the Pentagon has continued to invest in clean-energy technology, for example, in an effort to find ways to reduce one of its largest budget items, energy costs.

#### Plan is a huge win for Obama

Holl 9

Karen Holl (professor of environmental studies at the University of California-Santa Cruz) Special to the Mercury News October 6th, 9 2009 Opinion: Climate change is already making us sick http://www.mercurynews.com/opinion/ci\_13499695?nclick\_check=1

Although it may seem counterintuitive, passing a climate change bill in the Senate could help the health care bill. The conventional wisdom has been that the president has enough political capital to tackle only one big issue at a time. But political capital is a renewable resource that grows out of political success. If the Senate could pass climate change legislation this fall, Obama would suddenly have a huge political win that would enhance his credibility on health care.

### Solvency

#### We have expertise – Navy hired 700 nuclear engineers and new projects spark interest

Wheeler 10/12

(Brian graduated from Northeastern State University in Tahlequah, Okla., in 2005 with a Bachelor’s degree in Mass Communication. He majored in Journalism and minored in Speech Communication. Since graduation, Brian has worked as a newspaper reporter, a magazine freelance writer and most recently as a television news photojournalist and web reporter. Working in television taught Brian how to complete stories in a short time span with breaking news occurring daily. After three years in T.V. news, he joined the PennWell publishing team in March 2010.¶ Brian serves as Editor of Nuclear Power International and Senior Editor of Power Engineering. He also serves as a committee member for the Nuclear Power International Conference and Exhibition and COAL-GEN. “Special Report: Nuclear Power Executive Roundtable” Oct 12, 2012 <http://www.power-eng.com/articles/2012/10/special-report-nuclear-power-executive-roundtable.html>, TSW)

Cheri also mentioned the Navy agreement signed in August in Atlanta. I just got an email stating that 11 officers coming out of the Navy are looking for jobs in the nuclear industry. That’s the first of many, I believe to facilitate the workforce development in our industry.¶ Ashley: We have actually seen a definite resurgence of interest in the nuclear industry. That, and our workload has enabled us to hire about 700 engineers to support our nuclear business line over the past two years. About 25 percent of those were college hires. It wasn’t that long ago when we couldn’t really interest a college hire to come into the nuclear industry. That has changed.¶ There is a strong interest in terms of young engineers taking a more active role in the nuclear industry. At Bechtel, we have over 250 active members in North America Young Generation Nuclear. Those are mostly young engineers and professional under the age of 35. It is very active, and we see that as a developing group that is going to be the future of our industry. In June, we hosted a conference for the Mid-Atlantic region of NAYGN that included about 20 different chapters. Individuals from various companies came to Bechtel Power’s Frederick, Md. office, and participated on their own time. It started Friday night and it was over the weekend. That shows the enthusiasm that this group has for commercial nuclear. I am very optimistic that if we can keep them interested, we can build the next generation of engineers.¶ We also have nearly 200 members of Women in Nuclear and, once again, that shows the diversity of nuclear engineers and gives me reason for optimism. That is one of Bechtel’s strongest missions: preparing the future generation to not only take over supporting the operation of our existing fleet, but also the design and construction of new plants.¶

### Grid

#### Studies prove grid vulnerable to cyber attack

Rocky Mountain Institute 2/13

(Matthew Bressler, Intern at Rocky Mountain Institute, “How Military SPIDERS Project Aids Grid Cyber-Security” <http://blog.rmi.org/how_military_SPIDERS_project_aids_grid_cyber_security>, SEH)

In 2007, directors at the Idaho National Laboratory had their researchers play the role of computer hackers for an afternoon. Using the Internet to access an on-site electrical generator’s computer code, the “hackers” were able to reprogram the machine to destroy itself, demonstrating a key vulnerability of the U.S. electricity system. Though this experiment — labeled Project Aurora — was just a test, the threat is very real. A recent poll of electric companies completed by the National Electric Reliability Council found that many utility IT professionals are handling up to 150 attempted cyber-intrusions per week.¶ The U.S. military is confronting these types of grid vulnerabilities head-on via numerous avenues. One current effort, the SPIDERS project (Smart Power Infrastructure Demonstration for Energy Reliability and Security), will address security needs and fragility of this country’s aging electric system by installing microgrids on several domestic military bases.¶ Too often, small disruptions to the system create cascading problems. The 2003 Northeast blackout, for example, affected 50 million people and cost $5-14 billion in lost economic activity. That event, triggered by a few tree branches brushing against high voltage transmission lines in Ohio, highlighted how minor events can result in huge consequences. While this type of incident is an inconvenience for you and me and a cost to business, the stakes are much higher for the military.¶ Military missions, including homeland security and defense efforts, can be compromised by a blackout. Project Aurora showed how enemies could target the electricity grid using Internet-based methods. Beyond that, the country’s grid faces more routine threats from wind, weather, or even small animals interfering with and knocking out transmission lines. The Department of Def