# Round 6 vs. Harvard BN (Neg)

## 1NC

### 1

#### A. Interpretation – procurements are restrictions, NOT financial incentives.

Menz, Faculty of Economics and Finance, School of Business, Clarkson University, ‘5

[Frederic, also from the Center for International Climate and Environmental Research, Oslo (CICERO), Norway, “Green electricity policies in the United States: case study,” Energy Policy, December, Science Direct]

There is considerable variation among states in both their regulatory environments and the policies that have been implemented to promote green electricity. In the following discussion, state and local policy instruments are categorized as financial incentives, rules and regulations, and voluntary measures.[7](http://www.sciencedirect.com.proxy.lib.umich.edu/science/article/pii/S0301421504001648#fn7)Financial incentives include various subsidies and/or funding in direct support of green electricity projects, tax incentives (credits, deductions, or exemptions), and provisions for zero-interest or low-interest loans. Rules and regulations include requirements that utilities distribute a minimum share of electricity from renewable or green energy sources, green power purchase requirements for government entities, and net-metering requirements for consumers with small renewable generating facilities. Voluntary measures include green power products aimed at electricity consumers, green power certificate programs, and other programs to increase market support for renewable energy technologies.

#### Reduce means to make smaller, Dictionary.com

[http://dictionary.reference.com/browse/reduce?s=t]

1. to bring down to a smaller extent, size, amount, number, etc.: to reduce one's weight by 10 pounds.

#### B. Violation – They increase restrictions by mandating increased procurement contracts.

#### C. Standards

#### 1. Bidirectionality – their interpretation moots the direction of the restrictions part of the topic which allows the affirmative to effectively double their ground. Even if you think that they might also increase an incentive, they also certainly increase a restriction, and the ground advantage this generates outweighs any of their limits or education claims.

#### 2. Topic-specific education – they moot the debate about the market mechanisms of the topic. The predictable mechanism of the topic is to have the federal government either get out of the way of or incentivize the workings of the free market. They have the federal government participate in the market. The negative should always have a right to market bad solvency arguments, which they circumvent.

#### D. Voter for fairness and education.

### 2

#### The United States Federal Government should substantially increase investment in smart microgrid technology for its military bases in the United States via a diverse portfolio tailored to individual installation circumstances, including non-nuclear renewable energies for on-site generation, increased backup generation capacity, improvements in energy efficiency and energy storage, intelligent local energy management, and accelerated implementation of the SPIDERS project.

#### Smart microgrids solve DOD grid vulnerability --- best analysis goes neg.

SERDP 12

[The Strategic Environmental Research and Development Program, DoD’s environmental science and technology program, executed in partnership with DOE and EPA, 7/10/12, “DoD Study Finds Microgrids Offer Improved Energy Security for DoD Installations,” http://www.serdp.org/News-and-Events/News-Announcements/Program-News/DoD-study-finds-microgrids-offer-improved-energy-security-for-DoD-installations]

Advanced microgrids offer a cost-effective solution to military installations' growing vulnerability to the fragile electric grid, according to a study released today by DoD’s Office of Installations and Environment. The study performed by MIT Lincoln Laboratory looked at different microgrid architectures and characteristics and compared their relative cost-effectiveness. The report provides insight into increasing energy security and reducing energy costs through the incorporation of renewable energy resources into microgrids, as well as new market opportunities for DoD in the area of demand response and ancillary services. The study highlights the extent of ongoing microgrid work across DoD. It identified 44 installations that either had existing microgrids, planned installation of microgrids, or conducted microgrid studies or demonstrations at their facilities. The authors interviewed more than 75 people from the military Services, the Office of the Secretary of Defense, and the Department of Energy. The analysis categorized the ongoing microgrid efforts based on several key attributes including size, maturity, the inclusion of renewable resources, and the ability to operate in a grid-tied manner. The analysis confirms the value of microgrids to DoD. The combination of on-site energy generation and storage, together with the microgrid’s ability to manage local energy supply and demand, allow installations to shed non-essential loads and maintain mission-critical loads if the electric grid is disrupted. The report illustrates the largely untapped potential of moving to smarter, next generation microgrids that would accommodate far greater penetration of renewable energy sources, as well as tighter integration with the electrical grid. If solar resources that are increasingly being installed on DoD installations were available during islanded operation of a microgrid, they could significantly extend the islanding time. Moreover, a microgrid that could operate when tied to the grid would offer new opportunities for the DoD to generate cost savings by using backup generation assets during normal operation and generate financial revenue by using advanced ancillary services. One important finding is that there will be no “one size fits all” solution. The location of a military installation influences the options available for energy generation sources, the options available for interaction with the local utility, the characteristics of the local electricity market, and the regulatory environment. The most effective microgrids will be those that take into account the needs of the local commercial electric grid and are configured so that they can earn value helping to meet those needs.

#### SPIDERS will produce effective renewable-based microgrids that guarantee communications and control survive grid outages.

Ackerman, ‘12

[Robert K., SIGNAL Magazine, February 2012, “Military Energy Enters SPIDERS Web,” http://www.afcea.org/content/?q=node/2877]

No man may be an island, but each U.S. military base may become an energy island if a joint project among the Department of Energy, the Department of Homeland Security and the Defense Department comes to fruition. The effort aims to develop a microgrid that would supply a base with internal power independent of any external source that might fail as a result of enemy action. Network security would be a key element of this energy microgrid. Facing the possibility of a cyberattack on the nation’s power grid, military bases must be able to sustain internal power with a degree of immunity from the online tactics employed by cybermarauders. This program also seeks to blend a host of conventional and alternative energy sources into a single entity that would respond seamlessly to internal base power demands. Complicating the endeavor to link these energy sources is the requirement to provide secure network control that could interoperate with the public power grid but still be immune to cyberthreats that menace the larger network. Known as the Smart Power Infrastructure Demonstration for Energy Reliability and Security, or SPIDERS, the project is a Defense Department joint capability technology demonstration (JCTD). It already is underway at Joint Base Pearl Harbor-Hickam, Oahu, Hawaii, and later phases will evaluate progressively sophisticated systems at Fort Collins, Colorado, and Camp Smith, Hawaii. Melanie Johnson, an electrical engineer with the Army Corps of Engineers Construction Engineering Research Laboratory, explains that SPIDERS is designed to develop a template for bringing microgrid technology to military installations in the United States. Its success would have implications for installations outside the United States, particularly in operational settings, she points out. Part of the SPIDERS technical management team, Johnson explains that a key element in SPIDERS is to provide network security for the communications and control systems within that microgrid environment. That security would be vital if a base loses power because of a cyberattack on the local power grid. What sets SPIDERS apart from other microgrid efforts is its emphasis on cybersecurity and network communications. Security is a primary SPIDERS objective, Johnson says, adding that this includes information assurance certification and implementing emerging standards from the National Institute of Standards and Technology (NIST), the North American Electric Reliability Corporation (NERC) and Department of Energy organizations. Adding cybersecurity to the microgrid complicates the picture and requires “a little critical thinking,” Johnson observes. However, SPIDERS is not employing the traditional approach of first developing a control system and then overlaying security. Instead, security will be integrated into the system as it is developed. The result will be a comprehensive security solution that is tailored to the system, she offers. The microgrid control system continually will monitor power quality and conditions in the regional power grid. If it detects instability or significant quality issues, it can alert monitors who would decide to disconnect the base from the external grid. The microgrid would continue to provide power to critical missions. Johnson shares that planners are examining the relationship between the interface with the microgrid control system and the base’s enterprise network. Of particular interest is how that relationship would open the microgrid to vulnerabilities from outside the installation. Issues include the types of communications traffic that would be allowed in and out of the microgrid control system network. According to its guidance, SPIDERS’ primary objectives are to protect task-critical assets from power loss due to cyberattack; integrate renewable and other distributed generational electricity to power task-critical assets in times of emergency; sustain critical operations during prolonged power outages; and manage installation electrical power consumption to reduce petroleum demand and carbon footprint. SPIDERS will exploit existing energy assets such as solar arrays, wind generators and other renewable technologies as well as diesel generators to provide electricity more efficiently than if backup diesel generators alone were used. Renewable energy generators remain online constantly, providing electricity from alternate sources during opportune conditions such as windy or sunny days. Johnson points out, however, that most renewable energy resources trip offline when the main grid crashes. The microgrid allows the renewable power to stay online while maintaining necessary safety measures. The program might tweak the bases’ energy sources by upgrading a legacy generator that lacks the necessary capacity, for example. Otherwise, it will focus on existing assets. Johnson emphasizes that SPIDERS will be energy-source agnostic.

### 3

#### 1. Immigration reform will pass

Huffington Post 1/2 (Obama's Immigration Reform Push To Begin This Month , 2013, http://www.huffingtonpost.com/2013/01/02/obama-immigration-reform\_n\_2398507.html)

Good news for immigration advocates may have come Tuesday night, when Boehner broke the so-called "Hastert Rule" and allowed the fiscal cliff bill to come for a vote without support from a majority of his Republican conference. Given opposition to immigration reform by many Tea Party Republicans, the proof that Boehner is willing to bypass them on major legislation is a good sign, the Democratic aide said.¶ "If something is of such importance that the GOP establishment [is] telling Boehner, 'You must do this. You need to get this off the table soon,'" the Democratic aide said, the speaker could break the Hastert Rule again.¶ "He already did it with this fiscal issue, so I would not be surprised if when it came down to it he puts up a bill that he just allows to go through with a combination of Democratic and Republican votes, without worrying about a majority of the majority," the aide continued.¶ Frank Sharry, executive director of the pro-immigration reform group America's Voice, also said he thinks the House could pass an immigration bill in the same way it did last night, relying on support from both parties. He's hopeful that the fiscal cliff fight could even make them happy to work out legislation in a more standard way.¶ "I never thought I'd say this, but after bruising battles over the future of the American and world economy, the chance to legislate through regular order on immigration reform might have leaders in both parties working together and singing 'Kumbaya,'" Sharry said.

#### 2. Obama’s political capital is key.

Hesson 1/2 (Ted, Immigration Editor at ABC News, Analysis: 6 Things Obama Needs To Do for Immigration Reform, http://abcnews.go.com/ABC\_Univision/News/things-president-obama-immigration-reform/story?id=18103115#.UOTq55JIAho)

On Sunday, President Barack Obama said that immigration reform is a "top priority" on his agenda and that he would introduce legislation in his first year.¶ To find out what he needs to do to make reform a reality, we talked to Lynn Tramonte, the deputy director at America's Voice, a group that lobbies for immigration reform, and Muzaffar Chishti, the director of the New York office of the Migration Policy Institute, a think tank. Here's what we came up with.¶ 1. Be a Leader¶ During Obama's first term, bipartisan legislation never got off the ground. The president needs to do a better job leading the charge this time around, according to Chishti. "He has to make it clear that it's a high priority of his," he said. "He has to make it clear that he'll use his bully pulpit and his political muscle to make it happen, and he has to be open to using his veto power." His announcement this weekend is a step in that direction, but he needs to follow through.¶ 2. Clear Space on the Agenda¶ Political priorities aren't always dictated by the folks in D.C., as the tragic Connecticut school shooting shows us. While immigration had inertia after the election, the fiscal cliff and gun violence have been the most talked about issues around the Capitol in recent weeks. The cliff could recede from view now that Congress has passed a bill, but how quickly the president can resolve the other issues on his agenda could determine whether immigration reform is possible this year. "There's only limited oxygen in the room," Chishti said.

#### 3. SMRs drain political capital – opposition due to fear of waste, contamination and terror targets.

Smith 10 (Rebecca, Contributor, “Small Reactors Generate Big Hopes”, The Wall Street Journal, 2-18-10, ¶ <http://www.generatorsystems.com/pdf/Small%20Reactors%20Generate%20Big%20Hopes%20WSJ%2002-18-2010.pdf>, accessed 8-1-12, RSR)

"We see significant benefits from the new, modular technology," said Donald Moul, vice president of nuclear support for First Energy, an Ohio-based utility company. He said First Energy, which operates four reactors at three sites in Ohio and Pennsylvania, has made no decision to build any new reactor and noted there's "a lot of heavy lifting to do to get this reactor certified" by the NRC for U.S. use. Indeed, the smaller reactors still could incite major opposition. They face the same unresolved issues of where to put the waste and public fear of contamination, in the event of an accident. They could also raise alarms about creating possible terrorism targets in populated areas. Still, the sudden interest in small reactors illustrates a growing unease with the route that nuclear power has taken for half a century. What many regard as the first commercial reactor built in the U.S., in 1957 at Shippingport, Pa., was only about 60 megawatts in size. By the time construction petered out three decades later, reactors had grown progressively bigger, ending up at about 1,000 megawatts of capacity.

**4. The bill will open immigration and increase highly skilled immigrants.**

Amanda Peterson **Beadle 12/10**/12, Reporter/Blogger at ThinkProgress.org http://thinkprogress.org/justice/2012/12/10/1307561/top-10-reasons-why-the-us-needs-comprehensive-immigration-reform-that-includes-a-path-to-citizenship/

**The nation needs a comprehensive immigration plan,** and it is clear from a recent poll that most Americans support reforming the U.S.’s immigration system. In a new poll, nearly two-thirds of people surveyed are in favor of a measure that allows undocumented immigrants to earn citizenship over several years, while only 35 percent oppose such a plan. And President **Obama is expected to “begin an all-out drive for comprehensive immigration reform, including seeking a path to citizenship”** in January. Several top Republicans have softened their views on immigration reform following November’s election, but in the first push for reform, House Republicans advanced a bill last month that would add visas for highly skilled workers while reducing legal immigration overall. Providing a road map to citizenship for the millions of undocumented immigrants living in the U.S. would have sweeping benefits for the nation, especially the economy. **Here are the** top 10 **reasons why the U.S. needs comprehensive immigration reform:** 1. **Legalizing the 11 million undocumented immigrants** in the United States would boost the nation’s economy. It would add a cumulative $1.5 trillion to the U.S. gross domestic product—the largest measure of economic growth—over 10 years. That’s because immigration reform that puts all workers on a level playing field would create a virtuous cycle in which legal status and labor rights exert upward pressure on the wages of both American and immigrant workers. Higher wages and even better jobs would translate into increased consumer purchasing power, which would benefit the U.S. economy as a whole. 2. Tax revenues would increase. The federal government would accrue $4.5 billion to $5.4 billion in additional net tax revenue over just three years if the 11 million undocumented immigrants were legalized. And states would benefit. Texas, for example, would see a $4.1 billion gain in tax revenue and the creation of 193,000 new jobs if its approximately 1.6 million undocumented immigrants were legalized. 3. Harmful state immigration laws are damaging state economies. States that have passed stringent immigration measures in an effort to curb the number of undocumented immigrants living in the state have hurt some of their key industries, which are held back due to inadequate access to qualified workers. A farmer in Alabama, where the state legislature passed the anti-immigration law HB 56 in 2011, for example, estimated that he lost up to $300,000 in produce in 2011 because the undocumented farmworkers who had skillfully picked tomatoes from his vines in years prior had been forced to flee the state. 4. A path to citizenship would help families access health care. About a quarter of families where at least one parent is an undocumented immigrant are uninsured, but undocumented immigrants do not qualify for coverage under the Affordable Care Act, leaving them dependent on so-called safety net hospitals that will see their funding reduced as health care reforms are implemented. Without being able to apply for legal status and gain health care coverage, the health care options for undocumented immigrants and their families will shrink. 5. **U.S. employers need a legalized workforce.** Nearly half of agricultural workers, 17 percent of construction workers, and 12 percent of food preparation workers nationwide lacking legal immigration status. But business owners—from farmers to hotel chain owners—benefit from reliable and skilled laborers, and a legalization program would ensure that they have them. 6. In 2011, immigrant entrepreneurs were responsible for more than one in four new U.S. businesses. Additionally, immigrant businesses employ one in every 10 people working for private companies. Immigrants and their children founded 40 percent of Fortune 500 companies, which collectively generated $4.2 trillion in revenue in 2010—more than the GDP of every country in the world except the United States, China, and Japan. Reforms that enhance legal immigration channels for high-skilled immigrants and entrepreneurs while protecting American workers and placing all high-skilled workers on a level playing field will promote economic growth, innovation, and workforce stability in the United States. 7. Letting undocumented immigrants gain legal status would keep families together. More than 5,100 children whose parents are undocumented immigrants are in the U.S. foster care system, according to a 2011 report, because their parents have either been detained by immigration officials or deported and unable to reunite with their children. If undocumented immigrants continue to be deported without a path to citizenship enabling them to remain in the U.S. with their families, up to 15,000 children could be in the foster care system by 2016 because their parents were deported, and most child welfare departments do not have the resources to handle this increase. 8. Young **undocumented immigrants would add billions to the economy if they gained legal status**. Passing the DREAM Act—legislation that proposes to create a roadmap to citizenship for immigrants who came to the United States as children—would put 2.1 million young people on a pathway to legal status, adding $329 billion to the American economy over the next two decades. 9. And DREAMers would boost employment and wages. Legal status and the pursuit of higher education would create an aggregate 19 percent increase in earnings for young undocumented immigrants who would benefit from the DREAM Act by 2030. The ripple effects of these increased wages would create $181 billion in induced economic impact, 1.4 million new jobs, and $10 billion in increased federal revenue. 10. **Significant reform of the high-skilled immigration system would benefit certain industries that require high-skilled workers**. Immigrants make up 23 percent of the labor force in high-tech manufacturing and information technology industries, and immigrants more highly educated, on average, than the native-born Americans working in these industries. For every immigrant who earns an advanced degree in one of these fields at a U.S. university, 2.62 American jobs are created.

**5. Impact – Global Aging – Open immigration key to US aging transition – solves global aging.**

**Haas, '7** (Political Science Professor -- Duquesne, International Security, Summer)

**The more the** United States **maintains its enviable demographic position** (compared with the other great powers) **and relatively superior ability to pay for the costs of its elderly** population, **the more it will** be able both to **preserve its own position of international power dominance and** to **help other states address their aging** (and other) **problems** when it is in U.S. interests to do so. A critical implication of these facts is that such domestic policies as means-testing Social Security and Medicare payments, raising the retirement age to reflect increases in life expectancies, **maintaining largely open immigration policies to help keep the United States’ median age relatively low,** encouraging individual behaviors that result in better personal health, **and** perhaps above all **restraining the rising costs of its health-care system are critical international security concerns.** A defining political question of the twenty-first century for U.S. international interests is whether U.S. leaders have sufficient political will and wisdom to implement these and related policies. **The more proactive U.S. leaders are in minimizing** the scope of its **aging** population **and** the **costs associated** with it, **the more protected U.S. international interests will be. To ignore these costs, or even to delay** implementing various **reforms designed to limit their size, will jeopardize the level of global influence and security that the** UnitedStates enjoys today.

**6. Multiple nuclear wars.**

**Jackson & Howe, 11** (Senior Fellow – CSIS & Senior Associate – CSIS, http://csis.org/files/publication/110104\_gai\_jackson.pdf)

**A number of demographic storms are now brewing in different parts of the developing world**. The moment of maximum risk still lies ahead—just a decade away, in the 2020s. Ominously, this is the same decade when the developed world will itself be experiencing its moment of greatest demographic stress. Consider China, which may be the first country to grow old before it grows rich. For the past quarter-century, **China has been “peacefully rising,” thanks** in part **to a one-child**-per-couple **policy** that has lowered dependency burdens and allowed both parents to work and contribute to China’s boom. **By** the **2020**s, however, **the huge Red Guard generation**, which was born before the country’s fertility decline, **will move into retirement**, **heavily taxing the** resources of their children and **the state.** **China’s coming age wave**—by 2030 it will be an older country than the United States—**may weaken the t**wo pillars of the current **regime’s legitimacy**: rapidly rising GDP and social stability. Imagine workforce growth slowing to zero while tens of millions of elders sink into indigence without pensions, without health care, and without large extended families to support them. **China could careen toward social collapse**—**or**, in reaction, toward an **authoritarian clampdown**. The arrival of China’s age wave, and the turmoil it may bring, will coincide with its expected displacement of the United States as the world’s largest economy in the 2020s. According to “power transition” theories of global conflict, this moment could be quite perilous. By the 2020s, **Russia**, along with the rest of Eastern Europe, **will be in the midst of an extended population decline** as steep or steeper than any in the developed world. The Russian fertility rate has plunged far beneath the replacement level even as life expectancy has collapsed amid a widening health crisis. Russian men today can expect to live to 60—16 years less than American men and marginally less than their Red Army grandfathers at the end of World War II. By 2050, Russia is due to fall to 16th place in world population rankings, down from 4th place in 1950 (or third place, if we include all the territories of the former Soviet Union). Prime Minister Vladimir Putin flatly calls Russia’s demographic implosion “the most acute problem facing our country today.” **If the problem is not solved, Russia will weaken progressively, raising the nightmarish specter of a** failing or **failed state with nuclear weapons**. Or **this cornered bear may lash out** in revanchist fury rather than meekly accept its demographic fate. Of course, **some regions** of the developing world **will remain extremely young** in the 2020s. Sub-Saharan Africa, which is burdened by the world’s highest fertility rates and is also ravaged by AIDS, will still be racked by large youth bulges. So will a scattering of impoverished and chronically unstable Muslim-majority countries, including Afghanistan, the Palestinian territories, Somalia, Sudan, and Yemen. **If the correlation between extreme youth and violence endures, chronic unrest and state failure could persist** in much of sub-Saharan Africa and parts of the Muslim world through the 2020s, or even longer if fertility rates fail to drop. Meanwhile, many fast-modernizing countries where fertility has fallen very recently and very steeply will experience a sudden resurgence of youth in the 2020s. It is a law of demography that, when a population boom is followed by a bust, it causes a ripple effect, with a gradually fading cycle of echo booms and busts. In the 2010s, a bust generation will be coming of age in much of Latin America, South Asia, and the Muslim world. But by the 2020s**, an echo boom will follow**—dashing economic expectations and perhaps **fueling political violence, religious extremism, and ethnic strife**. These echo booms will be especially large in Pakistan and Iran. In Pakistan, the decade-overdecade percentage growth in the number of people in the volatile 15- to 24-year-old age bracket is projected to drop from 32 percent in the 2000s to just 10 percent in the 2010s, but then leap upward again to 19 percent in the 2020s. In Iran, the swing in the size of the youth bulge population is projected to be even larger: minus 33 percent in the 2010s and plus 23 percent in the 2020s. **These echo booms will be occurring in countries whose social fabric is already strained by rapid development**. **One country teeters on the brink of chaos, while the other aspires to regional hegemony. One already has nuclear weapons, while the other seems likely to obtain them**.

### 4

#### Nuclear energy embodies the essence of enframing objects as standing reserve

Kinsella 7 Dr. William J. Kinsella 2007 (Heidegger and Being at the Hanford Reservation: Standing Reserve, Enframing, and Environmental Communication Theory; Environmental Communication Vol. 1, No. 2, November 2007, pp.194-217 Dr. William J. Kinsella is an associate professor at North Carolina State University. His work on nuclear energy communication has encompassed the areas of nuclear fusion, environmental cleanup across the US nuclear weapons complex, and commercial nuclear energy in US and global contexts.)

In his essay on ‘‘the question concerning technology,’’ Heidegger (1977a) critiqued the reduction of nature to a ‘‘standing reserve’’ (bestand), a stockpile of phenomena appropriated for human exploitation. Hanford is a compelling example, as the place was taken from its former residents, farmers and ranchers who had taken it in turn from their Native American predecessors, by the government for use as a plutonium factory. Hanford’s plutonium ‘‘product,’’ as it is known in the jargon of workers and officials, remains an essential element in the US nuclear ‘‘stockpile.’’ The example is even more fitting, however, because Heidegger viewed atomic energy as the quintessential product of modern science, technology, and Western metaphysics, which he linked in an instrumental ‘‘enframing’’ (gestell ) of the natural world (Foltz, 1995; Heidegger, 1966, 1969, 1977a). Enframing involves a stance toward the world that ‘‘challenges,’’ ‘‘regulates,’’ and ‘‘secures’’ its elements to create a standing reserve of usable resources (Heidegger, 1977a, p. 16). Human intervention in nuclear processes enframes nature in a way that is historically unprecedented, but was already implicit in the founding premises of modernism (Kinsella, 2004, 2005).

#### The rapacious drive to secure energy is a symptom of “challenging-forth,” a mindset that renders everything as disposable. Only through rejecting challenging forth and embracing bringing forth can we avoid this hollowing out of Being

Waddington 5 A Field Guide to Heidegger: Understanding 'The Question concerning Technology' more by David Waddington Educational Philosophy and Theory, Vol. 37, No. 4, 2005 http://concordia.academia.edu/DavidWaddington/Papers/538046/A\_Field\_Guide\_to\_Heidegger\_Understanding\_The\_Question\_concerning\_Technology

Most essays on technology focus primarily on practical issues surrounding the use of particular technologies . Heidegger’s essay, however, does not—instead, it focuses on the ways of thinking that lie behind technology. Heidegger (1977, p. 3) thinks that by coming to understand these ways of thinking, humans can enter into a ‘free relationship’ with technology. After dismissing the conventional account of technology, which supposedly states that technology is simply a means to an end, Heidegger commences a discussion on ancient craftsmanship. He suggests that the ancient craftsmanship involves the four Aristotelian causes: material, formal, ﬁnal, and efﬁcient. Intuitively, one might think that the efﬁcient cause of a given craft-item (the craftsman) was the most signiﬁcant of the four. However, although the craftsman has an important role in that she unites the four causes by considering each of them carefully, each of the four causes is equally co-responsible for the particular craft-item that is produced. Heidegger comments, ‘The four ways of being responsible bring something into appearance. They let it come forth into presencing’ (1977, p. 9). Appropriately enough, Heidegger names this process bringing-forth . Notably, bringing-forth is not merely a descriptive genus under which the four causes are subsumed—rather, it is a uniﬁed process, ‘a single leading-forth to which [each of the causes] is indebted’ (Lovitt, 1972, p. 46).Heidegger writes that bringing-forth ‘comes to pass only insofar as something concealed comes into unconcealment’ (1977, p. 11). Thus, instead of the craft-item being created by the craftsman, as one would think, it was revealed or unconcealed .In ‘The Thing’, Heidegger comments on the making of a jug, The jug is not a vessel because it was made; rather, the jug had to be made because it is this holding vessel. The making … lets the jug come into its own. But that which in the jug’s nature is its own is never brought about by its making. (1971, p. 168)Clearly, revealing/unconcealing in the mode of bringing-forth contains strong hints of Platonism. Bringing-forth is the mode of revealing that corresponds to ancient craft. Modern technology, however, has its own particular mode of revealing, which Heidegger calls challenging-forth . Thinking in the mode of challenging-forth is very different from thinking in the mode of bringing-forth: when challenging-forth, one sets upon the elements of a situation both in the sense of ordering (i.e. setting a system upon) and in a more rapacious sense (i.e. the wolves set upon the traveler and devoured him). In bringing-forth, human beings were one important element among others in the productive process; in challenging-forth, humans control the productive process. Efﬁciency is an additional important element of thinking in the mode of challeng-ing forth; the earth, for example, is set upon to yield the maximum amount of ore with the minimum amount of effort. Essentially, challenging-forth changes the way we see the world—as Michael Zimmerman pointedly remarks, ‘To be capable of transforming a forest into packaging for cheeseburgers, man must see the forest not as a display of the miracle of life, but as raw material, pure and simple’ (1977, p. 79).Production in the mode of challenging-forth reveals objects that have the status of standing-reserve . Objects that have been made standing-reserve have been reduced to disposability in two different senses of the word: (1) They are disposable in the technical sense; they are easily ordered and arranged. Trees that once stood chaotically in the forest are now logs that can be easily counted, weighed, piled, and shipped. (2) They are also disposable in the conventional sense; like diapers and cheap razors, they are endlessly replaceable/interchangeable and have little value. For the most part, challenging things forth into standing-reserve is not a laudable activity, and thus it makes sense to wonder what drives human beings to think in this way. Heidegger’s answer to this motivational question is unconventional— instead of suggesting that the origins of this motivation are indigenous to human beings, he postulates the existence of a phenomenon that ‘sets upon man to order the real as standing-reserve’ (1977, p. 19). Heidegger calls this mysterious phenomenon enframing ( Ge-stell in German). The word ‘Ge-stell’ gathers together several meanings of the -stellen family of German verbs: in Ge-stell, humans are ordered ( bestellen ), commanded ( bestellen ), and entrapped ( nachstellen ) (Harries 1994,p. 229). Heidegger thinks that our default state is that of being trapped by Ge-stell; this is what he means when he writes, ‘As the one who is challenged forth in this way, man stands within the essential realm of [Ge-stell]. He can never take up a relationship to it only subsequently’ (1977, p. 24; Sallis, 1971, p. 162). According to Heidegger (1977, p. 25), there are different ‘ordainings of destining’ for human beings. Although the default destining is that of Ge-stell, it is possible to choose an alternate road. Heidegger thinks that human beings have been granted the special role of ‘Shepherds of Being’—we have been granted the power to reveal the world in certain ways (Ballard, 1971, p. 60). Trapped in Ge-stell, we tend to reveal things in the mode of challenging-forth, but we can also choose to reveal things in the mode of bringing-forth. Heidegger comments, ‘Placed between these possibilities, man is endangered from out of destining’ (1977, p. 26). However, by carefully considering the ways of thinking that lie behind technology, we can grasp the ‘saving power’. We can realize that we, the Shepherds of Being, have a choice : we can bring-forth rather than challenge-forth. Thus, once we understand the thinking behind technology, we become free to choose our fate—‘… we are already sojourning in the open space of destining’ (Heidegger, 1977, p. 26).

### Solvency

#### **Attacks would be much worse with SMRs.**

Baker, Adjunct Junior Fellow at American Security Project, ‘12

[Matthew, BA in Political Science, “Do Small Modular Reactors Present a Serious Option for the Military’s Energy Needs?”, June 22,

<http://americansecurityproject.org/blog/2012/do-small-modular-reactors-present-a-serious-option-for-the-militarys-energy-needs/>, CMR]Firstly like large reactors, one of the biggest qualms that the public has to nuclear is problems associated with nuclear waste. A more decentralized production of nuclear waste inevitably resulting from an increase in SMRs production was not even discussed. The danger of transporting gas into some military bases in the Middle East is already extremely volatile; dangers of an attack on the transit of nuclear waste would be devastating. Secondly, SMRs pose many of the same problems that regular nuclear facilities face, sometimes to a larger degree. Because SMRs are smaller than conventional reactors and can be installed underground, they can be more difficult to access should an emergency occur. There are also reports that because the upfront costs of nuclear reactors go up as surface area per kilowatt of capacity decreases, SMRs will in fact be more expensive than conventional reactors. Thirdly, some supporters of SMR technology seem to have a skewed opinion of public perception toward nuclear energy. Commissioner of the U.S. Nuclear Regulatory Commission, William C. Ostendorff, didn’t seem to think that the recent Fukushima disaster would have any impact on the development on SMRs. Opinion polls suggest Americans are more likely to think that the costs of nuclear outweigh its benefits since the Fukushima disaster. For SMRs to be the philosopher’s stone of the military’s energy needs the public needs to be on board. The DESC’s briefing did illustrate the hype that the nuclear community has surrounding SMRs, highlighting some pressing issues surrounding the military’s energy vulnerability. But proponents of SMRs need to be more realistic about the flaws associated with SMRs and realize that the negative impacts of nuclear technology are more costly than its benefits.

#### Nuclear attacks cause meltdowns that lead to extinction.

Lendman 11 (Stephen, Research Associate of the Centre for Research on Globalization,

03/ 13, “Nuclear Meltdown in Japan,”, The People’s Voice <http://www.thepeoplesvoice.org/TPV3/Voices.php/2011/03/13/nuclear-meltdown-in-japan>, accessed 8-2-12, RSR)

Reuters said the 1995 Kobe quake caused $100 billion in damage, up to then the most costly ever natural disaster. This time, from quake and tsunami damage alone, that figure will be dwarfed. Moreover, **under a worst case** core **meltdown, all bets are off as the entire region and beyond will be threatened with permanent contamination**, making the most affected areas unsafe to live in. On March 12, Stratfor Global Intelligence issued a "Red Alert: Nuclear Meltdown at Quake-Damaged Japanese Plant," saying: Fukushima Daiichi "nuclear power plant in Okuma, Japan, appears to have caused a reactor meltdown." Stratfor downplayed its seriousness, adding that such an event "does not necessarily mean a nuclear disaster," that already may have happened - the ultimate nightmare short of nuclear winter. According to Stratfor, "(A)s long as the reactor core, which is specifically designed to contain high levels of heat, pressure and radiation, remains intact, the melted fuel can be dealt with. If the (core's) breached but the containment facility built around (it) remains intact, the melted fuel can be....entombed within specialized concrete" as at Chernobyl in 1986. In fact, that disaster killed nearly one million people worldwide from nuclear radiation exposure. In their book titled, "Chernobyl: Consequences of the Catastrophe for People and the Environment," Alexey Yablokov, Vassily Nesterenko and Alexey Nesterenko said: "For the past 23 years, it has been clear that there is a danger greater than nuclear weapons concealed within nuclear power. **Emissions from** this **one reactor** exceeded a hundred**-fold the radioactive contamination of** the bombs dropped on **Hiroshima and Nagasaki.**" "**No** citizen of any **country** can be assured that he or she **can be protected from radioactive contamination. One nuclear reactor can pollute half the globe.** Chernobyl fallout covers the entire Northern Hemisphere." Stratfor explained that if Fukushima's floor cracked, "it is highly likely that the melting fuel will burn through (its) containment system and enter the ground. This has never happened before," at least not reported. If now occurring, "containment goes from being merely dangerous, time consuming and expensive to nearly impossible," making the quake, aftershocks, and tsunamis seem mild by comparison. Potentially, millions of lives will be jeopardized. Japanese officials said Fukushima's reactor container wasn't breached. Stratfor and others said it was, making the potential calamity far worse than reported. Japan's Nuclear and Industrial Safety Agency (NISA) said the explosion at Fukushima's Saiichi No. 1 facility could only have been caused by a core meltdown. In fact, 3 or more reactors are affected or at risk. Events are fluid and developing, but remain very serious. The possibility of an extreme catastrophe can't be discounted. Moreover, independent nuclear safety analyst John Large told Al Jazeera that by venting radioactive steam from the inner reactor to the outer dome, a reaction may have occurred, causing the explosion. "When I look at the size of the explosion," he said, "it is my opinion that there could be a very large leak (because) fuel continues to generate heat." Already, Fukushima way exceeds Three Mile Island that experienced a partial core meltdown in Unit 2. Finally it was brought under control, but coverup and denial concealed full details until much later. According to anti-nuclear activist Harvey Wasserman, Japan's quake fallout may cause nuclear disaster, saying: "This is a very serious situation. **If the cooling system fails** (apparently it has at two or more plants), the super-heated **radioactive fuel rods will melt**, and (if so) you could conceivably have an explosion," that, in fact, occurred. As a result, **massive radiation releases may follow**, impacting the entire region. "**It could be**, literally, **an apocalyptic event.**

#### No spillover- DOD can’t drive investments.

Dimotakis, The MITRE Corporation, ‘6

[Paul, “Reducing DoD Fossil-Fuel Dependence”, 12-9-6,

<http://www.fas.org/irp/agency/dod/jason/fossil.pdf>]  
The 2006 DoD fossil-fuel budget is, approximately, 2.5-3% of the national-defense budget, the range dependent on what is chosen as the total national-defense budget. Larger (percentage) fuel costs are borne by families and many businesses, for example, and fuel costs have only relatively recently become noticeable to the DoD. 3. At present, there is a large spread between oil-production cost and crude-oil prices. Many projections, however, including that of the U.S. Energy Information Agency, indicate that crude oil prices may well decrease to $40-$50/barrel within the next few years, as production and refining capacity increases to match demand. 4. DoD is not a sufficiently large customer to drive the domestic market for demand and consumption of fossil fuel alternatives, or to drive fuel and transportation technology developments, in general. Barring externalities, e.g., subsidies, governmental and departmental directives, etc., non-fossil-derived fuels are not likely to play a significant role in the next 25 years. 5. DoD fuel consumption constraints and patterns of use do not align well with those of the commercial sector. Most commercial-sector fuel use, for example, is in ground transportation, with only 4% of domestic petroleum consumption used for aviation. In contrast, almost 60% of DoD fuel use is by the Air Force, with additional fuel used in DoD aviation if Naval aviation consumption is included. Options for refueling ships at sea are more limited (or nonexistent) compared to those for commercial vehicles in urban areas. Options for DoD use of electrical energy on ground vehicles are limited, since one can not expect to plug into the grid in hostile territory, for example, to refuel/recharge an electric vehicle. Furthermore, drive cycles for DoD ground vehicles differ significantly from EPA drive cycles that, as a consequence, provide poor standards for fuel consumption.

#### Low gas prices kill SMRs.

McMahon, energy contributor – Forbes,’12

[Jeff, 5-23-12, <http://www.forbes.com/sites/jeffmcmahon/2012/05/23/small-modular-reactors-by-2022-but-no-market-for-them/>]

Small Modular Nuclear Reactors By 2022 -- But No Market For Them The Department of Energy will spend $452 million—with a match from industry—over the next five years to guide two small modular reactor designs through the nuclear regulatory process by 2022. But cheap natural gas could freeze even small nuclear plants out of the energy market well beyond that date. DOE accepted bids through Monday for companies to participate in the Small Modular Reactor program. A number of reactor manufacturers submitted bids, including NuScale Power and a collaboration that includes Westinghouse and General Dynamic. “This would allow SMR technology to overcome the hurdle of NRC certification – the ‘gold standard’ of the international nuclear industry, and would help in the proper development of the NRC’s regulatory framework to deal with SMRs,” according to Paul Genoa, Senior Director of Policy Development at the Nuclear Energy Institute. Genoa’s comments are recorded in a summary released today of a briefing given to Senate staff earlier this month on prospects for small modular reactors, which have been championed by the Obama Administration. DOE defines reactors as SMRs if they generate less than 300 megawatts of power, sometimes as little as 25 MW, compared to conventional reactors which may produce more than 1,000 MW. Small modular reactors can be constructed in factories and installed underground, which improves containment and security but may hinder emergency access. The same summary records doubt that SMRs can compete in a market increasingly dominated by cheap natural gas. Nuclear Consultant Philip Moor told Senate staff that SMRs can compete if natural gas costs $7 to $8 per million BTU—gas currently costs only $2 per MBTU—or if carbon taxes are implemented, a scenario political experts deem unlikely. “Like Mr. Moor, Mr. Genoa also sees the economic feasibility of SMRs as the final challenge. With inexpensive natural gas prices and no carbon tax, the economics don’t work in the favor of SMRs,” according to the summary.

#### Licensing questions prevent solvency- takes too long

O’ Connor ’11 (Dan O’Connor is a Policy Fellow in AEL’s New Energy Leaders Project and will be a regular contributor to the website, American Energy League, “Small Modular Reactors: Miracle, Mirage, or Between?”, <http://leadenergy.org/2011/01/small-modular-reactors-miracle-mirage-or-medium/>, January 4, 2011, LEQ)

Judging only by this promising activity, it is tempting to dub the SMR a miracle. But the majority of these diverse designs have yet to be demonstrated. In fact, the demonstration stage of the South African project, Pebble Bed Modular Reactor (a HTR), stalled and faded in 2010 after losing government funding due to lack of customer interest. The importance of demonstration, especially in the highly-regulated US industry, cannot be overstated. But even in the stages before the crucial demonstration step, skepticism over the SMR’s promises abounds. The ASME EnComm noted regulatory, financial, operational, and logistical challenges. Treading the uncharted waters of Lego-like power plant construction will not be easy. In a traditional plant, one reactor provides heat for one or a few steam turbines. In an SMR-based plant, each module drives one turbine with its own controls and operators. As such, few of the costs associated with these systems scale down with reactor capacity. The turbines do not come in a complimentary plug-and-play form either – they would have to be built on site. And while decentralization enables partial operation and online refueling, it also introduces the challenge of module co-operation, the need for numerous highly-trained operator personnel, and brand new reviews by the Nuclear Regulatory Commission (NRC). This goes without mentioning the urgent and increased need for a more dynamic national approach to waste storage. Licensing questions remain too. The one-time approval of a module before its mass production, bypassing a regulatory damper for each unit, is a highly-desirable advantage of SMR design. But if a utility would like to increase its capacity over two decades by incrementally adding more modules, will it face the choice between building licensed, though dated, technology or waiting again for a license to build with state of the art modules? Furthermore, as addressed in my past article, “Putting the Cart Before the Horse with Nuclear R&D” and its comments, the waiting time even for a traditional design license is considerable. With each new SMR innovation, from an individualized control room to coolant choice, the licensing duration increases by as much as a decade, pushing the vital demonstration step further away. Additional costs associated with these regulatory complications and non-scalable systems could combine to nullify the SMR’s affordability argument.

#### **Status quo solves – DoD already trying to procure SMR tech.**

Barattino, chief executive officer at Global Broadband Solutions, ‘12

[William, “Small Modular Reactors on Military Installations?”, ANS Nuclear Café, 1-23-12,

<http://ansnuclearcafe.org/2012/01/23/small-modular-reactors-on-military-installations/>]

Federal agencies have been directed by public laws and executive orders to reduce energy consumption, increase usage of clean energy sources, and reduce greenhouse gas emissions (GHGs). The U.S. Department of Defense (DOD) is working with the U.S. Department of Energy to develop a long-term strategy to embrace and implement these directives for military installations that includes small modular reactors (SMRs) in the mix of clean energy technologies. This blog post provides an initial assessment of the market size of SMRs on U.S. Army installations located in the United States that includes background factors driving the shift to clean energy sources; characterization of energy consumption and costs for Army installations; maximum overnight costs for breakeven based on offsets of current base electricity costs; and reductions in GHGs with use of SMRs.

#### Government guarantees create moral hazards- creates risky market structures- causes instability and turns case

Gerdin ’11 (Erik Gerding, Associate Professor at University of Colorado Law School. His research interests include securities, banking law, financial regulation generally, and corporate governance, “The Inherent, Ineluctable Instability of Financial Institution Regulation”, <http://www.theconglomerate.org/2011/09/the-inherent-ineluctable-instability-of-financial-institution-regulation.html>, September 12, 2011)

Here is my second contribution to the Faculty Lounge Online Forum on the legislative and regulatory process of financial reform. Check out the posts by the other contributors including, Kim Krawiec (Duke), Christie Ford (Univ. British Columbia), Brett McDonnell (Minnesota), Saule Omarova (North Carolina), and Dan Schwarz (Minnesota). In my last post, I concluded that the presence of government subsidies – particularly guarantees explicit (deposit insurance) and implicit (Too-Big-To-Fail) – makes the political economy of financial institution regulation different from other areas of the regulatory state. In this post, I argue that these government subsidies and moreover, the underlying reason for government subsidies, contributes to the inherent instability of financial institution regulation. The presence of government guarantees – explicit or implicit – creates strong incentives for financial firms to externalize the cost of their risk taking onto taxpayers. But there is more to government guarantees than moral hazard. Consider the following: Market distortion: When the government subsidizes some financial firms but not others, it distorts the market. A lower cost of capital allows the subsidized firms to undercut their competition. This can drive competitors either out of business or, if risk is being mispriced because of an asset boom, into riskier market segments (a phenomena I explored in a symposium piece). Cheaper debt and leverage: Government guarantees also. make debt cheaper than equity This supercharges the incentives of financial firms to increase leverage. Higher leverage of financial institutions, in turn, works to increase the effective supply of money. More money can fuel asset price bubbles and mask the mispricing of risk (phenomena explored by Margaret Blair in this paper, as well as by me in a forthcoming symposium piece in the Berkeley Business Law Journal.) Cheaper debt and regulatory capital arbitrage: Cheaper debt also supercharges financial firm incentives to game regulatory capital requirements (something I am writing about in the context of the shadow banking system. See also Jones; Acharya & Schnabl; Acharya & Richardson. Bailouts and correlated risk: Governments face pressure to bail out firms when their risk taking is highly correlated (because multiple firms will fail at the same time). On the flip side, this creates a strong incentive for financial firms to take on correlated risk. (See, e.g., Acharya et al.). Correlated risk taking reinforces the kind of herding that behavioral finance scholars have analyzed in the context of asset price bubbles. So feedback loops abound. What to do, then, about government subsidies? “Stop us before we bail out again” One approach is to erect barriers to the government providing subsidies and bailouts. Dodd-Frank is chock full o’ provisions that aim to do just this. But legal scholars need to give policymakers a dose of reality about the ability of law to hardwire “no bailouts, no subsidies.” I just came back from a conference last week in which a number of economists kept saying that this hardwiring was exactly what law needed to contribute to financial reform. Here is how some of the law professors in the room (including your friend and mine Anna Gelpern) responded: 1. Legal rules are by nature incomplete and, under pressure, firms and regulators will seek ways around rules. 2. It ain’t so easy for a sovereign to bind itself. In the end, what is the remedy and who will enforce it? 3. There is nothing to stop Congress from amending the law. Legislatures can’t entrench laws against amendments by future legislatures (although the government must honor contractual obligations – for a discussion of these issues, see U.S. v. Winstar) True, Dodd-Frank’s prohibitions on bailouts and governments are not just pieces of paper. Law does constrain government behavior to a degree and can promote political accountability. However, we should not expect “law” to work like a wind-up toy that is self-executing without worrying about issues of interpretation, compliance, incentives, and the norms of government actors. I restrained myself at the conference from delivering a little legal koan: “the law will bind government officials, if they believe it binds them.” As an aside: it strikes me that the legal academy has to do a much better job of educating economists, policy makers and the public about what is “law” and how it operates. We have to do this in an accessible manner and without undermining important norms of legal compliance. Financial reform proposals are replete with calls for more “automatic regulations” – whether to counter capture or political pressure to spike the economic punch when the party gets startin’. (For example, economists have proposed the very sensible policy of counter-cyclical capital buffers) But fetishizing automatic regulations can pervert financial regulation. Over-reliance on automatic regulation: Ignores the fact that regulators and lawmakers must interpret laws; and Discounts the likelihood or regulatory arbitrage or regulatory evasion. In short, we need to have a much richer discussion of what the “law in action” means. Letting it Burn: Confusing Bailouts with Other Externalities of Financial Institution Risk-Taking What if restrictions on bailouts and government guarantees work too well? There is a rationale for government interventions like deposit insurance, lender-of-last resort, and bailouts. They are not just about “capture.” Financial institution failure can impose significant negative externalities (which is a fairly antiseptic description of the social costs of financial crises). Counterparty and market discipline don’t force firms to internalize all of these externalities. I respect the intellectual consistency and fervor of those who believe that bailouts and government interventions are the root of all financial regulatory problems. But I wouldn’t trust them in any position of responsibility. Deposit insurance and bailouts aren’t the only ways governments distort markets when they act to avoid crises. Lender-of-last resort actions and even interest rates changes can create a type of moral hazard (see “Put, Greenspan”). It is a lot harder for central banks to calibrate liquidity responses to market seizures than armchair critics think. Countering Subsidies So if some government subsidization of the financial firms is inevitable, it is critical that the government counter these subsidies -- whether by limiting firm risk-taking or charging firms for the subsidy. Absent attempts to counter subsidies, we are right back where this post started – moral hazard, distortion, cheap debt --> leverage and capital arbitrage.

### Prolif

#### SQUO solves for nuclear prolif leadership – already seen as the gold standard.

Domenici and Miller, ‘12

(Pete (Senator) and Warren (Co-Chair, Nuclear Initiative; Former DOE Assistant Secretary for Nuclear Energy), “Maintaining U.S. Leadership in Global Nuclear Energy Markets”, July 2012, Bipartisan Policy Center, RSR)

Nuclear power already plays an important role in the U.S. energy supply mix: The nation’s existing fleet of 104 reactors currently accounts for close to 20 percent of overall electricity production. In many parts of the country, nuclear plants help to assure grid stability and have been a major source of cost-effective, low-carbon base-load power for decades. The NRC, the industry’s chief regulatory overseer, is expected to approve extension of the operating licenses for most of these plants to 60 years while striving for improved safety and increasingly efficient operations. At present, the domestic nuclear industry is looking at limited opportunities for expansion in terms of increasing the number of U.S. plants. Currently, four new Generation III+ nuclear reactors have been licensed by the NRC and are under construction in the Southeast. In addition, the Tennessee Valley Authority has restarted construction activities at Watts Bar II. Given this near-term expansion, the United States will continue to be a world leader in the development of advanced reactor technologies, including Generation III+ advanced passive reactors and SMRs. International interest in developing new nuclear-generating capacity, on the other hand, presents potentially substantial business opportunities for the domestic nuclear industry. Commercial nuclear exports generate obvious economic benefits for U.S. firms and for the nation’s overall balance of trade. Importantly, they also help the United States retain a major role in the evolution and maintenance of international nuclear safety and nonproliferation regimes. Other nations not only look to the U.S. industry for operational expertise, they see the NRC as setting the international gold standard for safety and physical security regulation. DOE’s National Nuclear Security Administration, meanwhile, has a great deal of influence over the nonproliferation aspects of international fuel-cycle issues.

#### SMR expansion fails -- the US nuclear supply chain has atrophied.

ITA, 11

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

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

#### No exports.

NEI, National Export Initiative, September ‘10

[“REPORT TO THE PRESIDENT ON THE NATIONAL EXPORT INITIATIVE: The Export Promotion Cabinet’s Plan for Doubling U.S. Exports in Five Years”]

Expand opportunities for the U.S. nuclear energy industry. Nuclear energy is also an integral part of a clean energy economy. While nuclear power already provides approximately 20 percent of U.S. electricity, wider deployment of civil nuclear reactors in the United States and around the world could provide the massive amount of electricity needed to power the global economy, while substantially reducing greenhouse gas emissions. The U.S. nuclear industry can expand its manufacturing base significantly as it takes advantage of the growing global demand for nuclear power. But the nuclear sector also faces substantial obstacles, including difficulties in obtaining new plant financing, workforce gaps, the lack of a global nuclear liability regime, supply chain constraints, licensing and regulatory-related delays, uncertainty with respect to disposal of spent fuel, and formidable state-owned competition.74

#### No global nuclear renaissance – current trend.

Mez, Department of Political and Social Sciences, Freie Universitat Berlin, ‘12

[Lutz, “5-7-12, “Nuclear Energy—Any Solution for Sustainability and Climate Protection?”, http://www.sciencedirect.com/science/article/pii/S0301421512003527]

Is the entire world really building nuclear power plants? By no means. According to the IAEA, 63 blocks with a rating of 61,032 MW are currently under construction (see Table 1). The building projects are spread out among fourteen countries: China (26), Russia (10), India (6), South Korea (5), the Ukraine (2), Japan (2), Slovakia (2), Bulgaria (2) and Taiwan (2) and one block each in Argentina, Brazil, Finland, France, and the USA. The World Nuclear Association (WNA) only lists 61 reactors under construction, but another 156 reactors in the category ‘planned.’ Actual development of nuclear technology teaches us, however, that planned reactors by no means automatically move into the category of ‘under construction.’ In 1979, before the Three Mile Island accident in Harrisburg, there were 233 reactors under construction in the world, and over 100 cancellations followed (Schneider, Froggatt, Thomas, 2011). In view of these facts, the metaphor ‘renaissance of nuclear power’ must be viewed as an ideological weapon. Examined more closely, it would appear that nuclear power has even taken a nose-dive in the Western industrialized countries. In the European Union there were 177 reactors in 1989, whereas the IAEA only lists 134 operational reactors in February 2012. Of the 192 members of the United Nations, only 31 countries had nuclear power plants in operation at the beginning of 2012. Three countries (Italy, Kazakhstan and Lithuania) have in the meantime closed down their nuclear power plants, while in Austria a reactor was built in Zwentendorf but never connected to the grid. A similar reactor project is the completed but never fueled Bataan Nuclear Power Plant in the Philippines. The six biggest countries operating nuclear power plants (USA, France, Japan, Russia, Germany and South Korea) include several countries possessing nuclear weapons (USA, France and Russia) and produce three-fourths of total nuclear power. In 2009 nuclear power plants only produced 13.4 percent of electrical power worldwide. This corresponds to 5.8 percent of Total Primary Energy Supply and a little more than two percent of global final energy consumption. In comparison to nuclear power, the potential contribution of renewable energies to easing the strain on the environment and tackling climate change is much higher because they account for 19.5 percent of global power production and more than 12 percent of primary energy production (IEA, 2011). The United States has the most nuclear capacity and generation among the 31 countries in the world that have commercial nuclear power plants. There are currently 104 operational nuclear reactors at 65 nuclear sites in 31 states. Most of the commercial reactors are located east of the Mississippi River, near water sources. Illinois has 11 reactors and the most nuclear capacity. Since 1990, the nuclear power share of the total electricity generation has averaged about 20%. Nuclear generation of electricity has roughly tracked the growth in total electricity output. Between 1985 and 1996, 34 reactors were connected to the grid. In addition, nuclear generation has increased as a result of higher utilization of existing capacity and from technical modifications to increase nuclear plant capacity. In 2007 the American construction site Watts Bar-2 overtook first place for years as far as delays in construction were concerned, replacing the Bushehr nuclear power plant in Iran, for which cement was first poured on 1 May 1975. The construction of Watts Bar-2 began 40 years ago on 1 December 1972, with the project then being frozen in 1985. The company which owns the plant, the Tennessee Valley Authority (TVA), announced in October 2007 that it would complete the reactor at a cost of US-$ 2.5 billion. Connection to the electricity grid is scheduled for August 2012. In August 2009, the U.S. Nuclear Regulatory Commission (NRC) issued an Early Site Permit for two new reactors at Southern Nuclear's Vogtle site. The two new units are the reference plant for the Westinghouse AP1000 pressurized water reactor design. In February 2010, President Obama announced that the DOE had offered a loan guarantee up to 80% of the project estimated cost of $14.5 billion. Southern Nuclear will only have to pay a credit subsidy fee for the $11.6 billion loan. On February 9, 2012, the Nuclear Regulatory Commission (NRC) voted 4 to 1 to issue the Combined Operating License for Vogtle units 3 and 4. This is the first license to be approved in the United States in over 30 years. In the European Union thirteen out of the twenty-seven member states do not produce any nuclear power themselves or have abolished this technology for technical or economic reasons following political decisions. Fourteen EU member states are currently using nuclear energy, while three countries have shut down their nuclear power plants. Two countries decided after Fukushima to phase-out nuclear power and the remaining countries do not have a nuclear energy program. Eight high-risk reactors were closed down in the new accession countries in the expansion of the EU to Eastern Europe, with the EU and other Western donor countries contributing more than one billion Euros to meet the costs of closure. Four reactors are labeled “under construction” in all of Eastern Europe at present, although a series of new nuclear power plants are being planned. In spite of liberalization and partial privatization of the electrical power sector, the completion or construction of new nuclear power plants constitutes a virtually insurmountable financing problem. Looking at the historical development, there were still a total of 134 nuclear power blocks in operation in Europe in February 2012–116 of them in Western Europe and, following the closure of Ignalina nuclear power plant in Lithuania, a total of 18 in Central and Eastern European countries. According to the IAEA, there are two reactor blocks under construction in Western Europe: one in Finland and since December 2007 one in France. Construction of the first so-called European Pressurized Reactor (EPR) with a rating of 1,600 MW began in Olkiluoto, Finland on 12 August 2005. Since then the project has been overshadowed by exploding costs and delays: originally slated for 2009, commercial operation will probably not take place before August 2013 and instead of the originally planned € 3.2 billion, the reactor will cost almost € 6 billion. An EPR is also being built in France. Construction officially commenced on 3 December 2007 and it was expected that it would take 54 months to complete the plant, i.e. by May 2012. According to inspection reports from the supervisory authority ASN, a host of problems have also cropped up here. As a result, the ambitious time schedule cannot be met and connection to the grid is now scheduled for the end of 2016. The three biggest emerging market countries—India, China and Brazil—embarked on their nuclear energy programmes decades ago, but have only partially achieved their goals. Nuclear energy only accounts for a small percentage of electrical power production and the energy supply in these countries. The People's Republic of China has the most ambitious plans for expanding nuclear power, operating sixteen nuclear power plants at present generating 71 TWh, which accounted for 1.8 percent of power production in 2010. As of February 2012, 26 additional nuclear power reactors are under construction. China had an estimated total installed electricity generating capacity of over 1,000 GW at the end of 2011 and will expand to 1,600 GW by 2020. According to China's National Development and Reform Commission the installed nuclear capacity shall be 80 GW (6%) by 2020 and a further increase to 200 GW (16%) by 2030. But following the Fukushima accident, the State Council announced that it would suspend approval for new nuclear power stations and halted work on four approved units. “The announcement marked a significant policy change” (Green-Weiskel, 2011). Nuclear has remained a small fraction of China's total energy mix, because government has given priority to solar and wind for future energy growth. While China has invested the equivalent of about $10 billion per year into nuclear power in recent years, in 2010 it spent twice as much on wind energy alone and some $54.5 billion on all renewables combined. There are several reasons for China to shelve its nuclear industry. China's energy sector is competing with agriculture for water, and the country is not immune to a temblor-triggered disaster. In India 20 smaller reactors are in operation, meeting 2.9 percent of electricity needs, with six more under construction. In Brazil two reactors are in operation, producing 3.2 percent of electrical power, with one additional reactor block under construction. A closer look shows, however, that twelve out of the 63 reactors under construction (see Table 1) were already included in the statistics with the status of “under construction” more than 20 years ago. Construction of the reactor blocks Khmelnitski 3 and 4, for instance, began in the Ukraine as far back as 1986 and 1987. These blocks are listed under the category of “planned” in the WNA statistics, however. Three out of the ten Russian nuclear power plant construction projects also began in 1985 and 1986—recently completed after 25 years under construction was Kalinin 4 in November 2011. The Atucha-2 nuclear power plant in Argentina has been under construction since 1981 and still no date has been set for its commissioning. Construction of both of the blocks in Belene, Bulgaria, began in 1987 and no dates are scheduled when they will be connected to the grid. And construction at Mochovce 3 and 4 in the Slovak Republic started in 1987, with commercial operation scheduled for 2013. This shows that the statistics contain a whole host of unfinished plants. In view of all these facts, it is erroneous to speak of any “global renaissance,” all the more so because such long building periods lead to exorbitant cost overruns which scarcely any bank would finance—unless the financial risk is assumed by a government. The complexity of the licensing procedure as well as the risks involved in a building project of this type should at any rate not be underestimated (Mez et al., 2009).

#### US won’t exert nonproliferation leadership

Cleary, American Enterprise Institute Research Assistant, ‘12

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

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

#### US nuclear leadership is irrelevant—countries won’t buy US if its constraining

Lewis, director of the East Asia Nonproliferation Program at the James Martin Center for Nonproliferation, ‘12

[Jeffrey, 8-1-12, It's Not as Easy as 1-2-3, www.foreignpolicy.com/articles/2012/08/01/it\_s\_not\_as\_easy\_as\_1\_2\_3?page=full]

Creating market incentives to discourage the spread of enrichment and reprocessing seems like a reasonable thing to do - except that most states make nuclear decisions on something other than a cost basis. Nuclear power enthusiasts have been no strangers to wishful thinking, starting with claims that nuclear energy would be "too cheap to meter." Government decisions about nuclear power tend to prioritize concerns about sovereignty and keeping technological pace with neighbors. It is not hard to see national nuclear programs as something akin to national airlines - money-losing prestige projects that barely take market forces into account. Often, aspiring nuclear states look to countries like the United States and Japan as models. If such countries invest heavily in fuel-cycle services, developing states might try to copy them rather than simply become their customers.

#### Spreading nuclear energy inevitably increases proliferation

Miller 9 (Steven E. Miller & Scott D. Sagan Nuclear power without nuclear proliferation? © 2009 by the American Academy of Arts & SciencesDædalus Fall 2009, 7-18, <http://iis-db.stanford.edu/pubs/22659/Sagan_Nuclear_power_without_nuclear_proliferation.pdf>) JD

Concerns about proliferation (whether to states or terrorists) arise at the intersection of nuclear power and nuclear weapons. Indeed, the connection between power and weapons is somewhat inevitable because key technologies in the nuclear sector–notably, uranium enrichment and plutonium reprocessing capabilities–are relevant to both. In the nonproliferation context, this is the dual-use dilemma: many technologies associated with the creation of a nuclear power program can be used to make weapons if a state chooses to do so. When a state seems motivated to acquire nuclear weapons, a nuclear power program in that state can appear to be simply a route leading to the bomb or a public annex to a secret bomb program. The crisis over Iran’s nuclear activities is a case in point. Depending on what capabilities spread to which states, especially regarding uranium enrichment and plutonium reprocessing, a world of widely spread nuclear technologies could be a world in which more states, like Iran, would have the latent capability to manufacture nuclear weapons. This could easily be a world filled with much more worry about the risk of nuclear proliferation–and worse, a world where more states possess nuclear weapons. A fundamental goal for American and global security is to minimize the proliferation risks associated with the expansion of nuclear power. If this development is poorly managed or efforts to contain risks are unsuccessful, the nuclear future will be dangerous.

#### No widespread proliferation.

Hymans, USC Associate Professor of IR, ‘12

[Jacques, /16/12, North Korea's Lessons for (Not) Building an Atomic Bomb, www.foreignaffairs.com/articles/137408/jacques-e-c-hymans/north-koreas-lessons-for-not-building-an-atomic-bomb?page=show]

Washington's miscalculation is not just a product of the difficulties of seeing inside the Hermit Kingdom. It is also a result of the broader tendency to overestimate the pace of global proliferation. For decades, Very Serious People have predicted that strategic weapons are about to spread to every corner of the earth. Such warnings have routinely proved wrong - for instance, the intelligence assessments that led to the 2003 invasion of Iraq - but they continue to be issued. In reality, despite the diffusion of the relevant technology and the knowledge for building nuclear weapons, the world has been experiencing a great proliferation slowdown. Nuclear weapons programs around the world are taking much longer to get off the ground - and their failure rate is much higher - than they did during the first 25 years of the nuclear age. As I explain in my article "Botching the Bomb" in the upcoming issue of Foreign Affairs, the key reason for the great proliferation slowdown is the absence of strong cultures of scientific professionalism in most of the recent crop of would-be nuclear states, which in turn is a consequence of their poorly built political institutions. In such dysfunctional states, the quality of technical workmanship is low, there is little coordination across different technical teams, and technical mistakes lead not to productive learning but instead to finger-pointing and recrimination. These problems are debilitating, and they cannot be fixed simply by bringing in more imported parts through illicit supply networks. In short, as a struggling proliferator, North Korea has a lot of company.

#### No impact to prolif – empirics prove that caution and disarmament win out.

Mueller, Professor of Political Science at Ohio State University, ‘11

[John, International Relations and Security Network, “'Clocking' Nuclear Weapons”, 6-7-11,

<http://www.isn.ethz.ch/isn/Digital-Library/ISN-Insights/Detail/?contextid734=129859&contextid735=129857&id=129859&lng=en&tabid=129857>, RSR]

For nuclear weapons to fade toward oblivion, perhaps nothing needs to be done except wait, while their low value and high cost cause more and more peo­ple to question their usefullness. In an important sense, nuclear weapons have been "managed" exceedingly well since 1945. They have been around, even­tually in great numbers, for two-thirds of a century, and none have been detonated either in anger or by accident. Nevertheless, legions of alarmed pundits over the decades have predicted inevitable doom: That clock on the cover of the Bul­letin of the Atomic Scientists has remained suggestively poised at shortly before mid­night since the 1940s. But it will come as no shock (especially in Switzerland) to suggest that clocks with hands that do not rotate are useless. And so, as it happens, are nuclear weapons. When the value is too low… It is difficult to see how any country that has possessed nuclear weapons has found them beneficial since World War II. They have supplied little diplomatic advantage, and no nuclear-armed country has discov­ered an effective use for them in the many wars waged in places like Vietnam, Korea, Afghanistan, the Falklands, Algeria, Leba­non, Kashmir, Kosovo, Iraq, Grenada, Panama and Hungary. Nor have they been useful in deterring war. Their supposed chief achievement was to prevent World War III during the Cold War, but this notion continues to be undercut with each leak from Soviet archives. Al­though highly sympathetic to revolution­ary and civil war violence, Soviet ideology dismissed direct war against the capitalist world, whether nuclear or not, as stupen­dously stupid. That is, there was nothing for the nukes to deter. Those who experienced World War II scarcely needed visions of mushroom clouds to realize that it was im­perative to be cautious about major war. The weapons' uselessness also helps to ex­plain why alarmists have been wrong for decades about the pace of nuclear prolifer­ation. Dozens of countries have been tech­nologically capable of obtaining nuclear arsenals, but very few have done so.

#### Proliferation impacts are empirically denied – your authors are alarmists

Krepon, Co-Founder of the Henry L. Stimson Center, 9

[Michael, Co-Founder of the Henry L. Stimson Center, a Diplomat Scholar at the University of Virginia, and the author of Better Safe Than Sorry: The Ironies of Living With the Bomb, "The mushroom cloud that wasn't: why inflating threats won't reduce them." Foreign Affairs 88.3 (May-June 2009), RSR]

Today, as was the case during the Cold War, there is no shortage of nonproliferation specialists predicting impending nuclear disasters. Eighty-five experts polled by Senator Lugar in 2005 estimated that the risk of a WMD attack occurring before 2010 was 50 percent and before 2015, 70 percent. The Bulletin of the Atomic Scientists has set its iconic Doomsday Clock at five minutes to midnight--two minutes closer to Armageddon than it was during the Cuban missile crisis. A bipartisan congressional commission concluded in 2008 that "America's margin of safety is shrinking, not growing" and that "unless the world community acts decisively and with great urgency, it is more likely than not that a weapon of mass destruction will be used in a terrorist attack somewhere in the world by the end of 2013." Graham Allison, one of the commission's members, had warned in 2004 that "the detonation of a nuclear device in an American city is inevitable if the U.S. continues on its present course." And soon after leaving office, former Vice President Dick Cheney warned that there is a "high probability" that terrorists will attempt a catastrophic nuclear or biological attack on the United States in the coming years. These sorts of scary predictions have a basis in reality. After all, Iran has mastered the ability to enrich uranium, is laying the foundation for a nuclear weapons program, and has close ties to terrorist groups; Pakistan is ramping up its capacity to produce plutonium as the central government's influence is waning; and North Korea has a bomb-making capacity, weapons-grade material, and a need for hard currency. Al Qaeda's leaders have sought to acquire and use these weapons, and other extremist groups have an interest in doing so, too. Experts cite such worrisome developments and then use threat inflation to seize the public's attention and to secure sufficient appropriations for their preferred remedies. They, along with government officials, members of Congress, and the intelligence community are all safer warning of great danger than downplaying threats--except when their inflated anxieties facilitate a preventive war based on false premises. The Iraq war notwithstanding, when worst cases do not materialize, those who issued dire warnings can take credit. And if attacks do occur, the alarmists can always say, "I told you so." As real as these threats, are, hyping them carries its own risks. Crying wolf too often can lead to complacency when action is needed most. Repeated warnings can also prompt taxpayers and lawmakers to question what was gained from prior investments in reducing threats and so limit appropriations for new ones. This is a major problem, since remedial efforts over short periods of time are insufficient; reducing the nuclear threat requires success over the long haul.

### Command and Control

#### DOD SMR procurement sends a global signal of impending U.S. military aggression—-causes resentment against U.S. unilateralism. Turns heg.

Smith, Program Coordinator and Research Assistant with the William E. Simon Chair in Political Economy at the CSIS, ‘11

[Terrence, “An Idea I Can Do Without: "Small Nuclear Reactors for Military Installations,"" <http://csis.org/blog/idea-i-can-do-without-small-nuclear-reactors-military-installations>, RSR]

The report describes DoD’s interest in the reactors as stemming from two “critical vulnerabilities”: 1) “the dependence of U.S. military bases on the fragile civilian electrical grid,” and 2) “the challenge of safely and reliably supplying energy to troops in forward operating locations.” The proposed solution: small nuclear reactors that (in many of the proposed plans) are “self-contained and highly mobile.” This would allow the military to use them in forward bases and pack ‘em up and move ‘em out when we are done. But in an era where the U.S. is engaged in global fights with our bases often placed in unfriendly neighborhoods, the idea of driving around nuclear reactors and material (particularly through areas that have “ a fragile civilian electrical grid”) hardly seems like the idea of the century to me. The report counters that “some” designs promise to be “virtually impervious to accidents” and have design characteristics that “might” allow them to be proliferation-resistant. The plans that use low-enriched uranium, sealed reactor cores, ect., do make them a safer option that some current designs of larger nuclear reactors, but, again, if we are going to be trucking these things around the world, when it comes to nuclear material a “might” doesn’t sit well with me. What are the alternatives to small nuclear reactors (assuming we want to maintain a large oversees military presence)? The NDU report makes the point that the DoD has already been experimenting with “an array of initiatives on energy efficiency and renewable and alternative fuels.” But, according to the report, “unfortunately, even with massive investment and ingenuity, these initiatives will be insufficient to solve DOD’s reliance on the civilian grid or its need for convoys in forward areas.” While, to my knowledge, the DoD has not seen any huge relief from what I would call its token attempts at ‘going green,’ it hardly writes off the possibility of alternative energy supplies short of going nuclear. The report repeatedly emphasizes the point that “DOD’s “’first mover’ pursuit of small reactors could have a profound influence on the development of the industry,” and cautions that “if DOD does not support the U.S. small reactor industry, the industry could be dominated by foreign companies.” The U.S. nonproliferation agenda, if there is one, stands in opposition to this line of thinking. Pursuing a nuclear technology out of the fear that others will get it (or have it), is what fueled the Cold War and much of the proliferation we have seen and are seeing today. It is a mentality I think we should avoid. I do not mean to say this report ignores the risks. In fact they explicitly say, “We acknowledge that there are many uncertainties and risks associated with these reactors.” For example it says, Some key issues that require consideration include securing sealed modules, determining how terrorists might use captured nuclear materials, carefully considering the social and environmental consequences of dispersing reactors. The report also points out that “from a financial perspective, small reactors represent substantial losses in economies of scale.” These issues, which were briefly mentioned, hardly seem like small potatoes. The reports answer to the issues raised: “making reliable projections about these reactors’ economic and technical performance while they are still on paper is a significant challenge,” and “Nevertheless, no issue involving nuclear energy is simple.” On the other hand, the report argues, “failing to pursue these technologies raises its own set of risks for DOD.” “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.” Yes these are important issue for a business stand, but I don’t find them to be the primary concern. The reactors are purely for energy purposes, but in a world that seems to be growing tired of U.S. military intervention, the idea of ensuring our ability to do so through the proliferation of mobile nuclear reactors will hardly quell any hostile sentiment. In addition, it can only add fire to the “nuclear = good” flame. So, while even under best case scenario, the reactors are completely proliferation proof and pose no direct threat to the nonproliferation cause (ignoring the spreading of nuclear tech and knowledge in general), I have a tough time seeing how it helps. The report concludes that the DoD “should seriously consider taking a leadership role on small reactors.” Since the 1970s, the report says, “in the United States, only the military has overcome the considerable barriers to building nuclear reactors. This will probably be the case with small reactors as well.” For now, the plans for small nuclear reactors are “unfortunately,” for the most part, “caught between the drawing board and production.” My point is, maybe that is where they should stay.

#### Accidents turn heg—interrupt military ops.

King, et. al, ‘11

[Marcus (Project Director and Research Analyst for the Environment and Energy Team at Center for Naval Analyses, LaVar Huntzinger, Thoi Nguyen, “Feasibility of Nuclear Power on U.S. Military Installations”, March, <http://www.cna.org/sites/default/files/research/Nuclear%20Power%20on%20Military%20Installations%20D0023932%20A5.pdf>]

Another factor to consider is that the exclusion area for SMRs are likely to be smaller than those established for large reactors. DoD must also consider the potential effect of military training on reactor operations. Reactors must be designed to the criteria that no accidents at nearby military facilities may threaten nuclear plant safety [48]. NRC regulations note that accidents at nearby military facilities such as munitions storage areas and ordinance test ranges may threaten safety. Flight training is another area of concern. The NRC stipulates that nuclear plant developers should identify airports within 16 km, and the risks of potential incidents must be taken into consideration [48]. Hybrid concepts that include industrial facilities associated with nuclear reactors raise additional safety concerns. Another factor is whether a nuclear accident would affect critical DoD missions. It is important that DoD consider only those sites that support missions that are not so critical to national security so that if an interruption caused by a nuclear incident, or an evacuation order, would create lasting damage to national security.

#### Plan hurts military readiness.

King, et. al, ‘11

[Marcus (Project Director and Research Analyst for the Environment and Energy Team at Center for Naval Analyses, LaVar Huntzinger, Thoi Nguyen, “Feasibility of Nuclear Power on U.S. Military Installations”, March, <http://www.cna.org/sites/default/files/research/Nuclear%20Power%20on%20Military%20Installations%20D0023932%20A5.pdf>]

The key factor that DoD must consider in the siting of nuclear reactors is the potential impact on training and readiness. All reactors regulated by the NRC have designated exclusion areas. The exclusion area is the area surrounding the reactor, in which the reactor licensee has the authority to determine all activities, including exclusion or removal of personnel and property from the area. The existence of an exclusion area would not necessarily prohibit military training. According to the NRC definition, This area may be traversed by a highway, railroad, or waterway, provided these are not so close to the facility as to interfere with normal operations of the facility and provided appropriate and effective arrangements are made to control traffic on the highway, railroad, or waterway, in case of emergency, to protect the public health and safety [48].

#### No solvency—can’t find siting.

King et. al, ‘11

[Marcus (Project Director and Research Analyst for the Environment and Energy Team at Center for Naval Analyses); LaVar Huntzinger; Thoi Nguyen, “Feasibility of Nuclear Power on U.S. Military Installations", March,

<http://www.cna.org/sites/default/files/research/Nuclear%20Power%20on%20Military%20Installations%20D0023932%20A5.pdf>]

With respect to the requirement to “consider the potential impact on the quality of life of personnel stationed at military installations at which a nuclear power plant is installed and ways to mitigate those impacts,” it is impossible to talk in specific terms without knowing details about which specific power plant is being considered and the specific locations being considered. In general terms, finding an appropriate site will be challenging. Part of the reason finding an appropriate site will be challenging is because the NRC site consideration process will force full consideration of these factors. Describing the NRC site assessment process is the best and most relevant information that can be provided with respect to this aspect of feasibility at this stage in the process. The NRC approval process described in this section will require that any potential impacts on the quality of life of personnel stationed at military installations at which a nuclear power plant is proposed will be fully consdered and that ways are planned to mitigate those impacts.

#### SMRs cannot island bases.

King et. al, ‘11

[Marcus (Project Director and Research Analyst for the Environment and Energy Team at Center for Naval Analyses); LaVar Huntzinger; Thoi Nguyen, “Feasibility of Nuclear Power on U.S. Military Installations", March,

<http://www.cna.org/sites/default/files/research/Nuclear%20Power%20on%20Military%20Installations%20D0023932%20A5.pdf>]

There are several alternatives for the customer base served by a DoD nuclear power plant. The plant could be built for: • DoD as the exclusive user • Commercial users, but with DoD a priority user • Commercial users, including DoD Having DoD as the exclusive user is not practical for almost all DoD installations because even small nuclear power plants generate more power than is needed on almost all DoD installations. If a nuclear plant doesn’t operate near capacity the cost of the power it supplies increases, making the business case unattractive. Having a DoD installation, or a group of DoD installations, as a priority user would allow an SMR plant to better contribute to energy assurance for those installations served by the plant. The installations could continue to be connected to the commercial power grid. When operation of the SMR plant was interrupted for some reason, like maintenance or refueling, the commercial grid could supply the installation power. When the SMR plant is operational it could supply power, even when power from the commercial grid is not available. The principal advantages of an arrangement where DoD is among the commercial users supplied by the nuclear power plant is that it would be easier to reliably operate the plant at full capacity. If contract arrangements could give DoD installations priority access to power when there is an interruption in power supplied by the commercial grid, then DoD electrical power assurance would still be significantly improved. And the nuclear plant would have sufficient capacity to supply many other users in the vicinity of the installations as well. With a long-term power purchase agreement, this could provide reliable power at a stable cost. This kind of arrangement would almost certainly require additional distribution infrastructure and more advanced electrical network control.

#### Status quo solves islanding---the military figured out the problem and fixed it.

Aimone, 12

[9/12, Director, Business Enterprise Integration, Office of the Deputy Under Secretary of Defense (Installations and Environment), 9/12, Statement Before the House Committee on Homeland Security, Subcommittee on Cybersecurity, Infrastructure Protection and Security Technologies, http://homeland.house.gov/sites/homeland.house.gov/files/Testimony%20-%20Aimone.pdf]

DoD’s facility energy strategy is also **focused heavily on grid security** in the name of mission assurance. Although the Department’s fixed installations traditionally served largely as a platform for training and deployment of forces, in recent years they have begun to provide direct support for combat operations, such as unmanned aerial vehicles (UAVs) flown in Afghanistan from fixed installations here in the United States. Our fixed installations also serve as staging platforms for humanitarian and homeland defense missions. These installations are largely dependent on a commercial power grid that is vulnerable to disruption due to aging infrastructure, weather-related events, and potential kinetic, cyber attack. In **2008**, the Defense Science Board warned that DoD’s reliance on a fragile power grid to deliver electricity to its bases places critical missions at risk.1 Standby Power Generation **Currently**, DoD **ensures** that it can **continue mission critical activities** on base largely through its fleet of on-site power generation equipment. This equipment is **connected to essential mission systems** and automatically operates in the event of a commercial grid outage. In addition, **each installation** has standby generators in storage for repositioning as required. Facility power production specialists ensure that the generators are **primed and ready to work**, and that they are maintained and fueled during an emergency. With careful maintenance these generators can **bridge the gap for even a lengthy outage**. As further back up to this installed equipment, DoD maintains a strategic stockpile of electrical power generators and support equipment that is kept in operational readiness. For example, during Hurricane Katrina, the Air Force transported more than 2 megawatts of specialized diesel generators from Florida, where they were stored, to Keesler Air Force Base in Mississippi, to support base recovery.

#### No impact to cyberattacks – grid is stable.

Clark, MA Candidate – Intelligence Studies @ the American Military University, ‘12

[Paul, senior analyst – Chenega Federal Systems, 4/28/’12, , “The Risk of Disruption or Destruction of Critical U.S. Infrastructure by an Offensive Cyber Attack,” American Military University]

In 2003, a simple physical breakdown occurred – trees shorted a power line and caused a fault – that had a cascading effect and caused a power blackout across the Northeast (Lewis 2010). This singular occurrence has been used as evidence that the electrical grid is fragile and subject to severe disruption through cyber-attack, a disruption that could cost billions of dollars, brings business to a halt, and could even endanger lives – if compounded by other catastrophic events (Brennan 2012). A power disruption the size of the 2003 blackout, the worst in American¶ history at that time (Minkel 2008), is a worst case scenario and used as an example of the¶ fragility of the U.S. energy grid. This perceived fragility is not real when viewed in the context¶ of the robustness of the electrical grid.¶ When asked about cyber-attacks against the electrical grid in April of 2012, the¶ intelligence chief of U.S. Cyber Command Rear Admiral Samuel Cox stated that an attack was¶ unlikely to succeed because of the “huge amounts of resiliency built into the [electrical] system¶ that makes that kind of catastrophic thing very difficult” (Capaccio 2012). This optimistic view¶ is supported by an electrical grid that has proven to be robust in the face of large natural¶ catastrophes. Complex systems like the electrical grid in the U.S. are prone to failures and the¶ U.S. grid fails frequently. Despite efforts to reduce the risk out power outages, the risk is always¶ present. Power outages that affect more than 50,000 people have occurred steadily over the last¶ 20 years at a rate of 12% annually and the frequency of large catastrophes remains relatively¶ high and outages the size of the 2003 blackout are predicted to occur every 25 years (Minkel¶ 2008). In a complex system that is always at risk of disruption, the effect is mitigated by policies¶ and procedures that are meant to restore services § Marked 14:23 § as quickly as possible. The most visible of these policies is the interstate Emergency Management Assistance Compact, a legally binding¶ agreement allowing combined resources to be quickly deployed in response to a catastrophic¶ disaster such as power outages following a severe hurricane (Kapucu, Augustin and Garayev¶ 2009).¶ The electrical grid suffers service interruptions regularly, it is a large and complex system¶ supporting the largest economy in the world, and yet commerce does not collapse (Lewis 2010).¶ Despite blizzards, earthquakes, fires, and hurricanes that cause blackouts, the economy is¶ affected but does not collapse and even after massive damage like that caused by Hurricane¶ Katrina, national security is not affected because U.S. military capability is not degraded (Lewis¶ 2010).¶ Cyber-security is an ever-increasing concern in an increasingly electronic and¶ interconnected world. Cyber-security is a high priority “economic and national security¶ challenge” (National Security Council n.d.) because cyber-attacks are expected to become the¶ top national security threat (Robert S. Mueller 2012). In response to the threat Congress is¶ crafting legislation to enhance cyber-security (Brito and Watkins 2012) and the Department of¶ Homeland Security budget for cyber-security has been significantly increased (U.S. Senate¶ Committee on Homeland Security and Governmental Affairs 2012).

#### Heg is resilient – latent power.

Wolhforth, Professor of Government – Dartmouth College, ‘7

[William, ““Unipolar Stability”, Harvard International Review, Spring, http://hir.harvard.edu/articles/1611/3/]

US military forces are stretched thin, its budget and trade deficits are high, and the country continues to finance its profligate ways by borrowing from abroad—notably from the Chinese government. These developments have prompted many analysts to warn that the United States suffers from “imperial overstretch.” And if US power is overstretched now, the argument goes, unipolarity can hardly be sustainable for long. The problem with this argument is that it fails to distinguish between actual and latent power. One must be careful to take into account both the level of resources that can be mobilized and the degree to which a government actually tries to mobilize them. And how much a government asks of its public is partly a function of the severity of the challenges that it faces. Indeed, one can never know for sure what a state is capable of until it has been seriously challenged. Yale historian Paul Kennedy coined the term “imperial overstretch” to describe the situation in which a state’s actual and latent capabilities cannot possibly match its foreign policy commitments. This situation should be contrasted with what might be termed “self-inflicted overstretch”—a situation in which a state lacks the sufficient resources to meet its current foreign policy commitments in the short term, but has untapped latent power and readily available policy choices that it can use to draw on this power. This is arguably the situation that the United States is in today. But the US government has not attempted to extract more resources from its population to meet its foreign policy commitments. Instead, it has moved strongly in the opposite direction by slashing personal and corporate tax rates. Although it is fighting wars in Afghanistan and Iraq and claims to be fighting a global “war” on terrorism, the United States is not acting like a country under intense international pressure. Aside from the volunteer servicemen and women and their families, US citizens have not been asked to make sacrifices for the sake of national prosperity and security. The country could clearly devote a greater proportion of its economy to military spending: today it spends only about 4 percent of its GDP on the military, as compared to 7 to 14 percent during the peak years of the Cold War. It could also spend its military budget more efficiently, shifting resources from expensive weapons systems to boots on the ground. Even more radically, it could reinstitute military conscription, shifting resources from pay and benefits to training and equipping more soldiers. On the economic front, it could raise taxes § Marked 14:23 § in a number of ways, notably on fossil fuels, to put its fiscal house back in order. No one knows for sure what would happen if a US president undertook such drastic measures, but there is nothing in economics, political science, or history to suggest that such policies would be any less likely to succeed than China is to continue to grow rapidly for decades. Most of those who study US politics would argue that the likelihood and potential success of such power-generating policies depends on public support, which is a function of the public’s perception of a threat. And as unnerving as terrorism is, there is nothing like the threat of another hostile power rising up in opposition to the United States for mobilizing public support. With latent power in the picture, it becomes clear that unipolarity might have more built-in self-reinforcing mechanisms than many analysts realize. It is often noted that the rise of a peer competitor to the United States might be thwarted by the counterbalancing actions of neighboring powers. For example, China’s rise might push India and Japan closer to the United States—indeed, this has already happened to some extent. There is also the strong possibility that a peer rival that comes to be seen as a threat would create strong incentives for the United States to end its self-inflicted overstretch and tap potentially large wellsprings of latent power.

#### Data disproves hegemony impacts.

Fettweis, Department of Political Science at Tulane University, ‘11

[Christopher, 9/26/11, Free Riding or Restraint? Examining European Grand Strategy, Comparative Strategy, 30:316–332, EBSCO]

It is perhaps worth noting that there is no evidence to support a direct relationship between the relative level of U.S. activism and international stability. In fact, the limited data we do have suggest the opposite may be true. During the 1990s, the United States cut back on its defense spending fairly substantially. By 1998, the United States was spending $100 billion less on defense in real terms than it had in 1990. 51 To internationalists, defense hawks and believers in hegemonic stability, this irresponsible “peace dividend” endangered both national and global security. “No serious analyst of American military capabilities,” argued Kristol and Kagan, “doubts that the defense budget has been cut much too far to meet America’s responsibilities to itself and to world peace.” 52 On the other hand, if the paciﬁc trends were not based upon U.S. hegemony but a strengthening norm against interstate war, one would not have expected an increase in global instability and violence. The verdict from the past two decades is fairly plain: The world grew more peaceful while the United States cut its forces. No state seemed to believe that its security was endangered by a less-capable United States military, or at least none took any action that would suggest such a belief. No militaries were enhanced to address power vacuums, no security dilemmas drove insecurity or arms races, and no regional balancing occurred once the stabilizing presence of the U.S. military was diminished. The rest of the world acted as if the threat of international war was not a pressing concern, despite the reduction in U.S. capabilities. Most of all, the United States and its allies were no less safe. The incidence and magnitude of global conﬂict declined while the United States cut its military spending under President Clinton, and kept declining as the Bush ramped the spending back up. No complex statistical analysis should be necessary to reach the conclusion that the two are unrelated. Military spending ﬁgures by themselves are insufﬁcient to disprove a connection between overall U.S. actions and international stability. Once again, one could presumably argue that spending is not the only or even the best indication of hegemony, and that it is instead U.S. foreign political and security commitments that maintain stability. Since neither was signiﬁcantly altered during this period, instability should not have been expected. Alternately, advocates of hegemonic stability could believe that relative rather than absolute spending is decisive in bringing peace. Although the United States cut back on its spending during the 1990s, its relative advantage never wavered. However, even if it is true that either U.S. commitments or relative spending account for global paciﬁc trends, then at the very least stability can evidently be maintained at drastically lower levels of both. In other words, even if one can be allowed to argue in the alternative for a moment and suppose that there is in fact a level of engagement below which the United States cannot drop without increasing international disorder, a rational grand strategist would still recommend cutting back on engagement and spending until that level is determined. Grand strategic decisions are never ﬁnal; continual adjustments can and must be made as time goes on. Basic logic suggests that the United States ought to spend the minimum amount of its blood and treasure while seeking the maximum return on its investment. And if the current era of stability is as stable as many believe it to be, no increase in conﬂict would ever occur irrespective of U.S. spending, which would save untold trillions for an increasingly debt-ridden nation. It is also perhaps worth noting that if opposite trends had unfolded, if other states had reacted to news of cuts in U.S. defense spending with more aggressive or insecure behavior, then internationalists would surely argue that their expectations had been fulﬁlled. If increases in conﬂict would have been interpreted as proof of the wisdom of internationalist strategies, then logical consistency demands that the lack thereof should at least pose a problem. As it stands, the only evidence we have regarding the likely systemic reaction to a more restrained United States suggests that the current peaceful trends are unrelated to U.S. military spending. Evidently the rest of the world can operate quite effectively without the presence of a global policeman. Those who think otherwise base their view on faith alone.

## 2NC

### Heidegger

#### Ontology must come first – one cannot say anything about what is without already having made assumptions about the is as such

Dillon 99 [Michael, “The Scandal of the Refugee: Some Reflections on the ‘Inter’ of International Relations and Continental Thought,” in *Moral Spaces: Rethinking Ethics and World Politics*, eds. David Campbell and Michael Shapiro (Minneapolis: University of Minnesota Press, 1999) pg. 97-99]

As Heidegger-himself an especially revealing figure of the deep and mutual implication of the philosophical and the political-never tired of pointing out, the relevance of ontology to all other kinds of thinking is fundamental and inescapable. For one cannot say anything about that is, without always already having made assumptions about the is as such. Any mode of thought, in short, always already carries an ontology sequestered within it. What this ontological turn does to other-regional-modes of thought is to challenge the ontology within which they operate. The implications of that review reverberate through the entire mode of thought, demanding a reappraisal as fundamental as the reappraisal ontology has demanded of philosophy. With ontology at issue, the entire foundations or underpinnings of any mode of thought are rendered problematic. This applies as much to any modern discipline of thought as it does to the question of modernity as such, with the exception, it seems, of science, which, having long ago given up the ontological questioning of when it called itself natural philosophy, appears now, in its industrialized and corporatized form, to be invulnerable to ontological perturbation. With its foundations at issue, the very authority of a mode of thought and the ways in which it characterizes the critical issues of freedom and judgment (of what kind of universe human beings inhabit, how they inhabit it, and what counts as reliable knowledge for them in it) is also put in question. The very ways in which Nietzsche, Heidegger, and other continental philosophers challenged Western ontology, simultaneously, therefore reposed the fundamental and inescapable difficulty, or *aporia*, for human being of decision and judgment. In other words, whatever ontology you subscribe to, knowingly or unknowingly, as a human being you still have to act. Whether or not you know or acknowledge it, the ontology you subscribe to will construe the problem of action for you in one way rather than another. You may think ontology is some arcane question of philosophy, but Nietzsche and Heidegger showed that it intimately shapes not only a way of thinking, but a way of being, a form of life. Decision, a fortiori political decision, in short, is no mere technique. It is instead a way of being that bears an understanding of Being, and of the fundaments of the human way of being within it. This applies, indeed applies most, to those mock-innocent political slaves who claim only to be technocrats of decision making. While Certain continental thinkers like Blumenberg and Lowith, for example, were prompted to interrogate or challenge the modern’s claim to being distinctively “modern,” and others such as Adorno questioned its enlightened credentials, philosophers like Derrida and Levinas pursued the metaphysical implications (or rather the implications for metaphysics) of the thinking initiated by Kierkegaard, as well as by Nietzsche and Heidegger. The violence of metaphysics, together with another way of thinking about the question of the ethical, emerged as the defining theme of their work. Other, notably Foucault, Deleuze, Lyotard, Baudrillard, and Bataille turned the thinking of Nietzsche and Heidegger into a novel kind of social and political critique of both the regimes and the effects of power that have come to distinguish late modern times; they concentrated, in detail, upon how the violence identified by these other thinkers manifested itself not only in the mundane practices of modern life, but also in those areas that claimed to be most free of it, especially the freedom and security of the subject as well as its allied will to truth and knowledge. Questioning the appeal to the secure self-grounding common to both its epistemic structures and its political imagination, and in the course of reinterrogating both the political character of the modern and the modern character of the political, this problematization of modernity has begun to prompt an ontopolitcally driven reappraisal of modern political thought.

#### The role of the ballot is to endorse the team with the best ontological relationship

#### We control the root cause - there is no end to technological thought and rationale – it will continue to find more destructive ways to control life and death, eradicating all value to life and making their impacts inevitable

Beckman 2k [Tad: Emeritus Professor of Philosophy, Humanities and Social Sciences at Harvey Mudd College, “Martin Heidegger and Environmental Ethics,” http://www2.hmc.edu/~tbeckman/personal/Heidart.html].

The threat of nuclear annihilation is, currently, the most dramatic and ironic sign of technology's "success" and of its overwhelming power; mass itself has been grasped as a standing-reserve of enormous energy. On the one hand we consider ourselves, rightfully, the most advanced humans that have peopled the earth but, on the other hand, we can see, when we care to, that our way of life has also become the most profound threat to life that the earth has yet witnessed. [(14)](http://thuban.ac.hmc.edu/%7Etbeckman/personal/Heidart.html#N_14_) Medical science and technology have even begun to suggest that we may learn enough about disease and the processes of aging in the human body that we might extend individual human lives indefinitely. In this respect, we have not only usurped the gods' rights of creation and destruction of species, but we may even usurp the most sacred and terrifying of the gods' rights, the determination of mortality or immortality. The gods, it is true, have been set aside in our time; they are merely antiquated conceptions. The gods, it is true, have been set aside in our time; they are merely antiquated conceptions. The "withdrawal of the gods" is a sign of our pervasive power and our progressive "ego-centrism."**The human ego stands at the center of everything and, indeed, sees no other thing or object with which it must reckon on an equal footing. We have become alone in the universe in the most profound sense. Looking outward, we see only ourselves in so far as we see only objects standing-in-reserve for our dispositions.** It is no wonder that we have "ethical problems" with our environment because the whole concept of the environment has been profoundly transformed. **A major portion of the environment in which modern Westerners live, today, is the product of human fabrication and this makes it ever more difficult for us to discover a correct relationship with that portion of the environment that is still given to us. It is all there to be taken, to be manipulated, to be used and consumed,** it seems. But what in that conception limits us or hinders us from using it in any way that we wish? **There is nothing that we can see today that really hinders us from doing anything with the environment, including if we wish destroying it completely and for all time.** This, I take it is the challenge of environmental ethics, the challenge of finding a way to convince ourselves that there are limits of acceptable human action where the environment is involved. But where can we look for the concepts that we need to fabricate convincing arguments?

#### Counter Interpretation:

#### The affirmative should have to justify their ontology. The role of the ballot is to endorse the team with the best ontological relationship

#### Reasons to prefer

#### Better education – our interpretations allow us to learn about the ontological foundations of policies in order to better understand political action.

#### Politics - conventional political theories that attempt to render the world calculable by inescapable simplification erase the possibility of truth and necessitate violence

Dillon 96 [Michael, professor Politics and International Relations at the University of Lancaster, *The Politics of Security*,pp. 75-76]

I recognise the danger that this movement of mine could be taken to excuse paying insufficiently close attention to Heidegger’s texts, or of failing to understand enough about what Heidegger has tried to say, and of similarly failing to do justice to these other complex and important thinkers. Such a danger will always exist, of course, especially when dealing with a thinker who is not only as difficult and subtle, not to say obscure, as Heidegger, but whose thought also evolved in important ways, exciting powerful responses from other eminent philosophers. Although I may very well fail on all these counts I do not intend, however, to take any liberties either with Heidegger or with the others. Rather, I am mindful, here, of Robert Bernasconi’s wise observation. Issued specifically in respect of Heidegger, it has a certain relevance to these other thinkers as well. ‘One cannot readily say what Heidegger says’, Robert Bernasconi notes, for the simple reason that Heidegger overcomes the ‘what’ of essentia by transforming the way of saying. Hence all writing about Heidegger should begin and end with a disclaimer. The disclaimer, in attempting to be faithful to what claimed [my emphasis] Heidegger, must at the same time disregard his warnings and lift the silence about silence.118 My object, then, is not to provide myself with excuses in advance but to explain instead both how I have tried to go about this work, and that—as I pursued what claimed my attention; specifically the aporia of obligatory freedom as it is simultaneously both disclosed and endangered through the preoccupation with security—the very path of my own thinking, as well as the content of it, began to change. ‘What happens’, Gerald Bruns asks, ‘when you try to follow Heidegger up or down one of his paths of thinking, studying him, trying out his moves, finding yourself caught up in him?’ His response seems to me to be an exemplary one. One of the things that happens, he says, ‘is that you begin to appreciate why people are careful to confine themselves to forms of mental activity that have no history’. By that he meant: purely analytical programs like formal logic, philosophy of language, linguistics, semiotics, most forms of literary criticism, perhaps most of what gets taught in school: programs you can get in and out of quickly and cleanly without the burden of having done anything more blameworthy than test, or apply, a certain method, skill, technique, or training.119 Precisely because it is so dangerous—and dangerous precisely because it is so intimately connected with history—there is often an almost desperate, and even violent, insistence that politics, too, both as a practice and as an object of study, be reduced in this way. In short, technologised. So-called political ‘realists’ and ‘idealists’ alike, for example, and for similar reasons, would reduce the political to the formulaic so as to settle its hash once and for all. I take their responses, however, to be symptomatic of a persistent and ancient desire to escape the sheer difficulty as well as the historically and singularity of the political.

#### Logical prerequisite - Ontology must come first – one cannot say anything about what is without already having made assumptions about the is as such

#### Eclipse of being is the biggest impact in the round--life has no meaning in a framework that sustains the standing reserve and denies us an authentic relationship with being

Zimmerman 94 [Michael: Professor of Philosophy at Tulane. Contesting the Earth’s Future, p.104].

Heidegger asserted that human self-assertion, combined with the eclipse of being, threatens the relation between being and human Dasein.53 Loss of this relation would be even more dangerous than a nuclear war that might "bring about the complete annihilation of humanity and the destruction of the earth."54 This controversial claim is comparable to the Christian teaching that it is better to forfeit the world than to lose one's soul by losing one's relation to God. Heidegger apparently thought along these lines: it is possible that after a nuclear war, life might once again emerge, but it is far less likely that there will ever again occur an ontological clearing through which such life could manifest itself. Further, since modernity's one-dimensional disclosure of entities virtually denies them any "being" at all, the loss of humanity's openness for being is already occurring.55 Modernity's background mood is horror in the face of nihilism, which is consistent with the aim of providing material "happiness" for everyone by reducing nature to pure energy.56 The unleashing of vast quantities of energy in nuclear war would be equivalent to modernity's slow-motion destruction of nature: unbounded destruction would equal limitless consumption. If humanity avoided nuclear war only to survive as contented clever animals, Heidegger believedwe would exist in a state of ontological damnation: hell on earth, masquerading as material paradise. Deep ecologists might agree that a world of material human comfort purchased at the price of everything wild would not be a world worth living in, for in killing wild nature, people would be as good as dead. But most of them could not agree that the loss of humanity's relation to being would be worse than nuclear omnicide, for it is wrong to suppose that the lives of millions of extinct and unknown species are somehow lessened because they were never "disclosed" by humanity.

#### 1. Logically impossible – the alternative is to refrain from enframing the resolution in a particular way in order to avoid the concealing that is innate in technological thought. Their plan is a link, and the permutation necessarily involves defending their plan as a cite for interpreting energy policy.

#### 2. The permutation is just another link. Their attempt to “solve” the problem of the K through action is another example of technological thought that kills the alts momentum

Botha 3 (Department of Philosophy University of Pretoria, South Africa, “Heidegger, technology and ecology”, South African Journal of Philosophy (2003), Vol. 22 Issue 2, 165)

Attempts to force Heidegger's ideas into a frame work of action forget his intention of escaping the wilfulness inherent to the technological attitude. He tells us explicitly that “Human activity can never directly counter this danger. Hu man achievement alone can never banish it. But human reflection can ponder the fact that all saving power must be of a higher essence than what is endangered, though at the same time kindred to it” (Heidegger 1993:399). The question asked at the beginning of this article is therefore in appropriate in the con text of Heidegger's views on technology. Heidegger wants us to respond to the question “what shall we think?” rather than “what shall we do?” Thought must first save us from our typical modes of behaving, namely those oriented towards possessive mastery, before we can move to action. Heidegger tells us that “[t]hinking does not become action only because some effect issues from it or because it is applied. Thinking acts in so far it thinks. Such action is presumably the simplest and at the same time the highest, because it concerns the relation of Being to man” (Heidegger, 1993:217). In this sense, the question of what we should do in the face of the technological crisis we are experiencing today can only be meaningful in terms of what we should think. Trying to force Heidegger's work into an “ecological” frame - work of action might convert it into the very willing which it is trying to escape. In our time, the world will remain largely technological, but we can launch an incisive critique of technology that ex poses the hegemony of its present reign. From this the saving power could grow. Admittedly, Heidegger does not give us much in terms of a political programme for change in terms of action, but in view of his definition of technology, this is war ranted.

#### 3. There is no net benefit to the permutation. The reasons their impacts matter are ethical claims that are contingent on them winning that their ontology is good, which they haven’t. That’s our Dillon evidence.

#### 4. Subordination DA: Their ontology is tied to their 1AC. The directed, goal-oriented technology of the affirmative can’t be combined with the alt’s mystical approach. Permutation just leads to more subordination

Botha 3 Catherine Frances (Department of Philosophy University of Pretoria, South Africa, “Heidegger, technology and ecology”, South African Journal of Philosophy (2003), Vol. 22 Issue 2, 165.

We can say both “yes” and “no” to technology by having an attitude of releasement to ward things. In other words, although it is crucial to perceive the danger of our technological constructions lest they dominate us, it is unnecessary to reject them completely. The alternative to be coming slaves of our own machines is not simply to become their masters. The goal is to integrate technology within a bounded worldly dwelling no longer ordered by possessive mastery. The attitude required to free ourselves from possessive mastery and achieve an appropriate relation to technology is one of awaiting and receiving, openness and releasement. Releasement towards things and open ness to the mystery grant us the possibility of dwelling in the world in a different way: a way where the mood of home lessness has been dis placed. Until this occurs, our attempts to control the products of technology will only sustain our subordination to it. The irony is that the “freedom” that has been nurtured for two and a half millennia in the West has encouraged this technological servitude.

#### Technology makes evil banal: it becomes the everyday consequence of viewing the world as standing reserve. We won’t dance around the point, violence is possible post-Aff, but inevitable in the status quo.

Szabo 2 Matt Szabo, PhD Candidate in Geography at The University of Manchester, “Managerial ecology: Zygmunt Bauman and the gardening culture of modernity,” Environments, Vol. 30, No. 3, 2002, p. proquest

However, a different perspective arises in Arendt's definition of evil as banal, which is drawn from her first hand experience at the trial of the Nazi war-criminal Adolf Eichmann. Benhabib (2000: 66) observes that Arendt was taken aback by what she later described as the sheer ordinariness of the man who had been party to such enormous crimes**: Eichmann spoke in endless cliches, gave little evidence of being motivated by a fanatical hatred of the Jews, and was most proud of being a "law-abiding citizen."** It was the shock of seeing Eichmann "in the flesh" that led Arendt to the thought that great **wickedness was not a necessary condition for the performance of (or complicity in) great crimes. Evil could take a "banal" form, as it had in Eichmann** (Benhabib 2000: 66). Bauman provides a good deal of applied thinking regarding how such 'banal' "machinery of evil" may actually function at the mundane, everyday level (see Bauman, 1994). He argues that **the Holocaust was largely enacted by regular people rather than ideologically driven, 'evil monsters'.** As Bauman (1989:26) points out, many of **the "'moral sleeping pills' made available by** modern bureaucracy and **modern technology**," as harnessed by the Nazis, **were not invented by the Nazis**. Rather**, they were** -- and still remain -- **structuring features of all modern societies**, features that many people utilise and are affected by every day of their lives. Beilharz highlights the everyday quality of modernity's "moral sleeping pills" by posing a moral question that such anaesthetics are intended to by-pass or quash: The Holocaust forced upon us this universal message: faced with a morally impossible question, what would / do? **Fascism did not result from chaos, from the heat of madness, but was administered through an impeccable, faultless and unchallenged rule of law and order. The good Nazis were**, after all, **those who** like you and me, did what was expected of them, **followed orders. If they did it, so could we** (Beilharz 2000: 98).

#### Only a god can save us – We should read our possibilities as debaters ontologically and open ourselves up to the possibility of Being revealing itself to us non-technologiclly

Heidegger and Spiegel 66. “Heidegger, Der Spiegel Interview” Philosophy Today 20 (Whiter 1976): 267-284. Scanned from Gunther Neske & Emil Kettering (eds), Martin Heidegger and National Socialism, New York: Paragon House, 1990, pp. 41-66.

SPIEGEL: You apparently see, so you have expressed it, a world movement that either brings about or has already brought about the absolute technological state? HEIDEGGER: Yes! But it is precisely the technological state that least corresponds to the world and society determined by the essence of technology. The technological state would be the most obsequious and blind servant in the face of the power of technology. SPIEGEL: Fine. But now the question of course poses itself: Can the individual still influence this network of inevitabilities at all, or can philosophy influence it, or can they both influence it together in that philosophy leads one individual or several individuals to a certain action? HEIDEGGER: Those questions bring us back to the beginning of our conversation. If I may answer quickly and perhaps somewhat vehemently, but from long reflection: Philosophy will not be able to bring about a direct change of the present state of the world. This is true not only of philosophy but of all merely human meditations and endeavors. Only a god can still save us. I think the only possibility of salvation left to us is to prepare readiness, through thinking and poetry, for the appearance of the god or for the absence of the god during the decline; so that we do not, simply put, die meaningless deaths, but that when we decline, we decline in the face of the absent god. SPIEGEL: Is there a connection between your thinking and the emergence of this god? Is there, as you see it, a causal connection? Do you think we can get this god to come by thinking? HEIDEGGER: We cannot get him to come by thinking. At best we can prepare the readiness of expectation. SPIEGEL: But can we help? HEIDEGGER: The preparation of readiness could be the first step. The world cannot be what and how it is through human beings, but neither can it be so without human beings. In my opinion that is connected to the fact that what I call “Being,” using a traditional, ambiguous, and now worn-out word, needs human beings. Being is not Being without humans being needed for its revelation, protection, and structuring. I see the essence of technology in what I call the con-struct. This name, on first hearing easily misunderstood, points, if it is properly considered, back into the innermost history of metaphysics, which still determines our existence [Dasein] today. The workings of the con-struct mean: Human beings are caught [gestellt], claimed, and challenged by a power that is revealed in the essence of technology. The experience that humans are structured [gestellt] by some-thing that they are not themselves and that they cannot control themselves is precisely the experience that may show them the possibility of the insight that humans are needed by Being. The possibility of experience, of being needed, and of being prepared for these new possibilities is concealed in what makes up what is most modern technology’s own. Thinking can do nothing more than to help humans to this insight, and philosophy is at an end. SPIEGEL: In earlier times – and not only in earlier times – it was thought that philosophy was indirectly very effective (seldom directly), that it helped new currents to emerge. Just thinking of Germans, great names like Kant, Hegel, up to Nietzsche, not to mention Marx

, it can be proved that philosophy has had, in roundabout ways, an enormous effect. Do you think this effectiveness of philosophy is at an end? And when you say philosophy is dead, that it no longer exists are you including the idea that the effectiveness of philosophy (if indeed it ever existed) today, at least, no longer exists? HEIDEGGER: I just said that an indirect, but not a direct, effect is possible through another kind of thinking. Thus thinking can, as it were, causally change the condition of the world. SPIEGEL: Please excuse us; we do not want to philosophize (we are not up to that), but here we have the link between politics and philosophy, so please forgive us for pushing you into such a conversation. You just said philosophy and the individual can do nothing except... HEIDEGGER: ... this preparation of readiness for keeping oneself open to the arrival or absence of the god. The experience of this absence is not nothing, but rather a liberation of human beings from what I called the “fallenness into beings” in Being and Time. A contemplation of what is today is a part of a preparation of the readiness we have been talking about. SPIEGEL: But then there really would have to be the famous impetus from outside, from a god or whomever. So thinking, of its own accord and self- sufficiently, can no longer be effective today? It was, in the opinion of people in the past, and even, I believe, in our opinion. HEIDEGGER: But not directly.

## 1NR

### T

#### The International Energy Agency makes this distinction specifically -- Procurement is not a financial incentive, it’s just straight up government acquisition, which avoids market links and opens the floodgates

International Energy Agency, 2010

[Policies and Measures Databases, http://www.iea.org/textbase/pm/explanation.asp]

Policy Type: The particular kind of policy instrument planned or implemented.

Education and outreach: Policies and measures designed to increase knowledge, awareness, training among relevant stakeholders or users. This can include general information campaigns, targeted training programmes, labelling schemes that provide the user information on a product’s energy usage or emissions.

Financial incentives and subsidies: Policies and measures that encourage or stimulate certain activities, behaviours or investments using financial and fiscal instruments. These include feed-in tariffs for renewable energy, rebates for the purchase of energy-efficient appliances, grants, and preferential loans and financing. They also include tax incentives, such as tax exemptions, reductions or credits on the purchase or installation of certain goods and services.

Policy processes: Refers to the processes undertaken to develop and implement policies. This generally covers strategic planning documents and strategies that guide policy development. It can also include the creation of specific bodies to further policy aims, making strategic modifications to existing policy, or developing specific programmes.

Public investment: Policies and measures guiding investment by public bodies. These include government procurement programmes (e.g. requirement to purchase energy efficient equipment and vehicles, or to source a certain percentage of energy use from renewable sources) and infrastructure investment (e.g. urban planning and transport infrastructure).

RD&D: Policies and measures for the government to invest directly in or facilitate investment in technology research, development, demonstration and deployment activities.

Regulatory instruments: Covers a wide range of instruments by which a government will oblige actors to undertake specific measures and/or report on specific information. Examples include energy performance standards for appliances, equipment, and buildings; obligations on companies to reduce energy consumption, produce or purchase a certain amount of renewable energy; mandatory energy audits of industrial facilities; requirements to report on greenhouse gas emissions or energy use.

Tradable permits: Refers to three kinds of systems – greenhouse gas (GHG) emissions trading schemes, white certificate systems stemming from energy efficiency or energy savings obligations, and green certificate systems based on obligations to produce or purchase renewable energy-sourced power (generally electricity). In GHG trading schemes, industries must hold permits to cover their GHG emissions; if they emit more than the amount of permits they hold, they must purchase permits to make up the shortfall. If they emit less, they may sell these. White certificate schemes create certificates for a certain quantity of energy saved, for example a MWh; regulated entities must submit enough certificates to show they have met energy saving obligations. Again, if they are short, this must be made-up through measures that reduce energy use, or through purchase of certificates. Green certificates refer to renewable energy certificates which represent the certified generation of one unit of renewable energy, generally one megawatt-hour (MWh). Certificates can be traded and used to meet renewable energy obligations among consumers and/or producers.

Voluntary agreement: Refers to measures that are undertaking voluntarily by government agencies or industry bodies, based on a formalised agreement. There are incentives and benefits to undertaking the action, but generally few legal penalties in case of non-compliance. The scope of the action tends to be agreed upon in concert with the relevant actors. These are often agreed to between a government and an industry body, with the latter agreeing to certain measures; for example, reporting information on energy use to the government, being subject to audits, and undertaking measures to reduce energy use.

#### Webb includes PROCUREMENT CONTRACTS because in Canada they often are given with a condition to do something else. That makes them a financial incentive. NOT the procurement, but the EXTERNAL MOTIVATION. Plus, it’s Canadian.

Webb, lecturer in the Faculty of Law at the University of Ottawa, ‘93

[Kernaghan, “Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives”, 31 Alta. L. Rev. 501 (1993) Hein Online]

At the same time, Canadian governments make use of many financial incentives to encourage private sector compliance with public policies. As used here, incentives qualify as examples of the State's "fingers." Contrary to the impression given by the strong-thumbs-no-fingers aphorism, the position taken here is that in fact there are many fingers being used by the federal government, but often they operate outside of the glare of public scrutiny and effective control. Fingers can be less clumsy than thumbs, and are capable of probing where thumbs cannot go -- for example, the federal government can 8 and has created many incentive programs which directly affect matters of provincial legislative jurisdiction9 whereas it can only establish traditional regulatory regimes in relation to federal legislative heads of power.10 Incentives often take the form of funds which have "strings attached" -- for example, in the case of certain incentive programs involving contributions11 for economic development, and procurement contracts 12 it is not uncommon to find stipulations that recipients establish employment equity plans, or meet environmental requirements.13 Certainly, incentives have been used in Canada to achieve policy objectives where it is difficult to imagine coercive sanctions being employed: for example, threats of fines or imprisonment to achieve research and development, to increase the birth rate, to stimulate the Canadian art and film sector, or mining exploration might raise hackles, yet each of these contexts attracts financial incentives.14 Moreover, just as the fingers work well in tandem with thumbs, so too it is not uncommon to find financial incentives used in conjunction with coercive instruments. For example, there are incentives to abate pollution or to hire disadvantaged groups, offered at the same time as traditional pollution control and anti-discrimination regimes are in place.15

#### The American Bar Association proves our interp is an intent to define:

Columbia Law School, 2012, Center for Climate Change Law, “State Actions on Clean Energy: A Fifty-State Survey,” <http://web.law.columbia.edu/climate-change/resources/energy-law>

The book, The Law of Clean Energy: Efficiency and Renewables (Michael B. Gerrard, ed.), to be published by the American Bar Association (published by the American Bar Association in May 2011), includes as its appendix a fifty-state survey of state actions on clean energy. Specifically, the fifty-state survey provides a brief overview of the laws and policies adopted by each state to promote energy efficiency and renewable energy. The fifty-state survey is organized into three general categories: (1) financial incentives; (2) rules and regulations; and (3) policies, plans and governmental affiliations. Financial incentives include tax benefits, loan programs, grants, and rebates. Rules and regulations include renewable portfolio standards, facility siting and permitting considerations, building codes, appliance and equipment standards, regulations regarding electricity transmission and storage, fuel standards, and government procurement requirements. Policies, plans and governmental affiliations include plans for reducing statewide greenhouse gas emissions and energy consumption, the government entities tasked with the development and administration of these clean energy initiatives, and regional memberships.

#### Opening the door to increased regulations massively explodes aff ground:

Database of State Incentives for Renewables and Efficiency 12

<http://www.dsireusa.org/glossary/>

¶ DSIRE organizes incentives and policies that promote renewable energy and energy efficiency into two general categories -- (1) Financial Incentives and (2) Rules, Regulations & Policies -- and roughly 30 specific types of incentives and policies. This glossary provides a description of each specific incentive and policy type.¶ ¶ FINANCIAL INCENTIVES (click to collapse section)¶ ¶ Corporate Tax Incentives¶ Corporate tax incentives include tax credits, deductions and exemptions. These incentives are available in some states to corporations that purchase and install eligible renewable energy or energy efficiency equipment, or to construct green buildings. In a few cases, the incentive is based on the amount of energy produced by an eligible facility. Some states allow the tax credit only if a corporation has invested a minimum amount in an eligible project. Typically, there is a maximum limit on the dollar amount of the credit or deduction. In recent years, the federal government has offered corporate tax incentives for renewables and energy efficiency. (Note that corporate tax incentives designed to support manufacturing and the development of renewable energy systems or equipment, or energy efficiency equipment, are categorized as “Industry Recruitment/Support” in DSIRE.)¶ Grant Programs¶ States offer a variety of grant programs to encourage the use and development of renewables and energy efficiency. Most programs offer support for a broad range of technologies, while a few programs focus on promoting a single technology, such as photovoltaic (PV) systems. Grants are available primarily to the commercial, industrial, utility, education and/or government sectors. Most grant programs are designed to pay down the cost of eligible systems or equipment. Others focus on research and development, or support project commercialization. In recent years, the federal government has offered grants for renewables and energy efficiency projects for end-users. Grants are usually competitive.¶ Green Building Incentives¶ Green buildings are designed and constructed using practices and materials that minimize the impacts of the building on the environment and human health. Many cities and counties offer financial incentives to promote green building. The most common form of incentive is a reduction or waiver of a building permit fee. Several organizations issue certification for green buildings, including the U.S. Green Building Council (LEED certification), the Green Building Initiative (Green Globes certification), and the NAHB Research Center (National Green Building Certification). (Note that this category includes green building incentives that do not fall under other DSIRE incentive categories, such as tax incentives and grant programs.)¶ Industry Recruitment/Support¶ To promote economic development and the creation of jobs, some states offer financial incentives to recruit or cultivate the manufacturing and development of renewable energy systems and equipment. These incentives commonly take the form of tax credits, tax exemptions and grants. In some cases, the amount of the incentive depends on the quantity of eligible equipment that a company manufactures. Most of these incentives apply to several renewable energy technologies, but a few states target specific technologies, such as wind or solar. These incentives are usually designed as temporary measures to support industries in their early years. They commonly include a sunset provision to encourage the industries to become self-sufficient.¶ Loan Programs¶ Loan programs provide financing for the purchase of renewable energy or energy efficiency systems or equipment. Low-interest or zero-interest loans for energy efficiency projects are a common demand-side management (DSM) practice for electric utilities. State governments also offer low-interest loans for a broad range of renewable energy and energy efficiency measures. These programs are commonly available to the residential, commercial, industrial, transportation, public and/or non-profit sectors. Loan rates and terms vary by program; in some cases, they are determined on an individual project basis. Loan terms are generally 10 years or less. In recent years, the federal government has offered loans and/or loan guarantees for renewables and energy efficiency projects.¶ PACE Financing¶ Property-Assessed Clean Energy (PACE) financing effectively allows property owners to borrow money to pay for renewable energy and/or energy-efficiency improvements. The amount borrowed is typically repaid over a period of years via a special assessment on the owner's property. In general, local governments (such as cities and counties) that choose to offer PACE financing must be authorized to do so by state law.¶ Performance-Based Incentives¶ Performance-based incentives (PBIs), also known as production incentives, provide cash payments based on the number of kilowatt-hours (kWh) or BTUs generated by a renewable energy system. A "feed-in tariff" is an example of a PBI. To ensure project quality, payments based on a system’s actual performance are generally more effective than payments based on a system’s rated capacity. (Note that tax incentives based on the amount of energy produced by an eligible commercial facility are categorized as “Corporate Tax Incentives” in DSIRE.)¶ Personal Tax Incentives¶ Personal tax incentives include income tax credits and deductions. Many states offer these incentives to reduce the expense of purchasing and installing renewable energy or energy efficiency systems and equipment. The percentage of the credit or deduction varies by state, and in most cases, there is a maximum limit on the dollar amount of the credit or deduction. An allowable credit may include carryover provisions, or it may be structured so that the credit is spread out over a certain number of years. Eligible technologies vary widely by state. In recent years, the federal government has offered personal tax credits for renewables and energy efficiency.¶ Property Tax Incentives¶ Property tax incentives include exemptions, exclusions, abatements and credits. Most property tax incentives provide that the added value of a renewable energy system is excluded from the valuation of the property for taxation purposes. For example, if a new heating system that uses renewable energy costs more than a conventional heating system, the additional cost of the renewable energy system is not included in the property assessment. In a few cases, property tax incentives apply to the additional cost of a green building. Because property taxes are collected locally, some states have granted local taxing authorities the option of allowing a property tax incentive for renewables.¶ Rebate Programs¶ States, utilities and a few local governments offer rebates to promote the installation of renewables and energy efficiency projects. The majority of rebate programs that support renewables are administered by states, municipal utilities and electric cooperatives; these programs commonly provide funding for solar water heating and/or photovoltaic (PV) systems. Most rebate programs that support energy efficiency are administered by utilities. Rebate amounts vary widely by technology and program administrator.¶ Sales Tax Incentives¶ Sales tax incentives typically provide an exemption from, or refund of, the state sales tax (or sales and use tax) for the purchase of a renewable energy system, an energy-efficient appliance, or other energy efficiency measures. Several states have established an annual “sales tax holiday” for energy efficiency measures by annually allowing a temporary exemption – usually for one or two days – from the state sales tax.¶ ¶ RULES, REGULATIONS & POLICIES (click to collapse section)¶ ¶ Appliance/Equipment Efficiency Standards¶ Many states have established minimum efficiency standards for certain appliances and equipment. In these states, the retail sale of appliances and equipment that do not meet the established standards is prohibited. The federal government has also established efficiency standards for certain appliances and equipment. When both the federal government and a state have adopted efficiency standards for the same type of appliance or equipment, the federal standard overrides the state standard (even if the state standard is stricter).¶ Building Energy Codes¶ Building energy codes adopted by states (and some local governments) require commercial and/or residential construction to adhere to certain energy standards. While some government entities have developed their own building energy codes, many use existing codes (sometimes with state-specific amendments), such as the International Energy Conservation Code (IECC), developed and published by the International Code Council (ICC); or ASHRAE 90.1, developed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). A few local building energy codes require certain commercial facilities to meet green building standards.¶ Energy Efficiency Resource Standards (EERS)¶ Energy efficiency resource standards (EERS) are state policies that require utilities to meet specific targets for energy savings according to a set schedule. EERS policies establish separate reduction targets for electricity sales, peak electric demand and/or natural gas consumption. In most cases, utilities must achieve energy savings by developing demand-side management (DSM) programs, which typically provide financial incentives to customers to install energy-efficient equipment. An EERS policy is sometimes coupled with a state’s renewables portfolio standard (RPS). In these cases, energy efficiency is typically included as a lower-tier resource.¶ Energy Standards for Public Buildings¶ Many states and local governments, as well as the federal government, have chosen to lead by example by requiring new government buildings to meet strict energy standards. DSIRE includes policies that have established green building standards, energy-reduction goals, equipment-procurement requirements, and/or the use of on-site renewable energy. Many of these policies require that new government buildings (and renovated buildings, in some cases) attain a certain level of certification under the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) program. Equipment-procurement policies often mandate the use of the most efficient equipment, including equipment that meets federal Energy Star criteria. Policies designed to encourage the use of on-site renewables generally establish conditional requirements tied to life-cycle cost analysis.¶ Equipment Certification Requirements¶ Policies requiring renewable energy equipment to meet certain standards serve to protect consumers from buying inferior equipment. These requirements not only benefit consumers; they also protect the renewable energy industry by keeping substandard systems out of the market.¶ Generation Disclosure¶ Some states require electric utilities to provide their customers with specific information about the electricity that the utility supplies. This information, which generally must be shared with customers periodically, usually includes the utility's fuel mix percentages and emissions statistics. In states with restructured electricity markets, generation disclosure policies are designed to help consumers make informed decisions about the electricity and suppliers they choose. A few states that have not fully restructured their electricity markets require generation disclosure by utilities.¶ Green Power Purchasing Policies¶ Government entities, businesses, residents, schools, non-profits and others can play a significant role in supporting renewable energy by buying electricity from renewable resources, or by buying renewable energy credits (RECs). Many state and local governments, as well as the federal government, have committed to buying green power to account for a certain percentage of their electricity consumption. Green power purchases are typically executed through contracts with green power marketers or project developers, through utility green power programs, or through community aggregation.¶ Interconnection Standards¶ Interconnection standards specify the technical and procedural process by which a customer connects an electricity-generating to the grid. Such standards include the technical and contractual terms that system owners and utilities must abide by. State public utilities commissions typically establish standards for interconnection to the distribution grid, while the Federal Energy Regulatory Commission (FERC) has adopted standards for interconnection to the transmission level. Many states have adopted interconnection standards, but some states’ standards apply only to investor-owned utilities -- not to municipal utilities or electric cooperatives. (Several states have adopted interconnection guidelines, which are weaker than standards and generally apply only to net-metered systems.)¶ Line Extension Analysis¶ When a prospective customer requests electric service for a home or facility that is not currently served by the electric grid, the customer usually must pay a distance-based fee for the cost of extending power lines to the home or facility. In some cases, it is cheaper to use an on-site renewable energy system to meet a prospective customer’s electricity needs. A few states require utilities to provide information regarding renewable energy options when a line extension is requested.¶ Mandatory Utility Green Power Option¶ Several states require electric utilities to offer customers the option to buy electricity generated from renewable resources, commonly known as “green power.” Typically, utilities offer green power generated using renewable resources that the utilities own (or for which they contract), or they buy renewable energy credits (RECs) from a provider certified by a state public utilities commission.¶ Net Metering¶ For electric customers who generate their own electricity, net metering allows for the flow of electricity both to and from the customer – typically through a single, bi-directional meter. When a customer’s generation exceeds the customer’s use, electricity from the customer flows back to the grid, offsetting electricity consumed by the customer at a different time during the same billing cycle. In effect, the customer uses excess generation to offset electricity that the customer otherwise would have to purchase at the utility’s full retail rate. Net metering is required by law in most U.S. states, but these policies vary widely.¶ Public Benefit Funds¶ Most public benefit funds (PBFs) were developed by states during the electric utility restructuring era, in the late 1990s, to ensure continued support for renewable energy, energy efficiency and low-income energy programs. These funds are commonly supported through a very small surcharge on electricity consumption (e.g., $0.002/kWh). This charge is sometimes referred to as a "system benefits charge" (SBC). PBFs commonly support rebate programs, loan programs, research and development, and energy education programs.¶ Renewables Portfolio Standards (RPS)¶ Renewable portfolio standards (RPSs) require utilities to use renewable energy or renewable energy credits (RECs) to account for a certain percentage of their retail electricity sales -- or a certain amount of generating capacity -- according to a specified schedule. (Renewable portfolio goals are similar to RPS policies, but renewable portfolio goals are not legally binding.) Most U.S. states have established an RPS. The term “set-aside” or “carve-out” refers to a provision within an RPS that requires utilities to use a specific renewable resource (usually solar energy) to account for a certain percentage of their retail electricity sales (or a certain amount of generating capacity) according to a set schedule.¶ Solar & Wind Access Policies¶ Solar and wind access policies are designed to establish a right to install and operate a solar or wind energy system at a home or other facility. Some solar access laws also ensure a system owner’s access to sunlight. These laws may be implemented at both the state and local levels. In some states, access rights prohibit homeowners associations, neighborhood covenants and local ordinances from restricting a homeowner’s right to use solar energy. Easements, the most common form of solar access policy, allow for the rights to existing access to a renewable resource on the part of one property owner to be secured from an owner whose property could be developed in such a way as to restrict that resource. An easement is usually transferred with the property title. At the local level, communities use several policies to protect solar access, including solar access ordinances, development guidelines requiring proper street orientation, zoning ordinances that contain building height restrictions, and solar permits.¶ Solar & Wind Contractor Licensing¶ Some states have established a licensing process for solar-energy contractors and/or wind-energy contractors. These requirements are designed to ensure that contractors have the necessary knowledge and experience to install systems properly. Solar licenses typically take the form of either a separate, specialized solar contractor’s license, or a specialty classification under a general electrical or plumbing license.¶ Solar & Wind Permitting Standards¶ Permitting standards can facilitate the installation of wind and solar energy systems by specifying the conditions and fees involved in project development. Some local governments have adopted simplified or expedited permitting standards for wind and/or solar. “Top-of-the-stack” permitting (or fast-track permitting) saves system owners and project developers time and money. Some states have capped fees that local governments may charge for a permit for a solar or wind energy system. In addition, some states have developed (or have supported the development of) model wind ordinances for use by local governments.

#### Specifically, this interp lets in affs that completely dodge links to government alteration of energy markets, destroys core negative ground

Singh-Renewable Energy Policy Project-98 [Government Procurement to Expand PV Markets](http://www.repp.org/repp_pubs/pdf/pv4.pdf)

<http://www.repp.org/repp_pubs/articles/pv/pvs.html#4>

A good government procurement program for renewables should take into account the needs of the private market. The creation of a government market for renewables that bears no relationship to the private market eliminates the indirect, but potentially enormous economic development and environmental benefits of commercializing renewables in the private market. Too often policy efforts to create a government market have resulted in submarkets reflective of governments’ unique needs and procedures. For many PV firms, devoting substantial staff time to government contracts may detract significantly from efforts oriented to the larger private market.