## T

#### A. Interpretation – The aff has to affect both resource extraction and conversion into energy

Australian Government, Department of Climate Change and Energy Efficiency 2011 [“Energy Production and Consumption,” http://www.climatechange.gov.au/government/initiatives/national-greenhouse-energy-reporting/publications/supplementary-guidelines/energy-production-consumption.aspx]

Production of energy: in relation to a facility, means the:

1. extraction or capture of energy from natural sources for final consumption by or from the operation of the facility or for use other than in the operation of the facility
2. manufacture of energy by the conversion of energy from one form to another form for final consumption by or from the operation of the facility, or for use other than in the operation of the facility (regulation 2.23(3) NGER Regulations).

#### B. Violation – The plan only removes restrictions on coal.

#### C. Reasons to Prefer

#### 1. Predictability –

Only our interpretation guarantees link arguments to both extraction and the burning of resources to produce energy. This is crucial link ground for pollution DAs and domestic/foreign energy tradeoff DAs.

#### 2. Limits –

Requiring the aff to both extract and convert the energy is necessary to eliminate affs that only extract, like capture carbon or methane or stockpile oil as a strategic military reserve with heg advantages. Also key to prevent affs that only burn fuels like Bataille-style affs that encourage rapid consumption or R&D affs that incentivize new ways to burn the same resources.

#### D. Topicality is a voting issue for both Fairness and Educational reasons.

## CP

#### The United States Federal government should provide production tax credits for small modular reactors.

#### Production cost incentives for SMRs create a sustainable domestic industry

Rosner and Goldberg 11 (Robert (William E. Wrather Distinguished Service Professor in the Departments of Astronomy and Astrophysics and Physics) and Stephen (Special Assistant to the Director at the Argonne National Laboratory) , *Energy Policy Institute at Chicago*, “Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S.”, Technical Paper, Revision 1, November 2011) RCM

Production Cost Incentive: A production cost incentive is a performance-based incentive. With a production cost incentive, the government incentive would be triggered only when the project successfully operates. The project sponsors would assume full responsibility for the upfront capital cost and would assume the full risk for project construction. The production cost incentive would establish a target price, a so-called “market-based benchmark.” Any savings in energy generation costs over the target price would accrue to the generator. Thus, a production cost incentive would provide a strong motivation for cost control and learning improvements, since any gains greater than target levels would enhance project net cash flow. Initial SMR deployments, without the benefits of learning, will have significantly higher costs than fully commercialized SMR plants and thus would benefit from production cost incentives. Because any production cost differential would decline rapidly due to the combined effect of module manufacturing rates and learning experience, the financial incentive could be set at a declining rate, and the level would be determined on a plant-by-plant basis, based on the achievement of cost reduction targets.43 The key design parameters for the incentive include the following:¶ 1. The magnitude of the deployment incentive should decline with the number of SMR modules and should phase out after the fleet of LEAD and FOAK plants has been deployed. 2. The incentive should be market-based rather than cost-based; the incentive should take into account not only the cost of SMRs but also the cost of competing technologies and be set accordingly.¶ 3. The deployment incentive could take several forms, including a direct payment to offset a portion of production costs or a production tax credit. The Energy Policy Act of 2005 authorized a production tax credit of $18/MWh (1.8¢/kWh) for up to 6,000 MW of new nuclear power plant capacity. To qualify, a project must commence operations by 2021. Treasury Department guidelines further required that a qualifying project initiate construction, defined as the pouring of safety- related concrete, by 2014. Currently, two GW-scale projects totaling 4,600 MW are in early construction; consequently, as much as 1,400 MW in credits is available for other nuclear projects, including SMRs.¶ The budgetary cost of providing the production cost incentive depends on the learning rate and the market price of electricity generated from the SMR project. Higher learning rates and higher market prices would decrease the magnitude of the incentive; lower rates and lower market prices would increase the need for production incentives. Using two scenarios (with market prices based on the cost of natural gas combined-cycle generation) yields the following range of estimates of the size of production incentives required for the FOAK plants described earlier. For a 10% learning rate,¶ 􏰂 Based on a market price of $60/MWh44 (6¢/kWh), the LEAD plant and the subsequent eight FOAK plants would need, on average, a production credit of $13.60/MWh (1.4¢/kWh), 24% less than the $18 credit currently available to renewable and GW-scale nuclear technologies. (The actual credit would be on a sliding scale, with the credit for the LEAD plant at approximately $31/MWh, or 3.1¢/kWh, declining to a credit of about $6/MWh, or 0.6¢/kWh, by the time of deployment of FOAK-8). The total cost of the credit would be about $600 million per year (once all plants were built and operating).¶ If the market price were about $70/MWh (7¢/kWh), the LEAD and only four subsequent FOAK plants would require a production incentive. In this case, the average incentive would be $8.40/MWh (0.8¢/kWh), with a total cost of about $200 million per year.¶ Higher learning rates would drive down the size of the production incentive. For example, at a 12% learning rate,¶ 􏰂 At a market price of $60/MWh (6¢/kWh), the LEAD and the subsequent five FOAK plants would require a production incentive, with an average incentive level of about $15/MWh (1.5¢/kWh). Total annual cost (after all plants are in full operation) would be about $450 million per year.¶ 􏰂 At a market price of $70/MWh (7¢/kWh), the LEAD and three FOAK plants would require a production incentive averaging $9.00/MWh (0.9¢/kWh, half of the current statutory incentive), with a total annual cost of about $170 million per year.¶ The range of costs for the production incentive illustrates the sensitivity of the incentive level to the learning rate and the market price of electricity. Thus, efforts to achieve higher learning rates, including fully optimized engineering designs for the SMRs and the manufacturing plant, as well as specially targeted market introduction opportunities that enable SMRs to sell electricity for higher priced and higher value applications, can have a critical impact on the requirements for production incentives. The potential size of the incentive should be subject to further analysis as higher quality cost estimates become available.

**Unbalanced dependence on natural gas will compromise energy security and economic growth – increased development of nuclear energy is key**

**Whitman ’12** – former EPA administrator and New Jersey governor, co-chair of the Clean and Safe Energy Coalition which promotes the inclusion of nuclear power as part of a clean energy portfolio (Christine Todd, “It's dangerous to depend on natural gas”, May 9, <http://tech.fortune.cnn.com/2012/05/09/christine-whitman-nuclear-energy/>, CMR)

FORTUNE -- The United States needs an "all of the above" energy strategy that focuses on low-carbon electricity sources that will lower energy costs, reduce dependency on foreign fuel sources and promote clean electricity. This is a prudent strategy to help drive American manufacturing and transportation networks of the future. Most importantly, this approach can put the country on a **sustainable path toward long-term economic growth**.¶ While today's rock-bottom natural gas prices are attractive, an unbalanced dependence on natural gas in the electricity sector would **put Americans at risk**, both economically and in terms of longer term energy security.¶ While many look at energy prices from today's lens, successful energy policy requires a long view that promotes **fuel diversity** but doesn't pick technology winners; it preserves our air, land and water and is affordable for consumers.¶ We need only look at the **volatile history** of natural gas prices. Consider the shift from the low, stable prices of the 1990s to the record-high rates and wild supply fluctuations of the mid-2000s.¶ We should take advantage of our domestic energy resources, recognizing that today's natural gas market is still vulnerable. The present oversupply of natural gas opens opportunities for exports into foreign markets at prices two-to-three times higher. If demand from other countries increases as they meet growing energy demand, it will cause our prices to align with higher world prices.¶ During my tenure as governor of a state that relies heavily on nuclear energy, I can attest to the cost effectiveness of nuclear fuel and the protection it offers against price spikes in natural gas or future environmental controls such as a cost on carbon. Nuclear energy doesn't emit any greenhouse gases or controlled pollutants while producing power and it is affordable, predictable and efficient. Moreover, a nuclear power plant with a footprint of one square mile generates the same amount of energy as 20 square miles of solar panels or 2,400 wind turbines spread out across 235 square miles.¶ Uranium fuel is abundant and costs an average of 2.14 cents per kilowatt-hour, compared to 4.86 cents per kilowatt-hour for natural gas. A nuclear plant typically generates electricity at 90 percent capacity—an electric sector best and twice that of combined cycle natural gas plants at 40 to 45 percent capacity.¶ Clean energy production costs, which include fuel, operations and maintenance, run nearly equal for nuclear and natural gas. A new nuclear plant with state or federal support can generate power at $84-$91 per megawatt-hour with zero carbon emissions. Natural gas plants produce power at today's gas prices for $56-$71 per megawatt-hour, but still emit greenhouse gases at about half the rate of coal plants. Assuming a carbon price of $30 per ton, natural gas power generation costs rise to about $74-$89 per megawatt-hour.¶ At Fortune's Brainstorm Green conference, I noted a March 2012 Gallup poll that found 57% of Americans support nuclear energy.¶ This support reflects the momentum behind nuclear energy's expansion, including recent U.S. Nuclear Regulatory Commission approval of four reactors in Georgia and South Carolina.¶ New large-scale electricity is needed today in the fast-growing Southeast electric grid because of business expansion and population growth. These new reactors will serve the needs of 3 million homes while creating thousands of high-paying jobs. On average, a nuclear facility creates up to 3,500 construction jobs and 400 to 700 operation positions.¶ According to the Bureau of Labor Statistics, nuclear energy accounted for 54% of green jobs in the utility sector in 2010, supplying the most green goods-and-services jobs—35,800—in private sector electricity generation. For example, 90% of the components for the Westinghouse reactors being built in Georgia and South Carolina will be manufactured domestically.¶ As the dash to gas accelerates across America, I am encouraged by the support from government and industry leaders for nuclear energy as part of a diverse electricity supply. Secretary of Energy Steven Chu recently restated the administration's support for nuclear energy to be developed alongside renewable energy sources and natural gas. Kevin Marsh, president and CEO of Columbia, S.C.-based SCANA, which is developing two advanced designed Westinghouse reactors, said a **balanced energy portfolio** is best. "You don't want to be all gas, all nuclear or all coal."¶ Fuel diversity is one of the great strengths of the United States' electric supply system, and we must be mindful of that lesson. In the coming years, we will need hundreds of new power plants from a variety of fuel sources along with significant investment in the smart grid that will move that power to homes, businesses and an evolving electrified transportation system. Nuclear energy is **the only** large-scale, carbon-free electricity source, and it must be among these energy choices if we are to secure a safe and sustainable portfolio of energy resources.

**Balanced energy portfolio is key to the electric grid**

**Hart ’12** (Kathleen, “Duke CEO warns against 'all gas, all the time' for electric generation”, April 11, <http://www.snl.com/Interactivex/article.aspx?CdId=A-14623524-13105>, CMR)

Warning against the use of "all gas, all the time" for electricity generation, Duke Energy Corp. Chairman, President and CEO Jim Rogers said a balance of natural gas, coal, nuclear power, renewables and energy efficiency will be crucial to maintaining the **affordability** and **reliability** of the U.S. electric grid.¶ "Our greatest challenge as an industry is to avoid all gas, all the time, because it's very cheap today," Rogers said at an April 11 Energy for Tomorrow conference sponsored by The New York Times. "I think this is the first time in my career that our gas units are dispatching after nuclear and before all our coal plants. … That's based on price, because gas prices are so low."¶ Rogers noted that "tremendous inventories" of coal are building up in the PJM Interconnection LLC and Midwest ISO markets as natural gas is being burned on a regular basis for power generation. When asked what will happen to all this coal, Rogers responded, "I guess we'll be exporting it to China, maybe one answer."¶ The challenge for the United States is to keep nuclear and coal in the electricity generation mix, Rogers said. He predicted that "between now and 2030, you'll see electricity generated from gas be equal to coal in megawatt-hours. You're going to see that transition occur over the next 20 years."¶ Because natural gas is so cheap today, selling in the $2/MMBtu range, regulators, particularly in regulated states, will likely push for "all gas, all the time," rather than putting an emphasis on new nuclear plants or wind, solar power and other renewables, Rogers said. "When gas is that cheap, there's no need for renewables. You just build a gas unit."¶ Rogers noted that U.S. electric utility companies are in the position of having "to remake our entire generation fleet over the next 40 years. We have a blank sheet of paper, and so the question is, 'What do we build?'" He argued in favor of maintaining a **balanced mix** of generation sources. "The 'Holy Grail' for our industry is all of the above. We've got to have all of them. … It would be **a mistake** for our country [to build] nothing but gas over the next two decades, as we have in the last two. Almost 90% of what we've built in the last two decades has been gas."¶ Rogers predicted that at some point, the United States is going to address the carbon dioxide emissions that are widely believed to be causing global warming. "My preference has always been for cap-and-trade for a number of reasons, including the equity of such a system," he said. However, even though Congress has not yet passed legislation aimed at cutting CO2 emissions from power plants and other sources of greenhouse gases, Rogers said he assumes that ultimately there will be a price on carbon. "We know, over time, people in this country will recognize this is an issue and address the issue. Will it get done in the next session of Congress? Not clear. I'm not sure it gets done in the next presidential term."

## Elections

#### 1. Obama winning – swing state polls and voters like his policies so far

Bowen 9/20 (Robert Bowen¶ Economic Policy writer for the Examiner¶ Currently a businessman, Robert Bowen served in the Colorado legislature in the 1980s as a moderate Democrat. He was also appointed by three different governors to serve on various boards and commissions, “New Fox News poll released Thursday shows Obama winning 3 key swing states” 2012, http://www.examiner.com/article/new-fox-news-poll-released-thursday-shows-obama-winning-3-key-swing-states)

Despite two re-set buttons, Mitt Romney’s campaign continues to back slide. The latest bad news comes from the Fox News poll for the crucial states of Ohio, Florida, and Virginia. The poll was released Thursday, and it is not good news for Romney. The results were confirmed by 3 other polls this week.¶ According to Fox News, Obama tops Romney by seven percentage points among likely voters in both Ohio (49-42 percent) and Virginia (50-43 percent). In Florida, the president holds a five-point edge (49-44 percent). Obama’s lead is just outside the poll’s margin of sampling error in Ohio and Virginia, and within the margin of sampling error in Florida.¶ .¶ The poll shows that majorities of voters are unhappy with how things are going in the country, yet in all three states more say they trust Obama than Romney to improve the economy. It was not asked in this poll, but in others, more voters still blame Bush and Republicans for the bad economy than Obama.¶ Likewise, in each state more voters believe the Obama administration’s policies have helped rather than hurt the economy although the margins are small. They favor Obama by two points in Florida, three points in Ohio, and five points in Virginia.

#### 2. Bi-partisan opposition to coal

Civil Society Institute 12 (Civil Society Institute, "PARTISAN DIVIDE" ON ENERGY ISSUES IS A MYTH, STRONG BIPARTISAN SUPPORT SEEN FOR SHIFT TO CLEANER ENERGY,” http://www.civilsocietyinstitute.org/media/042512release.cfm)ip

The common wisdom is wrong: There is no political "fault line" that divides Americans along party lines when it comes to clean energy issues and solutions. Majorities of Republicans, Independents and Democrats agree that the United States should move away from its reliance on dirty energy sources that foul the air and water and toward a future that makes greater use of clean energy sources, according to a major new ORC International survey conducted for the nonprofit and nonpartisan Civil Society Institute (CSI).¶ A key finding: More than three out of four Americans (76 percent) - including 58 percent of Republicans, 83 percent of Independents, and 88 percent of Democrats -- think that the United States should move to a sustainable energy future through "a reduction in our reliance on nuclear power, natural gas and coal, and instead, launch a national initiative to boost renewable energy and energy efficiency."¶ However, the bipartisan support for clean energy does not mean that Americans think that Washington, D.C., is on the same page with them. More than three out of four Americans (77 percent) - including 70 percent of Republicans, 76 percent of Independents, and 85 percent of Democrats -- believe that "the energy industry's extensive and well-financed public relations, campaign contributions and lobbying machine is a major barrier to moving beyond business as usual when it comes to America's energy policy."¶ As a result, more than eight out of 10 Americans (83 percent) - including 69 percent of Republicans, 84 percent of Independents, and 95 percent of Democrats -- agree with the following statement: "The time is now for a new, grassroots-driven politics to realize a renewable energy future. Congress is debating large public investments in energy and we need to take action to ensure that our taxpayer dollars support renewable energy-- one that protects public health, promotes energy independence and the economic well being of all Americans."¶ Pam Solo, founder and president, Civil Society Institute, said: "Our survey is a call to action: Americans across the political spectrum think that it is time for decisive action toward a renewable energy future that will protect public health and provide reliable and cost effective energy. They are ready for leadership and, when offered choices in energy futures, choose an energy path that will protect public health and not sacrifice the quality of our air and water. Americans believe the partisan gridlock can only be challenged by a grassroots-driven process that challenges the undue political influence of the fossil fuel and nuclear power interests."¶ Heather White, general counsel, Environmental Working Group, said: "Dirty energy companies and their lobbyists like to marginalize those of us who are working towards a cleaner energy future for the U.S. But the verdict of this new survey is clear: We are the majority, not the 'fringe' when it comes to how Americans of all political leanings view energy issues. The truth is that those who are clinging to America's dirty energy past are the people who are way out of step with the American political mainstream. The survey shows that Republicans, Democrats and Independents can sit down and hammer out a U.S. energy future that makes sense; it's just that major energy companies are doing everything they can to keep common sense from prevailing."¶ Conducted March 22-25, 2012, the new ORC International survey of 1,019 Americans shows that:¶ About two out of three Americans (66 percent) - including 58 percent of Republicans, 65 percent of Independents, and 75 percent of Democrats -- agree that the term "'clean energy standard' should not be used to describe any energy plan that involves nuclear energy, coal-fired power, and natural gas that comes from hydraulic fracturing, also known as 'fracking'."

#### 3. Job approval ratings are key to the election

Cook 11 (The National Journal Political Analyst, Charlie, October 27, “Underwater,” <http://www.nationaljournal.com/columns/cook-report/the-cook-report-obama-underwater-20111027>, d/a 7-20-12, ads)

The best barometer of how a president is going to fare is his approval rating, which starts taking on predictive value about a year out. As each month goes by, the rating becomes a better indicator of the eventual results. Presidents with approval numbers above 48 to 50 percent in the Gallup Poll win reelection. Those with approval ratings below that level usually lose. If voters don’t approve of the job you are doing after four years in office, they usually don’t vote for you. Of course, a candidate can win the popular vote and still lose the [Electoral College](http://www.nationaljournal.com/columns/cook-report/the-cook-report-obama-underwater-20111027). It happened to Samuel Tilden in 1876, Grover Cleveland in 1888, and Al Gore in 2000. But the popular votes and the Electoral College numbers usually come down on the same side.

#### 4 Romney will bomb Iran

Tilford 12 (Robert, Military Affairs writer for the ExaminerAugust 25th, “Romney promises the American people war if elected” http://www.examiner.com/article/romney-promises-the-american-people-war-if-elected)

U.S. presidential candidate from the Republican Party Mitt Romney is promising the American people war if elected.¶ Romney told CBS news he'd be willing to go to war to stop Iran from "becoming nuclear” (see article: Romney Ready to Invade Syria, Strike Iran's Nuclear Program http://www.novinite.com/view\_news.php?id=142607 ).¶ "No question in my view that we can put all manner of pressure on the regime that's there, but they have to also know that a military option is one which we'd be willing to consider if they do not take action to dissuade a course towards nuclearization," Romney said of Iran.¶ On Face the Nation on Sunday, Mitt Romney said that if elected president “he wouldn't have to get congressional permission for a military strike on Iran” – which, of course would violate the U.S. Constitution.

#### 5. Attacking Iran causes full-scale war with Russia

Conway 12 January 17, 2012 Alvin Conway Author, blogger he cites Russia’s former ambassador to NATO and the Arab Times “Iranian Crisis: escalating series of troubling events sliding world towards war” <http://theextinctionprotocol.wordpress.com/2012/01/17/iranian-crisis-escalating-series-of-troubling-events-sliding-world-towards-war/>

Russian response could lead to WWIII: Russia would regard any military intervention linked to Iran’s nuclear program as a threat to its own security, Moscow’s departing ambassador to NATO warned on Friday. “Iran is our neighbor,” Dmitry Rogozin told reporters in Brussels. “And if Iran is involved in any military action, it’s a direct threat to our security.” –Arab Times

#### 6. US-Russia war is the only scenario for nuclear extinction

Bostrom 2 Nick Bostrom Professor, Faculty of Philosophy, Oxford University“Existential Risks” Journal of Evolution and Technology, Vol. 9, No. 1 (2002). <http://www.nickbostrom.com/existential/risks.html>

A much greater existential risk emerged with the build-up of nuclear arsenals in the US and the USSR. An all-out nuclear war was a possibility with both a substantial probability and with consequences that might have been persistent enough to qualify as global and terminal. There was a real worry among those best acquainted with the information available at the time that a nuclear Armageddon would occur and that it might annihilate our species or permanently destroy human civilization.[4] Russia and the US retain large nuclear arsenals that could be used in a future confrontation, either accidentally or deliberately. There is also a risk that other states may one day build up large nuclear arsenals. Note however that a smaller nuclear exchange, between India and Pakistan for instance, is not an existential risk, since it would not destroy or thwart humankind’s potential permanently. Such a war might however be a local terminal risk for the cities most likely to be targeted. Unfortunately, we shall see that nuclear Armageddon and comet or asteroid strikes are mere preludes to the existential risks that we will encounter in the 21st century.

## Case

### Power Grid

#### MATS good – Jobs, Clean air, and production levels stay same

Kraft 12, professor emeritus of environmental studies at the University of Wisconsin – GB, 2k12¶ (Michael Kraft, SouthCoastToday, Pro&Con: Rules will create jobs, clean air and modernize outmoded utilities, <http://www.southcoasttoday.com/apps/pbcs.dll/article?AID=/20120804/OPINION/208040317>) SVK

There is great deal of confusion about new EPA regulations affecting coal-fired power plants, and also opposition to regulations that could lead to plant closings or loss of jobs.¶ Yet, as the business community has argued for years, the merits of regulatory proposals must be judged by comparing their overall benefits and costs to society and by focusing on only some economic effects they might have.¶ Let's consider some facts:¶ First, the Obama administration is not advocating the closure of all coal-fired power plants. It has proposed new public health standards in response to court mandates, and, yes, some could lead to closure of older, inefficient plants.¶ One of these standards addresses how much toxic air pollutants, such as mercury, can be released from coal-burning plants. Another sets limits on "cross-state pollution," such as fine particles, nitrogen oxides and sulfur dioxide, generated by these plants that also affect public health.¶ Actions to lower these emissions have been debated since 1990 when Congress authorized the EPA to regulate them. The Obama rules, issued in 2011 under court order, require more extensive reductions than comparable rules under the George W. Bush administration that federal courts in 2008 found to be unacceptably weak.¶ Second, these new regulations take effect this year, and they clarify what is expected of electric utilities after years of uncertainty. This is a positive development for the industry.¶ Third, the EPA anticipates that most plants can meet the standards using available technology, and that these changes are likely to create tens of thousands of jobs in the construction and pollution-control industries. The rules also will improve labor productivity throughout the economy because fewer days will be lost to respiratory illnesses.¶ Let's put some numbers on these benefits. EPA reports that each year these two regulations together would prevent as many as 18,000 to 46,000 premature deaths, 540,000 asthma attacks, 20,000 heart attacks, 25,000 hospital and emergency room visits, and 2 million missed work or school days, while providing important health protection for children and older Americans.¶ Using standard economic analysis, the agency values these benefits at between $150 billion and $380 billion a year; they clearly exceed the estimated $10 billion annual costs of compliance for the industry. Even if one quarrels with the accuracy of these estimates, it is apparent that the health benefits are much greater than the costs to utilities.¶ In a separate and more controversial proposal, the EPA seeks to set the first limits on greenhouse gas emissions from new power plants, an action required under a 2007 Supreme Court decision. The high court ruled that under the Clean Air Act the agency must regulate the release of greenhouse gases if they endanger the public welfare, which they do.¶ The Obama administration has long preferred a legislative solution, such as a cap-and-trade policy, over regulation, but Congress could not agree on such a policy. Now the administration is forced to use regulation.¶ The proposed New Source Performance Standards are indeed likely to end new construction of conventional coal-fired power plants as utilities will choose natural gas over coal or eventually adopt carbon capture technology. However, this new rule does not affect existing facilities, and new plants will have years to comply.¶ Some utilities do plan to shut down coal-fueled boilers at existing plants. This makes economic sense given the abundance and low cost today of cleaner natural gas.¶ Critics in Congress and elsewhere have demanded that the EPA back off, but they exaggerate the costs and ignore the enormous benefits for public health.¶ It's time for the electrical generating industry to modernize its plants and give us the clean energy we deserve in the 21st century. It should not continue to use outmoded and dirty technologies to produce electricity.

#### MATS has beneficial health and economic impacts.

Weiss 12 and Weidman June 2012 (Daniel J. and Jackie, They Fought the Law: Big Utilities Sue the EPA and Lobby the Senate to Stop Public Health Protection, Center for American Progress, June 2012, http://www.americanprogress.org/issues/2012/06/pdf/big\_utilities.pdf, da 8-4-2012) PC

The Mercury and Air Toxics Standards would require steep reductions of mercury, lead, ¶ arsenic, and other toxic pollutants. Coal-fired power plants are the “largest human-caused ¶ source of mercury emissions in the United States,” according to Senate testimony by Dr. ¶ Jerome Paulson of the American Academy of Pediatrics. These contaminants are linked to ¶ birth defects, brain damage, learning disabilities, cancer, and other serious ailments. ¶ Mercury is so toxic that small amounts found in fish can pass through women that eat them, ¶ harming their children. Forty-eight states have issued fish consumption advisories warning ¶ pregnant women, nursing mothers, children, and women of a childbearing age to limit or ¶ avoid consumption of certain fish species that are prone to mercury contamination. ¶ The EPA predicts that the mercury and air toxics reductions—which don’t take effect ¶ until 2015, with a possible extension to 2016—will save 11,000 lives annually and ¶ prevent more than 100,000 asthma and heart attacks yearly. These health improvements ¶ will provide net economic benefits of up to $80 billion annually. ¶ On top of these benefits, investments in the manufacturing, installation, and operation ¶ of pollution-control equipment to clean up these pollutants will create jobs. An analysis ¶ from the Economic Policy Institute, or EPI, found that the Mercury and Air Toxics Rule ¶ will have a “positive net impact on overall employment” by creating 49,500 direct jobs ¶ by 2015. EPI concluded that “by balancing benefits to health against costs of compliance—the toxics rule is a clear win for Americans.”

#### Blackouts are inevitable- there is no way to stop them

**Fairley 2003** (Peter, Spectrum magazine. “The Unruly Power Grid” http://www.spectrum.ieee.org/print/4195)

The 14 August 2003 blackout may have been the largest in history, zapping more total wattage and affecting more customers than any before, but if history is any guide, it won't be the last. "These kinds of outages are consistent with historical statistics, and they'll keep happening," says John Doyle, professor of control and dynamical systems, electrical engineering, and bioengineering at the California Institute of Technology in Pasadena. "I would have said this one was overdue." "We will have major failures," agrees IEEE Fellow Vijay Vittal, an electrical engineering professor at Iowa State University in Ames, who is an expert on power system dynamics and control. "There is no doubt about that."

#### Blackouts are not a relevant economic statistic.

Uchitelle 3 (August 16, International Herald Tribune, http://query.nytimes.com/gst/fullpage.html?res=9C00E2DB1530F935A2575BC0A9659C8B63)

''Blackouts are economically like snowstorms,'' said Mark M. Zandi, the chief economist at Economy.com, referring to the 1965 and 1977 power failures, as well as this latest one. ''They are a nuisance, but not a measurable one in the statistics that record the year's economic activity.'' Airlines, restaurants and retail stores have clearly been hurt. But for the economy as a whole, blackouts and snowstorms mostly delay economic activity and rearrange it, taking from one sector and giving to another, economists say. For every suit not sold at Saks, a generator may be sold at Lowe's to someone newly interested in protection from the next blackout. The lost power closed retail stores and halted Internet shopping, canceling purchases or delaying them until next week or next month. The same thing happened after the blizzard in the Northeast on Feb. 17, which was the Washington's Birthday holiday, one of the biggest shopping days of the year. The lost business was enough to make national retail sales for February dip by $4.3 billion. But in March they rebounded, rising by $6.3 billion. Much of the revenue from canceled airline flights is recovered; the disappointed ticketholders eventually travel. Their tickets are mostly ''prebooked and nonrefundable,'' said Robert W. Mann, an aviation industry consultant based in Port Washington, N.Y. What the airlines do not recover, though, are the considerable sums for hotel rooms and meals for passengers whose flights are canceled, Mr. Mann said. Restaurants and theaters forced to close suffer a similar loss in revenue. It may be partly offset in several ways. Thousands of police officers, for example, will get handsome overtime checks, which they will spend, said Lee Price, director of research at the Economic Policy Institute. Spending is also likely to rise for flashlights and batteries, and for improvements to the nation's power grid. ''It is a wash, and you really cannot see it in the aggregate statistics,'' Mr. Price said. Or as Chris Varvares, the president of Macroeconomic Advisers, a St. Louis consulting and forecasting firm, put it: ''The blackout is going to be lost in the rounding.''

#### New Tech solves- multiple responses available to grid collapse

**Business Wire 2001** (Dec. 17. “Innovative technologies can improve national security; optimal technologies software able to make nation’s power grid more secure” written by business editors/high-tech and energy writers. http://findarticles.com/p/articles/mi\_m0EIN/is\_2001\_Dec\_17/ai\_80858553)

Optimal Technologies announced this week the ability to improve national security with breakthrough electric power system technologies. If one part of a power grid were to fail due to intentional disruption -- or accident, operating error, or natural disaster -- Optimal's tools could allow multiple responses to avoid grid collapse, including automated recontrolling of key connections, rerouting of power flows, and precise management of loads. Optimal's new Aempfast(TM) (pronounced aim-fast) software, now being tested, has the unique ability to "see" the power grid as a whole and in great detail. Aempfast can swiftly find blockages in power flow, identify and direct system adjustments eliminating the congestion points, and reroute power -- in seconds, as opposed to hours -- thereby avoiding blackouts and brownouts. "This software is fundamental for electric power contingency planning and crisis management," said Roland Schoettle, founder and CEO of Optimal Technologies.

### Rails

#### Coal can never be entirely “clean”

Biggers 8 March 2, 2008 Jeff Biggers award winning journalist “'Clean' Coal? Don't Try to Shovel That.” http://www.washingtonpost.com/wp-dyn/content/article/2008/02/29/AR2008022903390.html

Orwellian language has led to Orwellian politics. With the imaginary vocabulary of "clean coal," too many Democrats and Republicans, as well as a surprising number of environmentalists, have forgotten the dirty realities of extracting coal from the earth. Pummeled by warnings that global warming is triggering the apocalypse, Americans have fallen for the ruse of futuristic science that is clean coal. And in the meantime, swaths of the country are being destroyed before our eyes. Here's the hog-killing reality that a coal miner like Burl or my grandfather knew firsthand: No matter how "cap 'n trade" schemes pan out in the distant future for coal-fired plants, strip mining and underground coal mining remain the dirtiest and most destructive ways of making energy. Coal ain't clean. Coal is deadly.

#### Their impacts are drug industry funded hype.

Henderson, ‘6

[Mark, “Drugs Companies 'Inventing Diseases to Boost Their Profits,” Commercial Alert, 4-11-6, http://www.commercialalert.org/issues/health/drug-marketing/drugs-companies-inventing-diseases-to-boost-their-profits]

The practice of “diseasemongering” by the drug industry is promoting non-existent illnesses or exaggerating minor ones for the sake of profits, according to a set of essays published by the open-access journal Public Library of Science Medicine*.* The special issue, edited by David Henry, of Newcastle University in Australia, and Ray Moynihan, an Australian journalist, reports that conditions such as female sexual dysfunction, attention deficit hyperactivity disorder (ADHD) and “restless legs syndrome” have been promoted by companies hoping to sell more of their drugs. Other minor problems that are a normal part of life, such as symptoms of the menopause, are also becoming increasingly “medicalised”, while risk factors such as high cholesterol levels or osteoporosis are being presented as diseases in their own right, according to the editors. “Disease-mongering turns healthy people into patients, wastes precious resources and causes iatrogenic (medically induced) harm,” they say. “Like the marketing strategies that drive it, disease-mongering poses a global challenge to those interested in public health, demanding in turn a global response.” Doctors, patients and support groups need to be more aware that pharmaceutical companies are taking this approach, and more research is needed into the changing ways in which conditions are presented, according to the writers. Disease-awareness campaigns are often funded by drug companies, and “more often designed to sell drugs than to illuminate or inform or educate about the prevention of illness or the maintenance of health”, they say.

#### Diseases “burn out” too fast to cause extinction – their ev is based on a sampling error.

Schwartz, Science Writer for the Washington Post, ‘97

[Jim, “Battling an Outbreak Of Hype”, Washington Post, 1-19-1997,

<http://www.washingtonpost.com/wp-srv/style/longterm/books/reviews/virusx.htm>, RSR]

Regis delights in deflating the scaremongers, and parodies the scare talk surrounding the Kikwit outbreak. Thanks to global air travel, he writes, "Your own home -your very own neighborhood -was only a day away from the Ebola virus!" He then debunks. Such "hot" viruses as Ebola burn themselves out quickly, and are far from unstoppable. "A virus, including the Ebola virus, was not something that magically tunneled through physical barriers. A layer of plastic or rubber was all that was necessary to contain it, and household bleach was sufficient to kill it." Regis's book also focuses on the heroes of virology: the men and women who identify and fight the nasties. As the book's title suggests, he gives the most ink to the scientists from the U.S. Centers for Disease Control and Prevention (CDC) in Atlanta. But he shows that America has no monopoly on viral cowboys -people who will go to superhuman effort to get the job done. Sometimes they break the rules of public safety, and even common sense. Belgian scientist Guido van der Groen sweet talks a Federal Express clerk into letting him ship deadly tissue samples from the Kikwit outbreak to the CDC. The CDC's Lyle Conrad brings a victim of deadly Lassa fever into the United States from Africa via airplane in 1969, greatly expanding our understanding of the disease -and earning a loud reprimand from the then-head of the CDC. This swashbuckling science, Regis gushes, "was a mythic journey, a quest, one that partook of the legendary and the fabulous. . . . It was a romantic adventure in the classic sense." Ryan's book is both broader and deeper. He refrains from the reporters' sometimes-overheated prose, and corrects their errors. But the compelling human stories seem to drag in the telling. Virus X comes alive when Ryan delves into the science, as when he gives a breathtaking step-by-step description of the process by which the CDC's Stuart Nichol was able to identify the hantavirus's genetic sequence even before the virus itself had been successfully cultured. Little wonder, then, that Ryan really begins to cook as he draws sweeping scientific conclusions toward the end of the book. He writes that "viruses, so often thought to be nothing more than parasites, play a much wider role" in nature's grand plan. He takes on the vexing issue of why viruses that coexist in relative harmony with their natural hosts emerge to attack humans with such lethal force. Because a bug that wipes out its target population will become extinct itself, it's sound evolutionary strategy to reach an accommodation instead, and to "co-evolve" with the host over time. Ultimately, the bugs aren't out to kill us, Ryan explains: They just want to move in, like microscopic Kato Kaelins. New hosts for the virus haven't had time to reach this accommodation, and so the initial encounters tend to be tragic. Yet once adapted, the viral guests aren't mere freeloaders: Ryan suggests that they become part of the host's armamentarium against turf invaders. Because we are the invaders of so many remote corners of the Earth, we run into these "unwitting knights of nature. . . . Although not primarily designed to attack humanity, human exploitation and invasion of every ecological sphere has directed that aggression our way." Ryan ends with a call for better monitoring of and response to emerging diseases -and, just to make sure we get the message, conjures up a hypothetical "virus X," a true doomsday bug as lethal as Ebola Zaire but with the airborne transmission abilities of measles. Brrrrrrrrrrr. Regis, on the other hand, steadfastly refuses to fret, and takes on the increasingly popular apocalyptic notion that emerging diseases are somehow "Gaia's revenge" on humanity for overdevelopment. He scorns Preston's idea that "in a sense, the earth is mounting an immune response against the human species" and Garrett's notion that "the microbes were winning." Many more Americans have been killed by lightning than the 700 Ebola deaths worldwide, yet "nobody spoke of lightning as 'the revenge of the thunderclouds,' even though there was abundant talk of Ebola as 'the revenge of the rain forest'," Regis sneers. This proliferation of new viral threats is an "illusion," Regis says. What's new are the tools of detection. "The better the CDC got at identifying the pathogens that caused age-old but hitherto unrecognized diseases, the more it looked as if scads of trailblazing new microbes were out there amassing themselves for attack, gathering their forces, and preparing to bring us 'the coming plague'."

#### Coal transport threatens keystone species – killing biodiversity.

Coal Train Facts 12 Coal Train Facts is a registered 501 (c)(3) nonprofit in Washington state“Key Facts” http://www.coaltrainfacts.org/key-facts

Sharply increased marine traffic, physical disruption of ecologically sensitive areas, and open coal storage in proximity to the Cherry Point Aquatic Reserve give rise to concerns about the proposed coal export facility. The risk of collisions and oil spills rises as coal ships are added to waters already crowded with oil tankers. 80-100 acres of open coal heaps will be in proximity to the aquatic reserve, in an area sometimes subjected to high winds; it is unknown to what extent coal dust in the water might affect the marine plants and animals. The construction of the facility and rail loops on wetlands and uplands, and of the wharf and trestle area over the water, have the potential to disrupt fragile ecosystems. Cherry Point herring are a keystone species, providing food for a number of other species; their status is currently fragile, and would likely be further stressed by activities associated with the coal port. Increased noise pollution, increased risk of collision with marine vessels, threatened food sources (i.e. herring), and a degraded marine environment would pose challenges to killer whales, salmon and a myriad of shore and migratory bird populations. Ballast water carried from Asian ports and released into local waters could introduce invasive species, to possibly devastating consequence.

#### The risk of keystone species loss outweighs nuclear war – it’s irreversible.

Chen 2k (Jim, Professor of Law at University of Minnesota and Dean of Law School at Louisville, “Globalization and Its Losers”:, 9 Minn. J. Global Trade 157’ LexisNexis Legal)

Conscious decisions to allow the extinction of a species or the destruction of an entire ecosystem epitomize the "irreversible and irretrievable commitments of resources" that NEPA is designed to retard.312 The original Endangered Species Act gave such decisions no quarter whatsoever;313 since 1979, such decisions have rested in the hands of a solemnly convened "God Squad."314 In its permanence and gravity, natural extinction provides the baseline by which all other types of extinction should be judged. The Endangered Species Act explicitly acknowledges the "esthetic, ecological, educational, historical, recreational, and scientific value" of endangered species and the biodiversity they represent.315 Allied bodies of international law confirm this view:316 global biological diversity is part of the commonly owned heritage of all humanity and deserves full legal protec- tion.317 Rather remarkably, these broad assertions understate the value of biodiversity and the urgency of its protection. A Sand County Almanac, the eloquent bible of the modern environmental movement, contains only two demonstrable bio- logical errors. It opens with one and closes with another. We can forgive Aldo Leopold's decision to close with that elegant but erroneous epigram, "ontogeny repeats phylogeny."318 What concerns erns us is his opening gambit: "There are some who can live without wild things, and some who cannot."319 Not quite. None of us can live without wild things. Insects are so essential to life as we know it that if they "and other land-dwelling anthropods ... were to disappear, humanity probably could not last more than a few months."320 "Most of the amphibians, reptiles, birds, and mammals," along with "the bulk of the flowering plants and ... the physical structure of most forests and other terrestrial habitats" would disappear in turn.321 "The land would return to" something resembling its Cambrian condition, "covered by mats of recumbent wind-pollinated vegetation, sprinkled with clumps of small trees and bushes here and there, largely devoid of animal life."322 From this perspective, the mere thought of valuing biodiver- sity is absurd, much as any attempt to quantify all of earth's planetary amenities as some trillions of dollars per year is ab- surd. But the frustration inherent in enforcing the Convention on International Trade in Endangered Species (CITES) has shown that conservation cannot work without appeasing Homo economicus, the profit-seeking ape. Efforts to ban the interna- tional ivory trade through CITES have failed to stem the slaugh- ter of African elephants.323 The preservation of biodiversity must therefore begin with a cold, calculating inventory of its benefits. Fortunately, defending biodiversity preservation in human- ity's self-interest is an easy task. As yet unexploited species might give a hungry world a larger larder than the storehouse of twenty plant species that provide nine-tenths of humanity's cur- rent food supply.324 "Waiting in the wings are tens of thousands of unused plant species, many demonstrably superior to those in favor."325 As genetic warehouses, many plants enhance the pro- ductivity of crops already in use. In the United States alone, the lates phylogeny" means that the life history of any individual organism replays the entire evolutionary history of that organism's species. genes of wild plants have accounted for much of "the explosive growth in farm production since the 1930s."326 The contribution is worth $1 billion each year.327 Nature's pharmacy demonstrates even more dramatic gains than nature's farm.328 Aspirin and penicillin, our star analgesic and antibiotic, had humble origins in the meadowsweet plant and in cheese mold.329 Leeches, vampire bats, and pit vipers all contribute anticoagulant drugs that reduce blood pressure, pre- vent heart attacks, and facilitate skin transplants.330 Merck & Co., the multinational pharmaceutical company, is helping Costa Rica assay its rich biota.33' A single commercially viable product derived "from, say, any one species among... 12,000 plants and 300,000 insects ... could handsomely repay Merck's entire investment" of $1 million in 1991 dollars.332 Wild animals, plants, and microorganisms also provide eco- logical services.333 The Supreme Court has lauded the pes- ticidal talents of migratory birds.334 Numerous organisms process the air we breathe, the water we drink, the ground we stroll.335 Other species serve as sentries. Just as canaries warned coal miners of lethal gases, the decline or disappearance of indicator species provides advance warning against deeper environmental threats.336 Species conservation yields the great- est environmental amenity of all: ecosystem protection. Saving discrete species indirectly protects the ecosystems in which they live.337 Some larger animals may not carry great utilitarian value in themselves, but the human urge to protect these charis- matic "flagship species" helps protect their ecosystems.338 In- deed, to save any species, we must protect their ecosystems.339 Defenders of biodiversity can measure the "tangible eco- nomic value" of the pleasure derived from "visiting, photograph- ing, painting, and just looking at wildlife."340 In the United States alone, wildlife observation and feeding in 1991 generated $18.1 billion in consumer spending, $3 billion in tax revenues, and 766,000 jobs.341 Ecotourism gives tropical countries, home to most of the world's species, a valuable alternative to subsis- tence agriculture. Costa Rican rainforests preserved for ecotour- ism "have become many times more profitable per hectare than land cleared for pastures and fields," while the endangered go- rilla has turned ecotourism into "the third most important source of income in Rwanda."342 In a globalized economy where commodities can be cultivated almost anywhere, environmen- tally sensitive locales can maximize their wealth by exploiting the "boutique" uses of their natural bounty. The value of endangered species and the biodiversity they embody is "literally . . . incalculable."343 What, if anything, should the law do to preserve it? There are those that invoke the story of Noah's Ark as a moral basis for biodiversity preser- vation.344 Others regard the entire Judeo-Christian tradition, especially the biblical stories of Creation and the Flood, as the root of the West's deplorable environmental record.345 To avoid getting bogged down in an environmental exegesis of Judeo- Christian "myth and legend," we should let Charles Darwin and evolutionary biology determine the imperatives of our moment in natural "history."346 The loss of biological diversity is quite arguably the gravest problem facing humanity. If we cast the question as the contemporary phenomenon that "our descend- ants [will] most regret," the "loss of genetic and species diversity by the destruction of natural habitats" is worse than even "energy depletion, economic collapse, limited nuclear war, or con- quest by a totalitarian government."347 Natural evolution may in due course renew the earth with a diversity of species approximating that of a world unspoiled by Homo sapiens - in ten mil- lion years, perhaps a hundred million.348

### Asian Pivot

#### Alt causes – Iran/NK prolif, Arab Spring and Indo-Pak relations.

Bader, John C. Whitehead Senior Fellow in International Diplomacy, Foreign Policy, John L. Thornton China Center, ‘12

[Jeffrey, “China and the United States: Nixon's Legacy after 40 Years,” Brookings, 2-23,

<http://www.brookings.edu/opinions/2012/0223_china_nixon_bader.aspx>, RSR]

The common interests on which Nixon and Mao sought to cooperate were international issues. In their day, the dominant ones were Vietnam and Indochina, Korea, south Asia, and resistance to Soviet expansionism. Since then, up to and including the Obama administration, American presidents have sought to work with the Chinese on the major international issues, either in the United Nations Security Council or elsewhere where the Chinese have influence. The record on such issues in recent years has been mixed. The United States and China have agreed on opposition to the Iranian and North Korean nuclear weapons programs, but have differed on tactics to reverse them. They have worked together to preserve peace in the Korean peninsula and in the Taiwan Strait. They see the Arab Spring, and more recently the Syrian uprising, through very different lenses, which will be a source of tension as the region remains in turmoil and the forces of change and status quo come into violent conflict. We have a common interest in preventing Pakistan from becoming a long-term source of instability and base for terrorism, but differing perspectives on Pakistan’s relationship with India. The good news is however deep our differences on some of these issues, none has led, or shows signs of leading, to conflict between us.

#### Single issues don’t spillover.

Clarke, Visiting Research Fellow at the East Asian Institute (EAI), National University of Singapore, ‘11

[Ryan, “Maintaining Baseline Stability in China-U.S. Relations: Alliance Structures, Rethinking Flashpoints, and Identifying New Shared Interests,” EAI Working Paper No. 158, 9-16, <http://www.eai.nus.edu.sg/EWP158.pdf>, RSR]

In recent years we have witnessed an explosion of analysis on both the future trajectories of China as well as the United States and the nature of the interactions between them with prognoses varying wildly. Some boldly predict a myopic, conflict free future in China-U.S. relations where America recognizes the inevitability of a rising China and adjusts its grand strategy, military deployments, and trade policy in order to clear the way for this predetermined geopolitical shift. For China, it obligingly adjusts its key institutions, market regulations, and foreign policy practices to be in line with the established norms of the heretofore largely undefined yet often cited “international community.” Others openly voice fears of a repeat of the events that rocked human civilization in the 19th and 20th centuries with terms such as security dilemma, security spiral, hard balancing, nationalism, and others returning into the everyday vernacular. Those who subscribe to the latter paradigm over-extrapolate from seemingly individual issues, such as Taiwan (which is actually an artifact of history), to make broad assessments of the overall direction of the China-U.S. relationship. “Test case”, “precedent”, and the like are now applied to what have previously been regarded as rather unitary issues. If defense-centric analysis becomes the dominant mode, then we had better prepare ourselves to see a constant stream of security dilemmas and escalations with no exit. No one actually desires such an outcome. This study seeks to make a humble contribution by providing a balanced, realistic, and policy-oriented analysis of the most pressing contemporary issues in the relationship between Washington and Beijing. Through this work, this study aims to highlight that while many ingrained, structural issues (Taiwan, Korean Peninsula, American alliance structures, etc…) continue to pose challenges to the relationship, there are still frontier areas in which shared interests can rationally be identified and expanded upon. There are indeed many challenges that China and America face in the future management of their relationship and there is ample space for miscalculation and escalation with unpredictable results. However, this study seeks to break out of the “wait-and-see” approaches which characterize so much analyses in Asia as well as the West.

#### Relations solve nothing – China doesn’t work with the US.

Blumenthal, Resident Fellow at AEI, ‘11

[Dan, Current commissioner and former vice chairman of the U.S.-China Economic and Security Review Commission, where he directs efforts to monitor, investigate, and provide recommendations on the national security implications of the economic relationship between the two countries. Previously, he was senior director for China, Taiwan, and Mongolia in the Secretary of Defense's Office of International Security Affairs and practiced law in New York prior to his government service. At AEI, in addition to his work on the national security implications of U.S.-Sino relations, he coordinates the Tocqueville on China project, which examines the underlying civic culture of post-Mao China. Mr. Blumenthal also contributes to AEI's Asian Outlook series and is a research associate with the National Asia Research Program, 10-31-11, The top ten unicorns of China policy”, AEI

http://www.aei.org/article/foreign-and-defense-policy/regional/asia/the-top-ten-unicorns-of-china-policy/]

9) We need China's help to solve global problems. This is further down on my list because it is not really a fantastical unicorn. It is true. What is a fantasy is that China will be helpful. We do need China to disarm North Korea. They do not want to, and North Korea is now a nuclear power. The same may soon be true with Iran. The best we can get in our diplomacy with China is to stop Beijing from being less helpful. It is a fact that the global problems would be easier to manage with Chinese help. However, China actually contributing to global order is a unicorn.

#### Low price natural gas crowds out the coal industry, China’s making the transition.

Yang 2012

(Catherine, writer for Natural Geographic News, February 13th, “Amid U.S.-China Energy Tension, ‘Clean Coal’ Spurs Teamwork”, National Geographic Daily News) PY

In China, coal is king. U.S. energy companies, from small start-ups to one of the nation's largest utilities, Duke Energy, have concluded that they must work with China to keep a hand in technology to reduce the greenhouse gas emissions of coal-fired electricity: carbon capture and storage (CCS).¶ Although the United States has poured billions of dollars into CCS research and development over 25 years, progress has been halting, and several high-profile projects have been abandoned due to high costs. The building of coal power plants has been so slowed by environmental concerns and the rise of natural gas as an alternative that the United States has not proven to be a fertile ground for accelerating CCS.¶ China, on the other hand, has been building one new coal-fired plant a week on average to stoke its growing economy.

#### Coal shipping to China is bad for the economy

Serres 11, Columbia Riverkeeper Conservation Director, no date¶ (Dan, “MASSIVE COAL EXPORT TERMINALS TARGET WASHINGTON”, Columbia Riverkeeper, no date, <http://climatesolutions.org/nw-states/washington/no-coal/factsheet>) SVK

Coal giants Peabody, Arch Coal, and other players also have ¶ plans to transport massive volumes of coal from Wyoming, ¶ through the Columbia River Gorge, to SW Washington, where the ¶ coal will be shipped to China. Peabody’s stock reports said they ¶ plan to export 20 to 30 million tons of U.S. coal per year to Asia. ¶ This has the carbon equivalent to ten Trans-Alta coal-fired power ¶ plants. Peabody Coal stated that "Coal's best days are ahead" ¶ while Washington fights for clean energy. ¶ COAL EXPORT IS BAD FOR THE ECONOMY ¶ Coal export requires a small workforce and wastes hundreds of ¶ acres of waterfront property to store raw coal. Currently, 50 people work at the targeted port in Longview and Ambre proposes to ¶ add just 20 more. This 460-acre site has tremendous potential for ¶ thousands of jobs in light industrial and smart-tech growth, instead of being mired in a single-commodity dirty export trade. ¶ Far from being a job creator, the volatile export market for coal ¶ leaves the long term viability of these terminals an open question.

#### No nuclear terrorism – too many difficulties.

Gavin, Tom Slick Professor of International Affairs at UT Austin, ‘10

 [Francis, Winter 2009/2010, “Same As It Ever Was: Nuclear Alarmism, Proliferation, and the Cold War,” International Security 34.3]

Coherent policies to reduce the risk of a nonstate actor using nuclear weapons clearly need to be developed. In particular, the rise of the Abdul Qadeer Khan nuclear technology network should give pause.49 But again, the news is not as grim as nuclear alarmists would suggest. Much has already been done to secure the supply of nuclear materials, and relatively simple steps can produce further improvements. Moreover, there are reasons to doubt both the capabilities and even the interest many terrorist groups have in detonating a nuclear device on U.S. soil. As Adam Garfinkle writes, "The threat of nuclear terrorism is very remote."50 Experts disagree on whether nonstate actors have the scientific, engineering, financial, natural resource, security, and logistical capacities to build a nuclear [End Page 19] bomb from scratch. According to terrorism expert Robin Frost, the danger of a "nuclear black market" and loose nukes from Russia may be overstated. Even if a terrorist group did acquire a nuclear weapon, delivering and detonating it against a U.S. target would present tremendous technical and logistical difficulties.51 Finally, the feared nexus between terrorists and rogue regimes may be exaggerated. As nuclear proliferation expert Joseph Cirincione argues, states such as Iran and North Korea are "not the most likely sources for terrorists since their stockpiles, if any, are small and exceedingly precious, and hence well-guarded."52 Chubin states that there "is no reason to believe that Iran today, any more than Sadaam Hussein earlier, would transfer WMD [weapons of mass destruction] technology to terrorist groups like al-Qaida or Hezbollah."53 Even if a terrorist group were to acquire a nuclear device, expert Michael Levi demonstrates that effective planning can prevent catastrophe: for nuclear terrorists, what "can go wrong might go wrong, and when it comes to nuclear terrorism, a broader, integrated defense, just like controls at the source of weapons and materials, can multiply, intensify, and compound the possibilities of terrorist failure, possibly driving terrorist groups to reject nuclear terrorism altogether." Warning of the danger of a terrorist acquiring a nuclear weapon, most analyses are based on the inaccurate image of an "infallible ten-foot-tall enemy." This type of alarmism, writes Levi, impedes the development of thoughtful strategies that could deter, prevent, or mitigate a terrorist attack: "Worst-case estimates have their place, but the possible failure-averse, conservative, resource-limited five-foot-tall nuclear terrorist, who is subject not only to the laws of physics but also to Murphy's law of nuclear terrorism, needs to become just as central to our evaluations of strategies."54

### Solvency

#### Alt cause - non-permanence of refined coal tax credit creates investor uncertainty

Simpson 3/15/12 Stephen Simpson CFA, is a freelance financial writer “ADA-ES A Coal Story The Market Actually Likes”¶ http://www.investopedia.com/stock-analysis/2012/ADA-ES-A-Coal-Story-The-Market-Actually-Likes-ADES-FWLT-FTEK-SI0315.aspx#ixzz22nE9vez3

Refined Coal - Will This Be the One That Works?¶ ADA-ES has an intriguing, albeit complicated, opportunity with its refined coal business. This is actually run as a joint venture with NexGen and Goldman Sachs, and it involves building facilities on site for the customer that treats the coal ((with chemicals and additives (CyClean) developed by ADA-ES)). When it's all said and done, this treatment reduces the NOx, mercury and other byproducts that are produced by burning coal (especially Powder River Basin coal). ¶ More important, though, is that the facilities and coal qualify for tax credits (presently more than $6/ton) under "Section 45," and ADA-ES will benefit through its share of prepaid rent, rent and royalties. There's no question that this can be a lucrative opportunity, and the installation of 26 facilities in 2011 speaks well to that opportunity. Playing devil's advocate, though, whatever the Congress giveth, it can eventually taketh away. While CyClean and the ADA-ES refined coal business could, perhaps, stand on its own, the tax credits are a huge part of the economic model at present. I don't necessarily believe that Congress is going to reverse this anytime soon; I simply offer the point that clean coal tax credits have been a political pinata in the past.

#### Natural gas is killing coal – not restrictions or lack of incentives

The Guardian 12 (June 2012 Scott Rosenberg and Chip Giller “'The problem for coal right now is entirely economic' – EPA's Lisa Jackson” <http://www.guardian.co.uk/environment/2012/jun/11/coal-economic-epa-lisa-jackson>)

And then coal has another pollution problem, and that's carbon pollution: it's the most carbon-intense fossil fuel. And the president invested in carbon capture and sequestration technology as part of the Recovery Act. He said all along, I'm from a coal state, so I believe that if there's going to be a future for coal it has to be one that deals with carbon pollution, with climate change. So in my opinion the problem for coal right now is entirely economic. The natural gas that this country has and is continuing to develop is cheaper right now on average. And so people who are making investment decisions are not unmindful of that — how could you expect them to be? It just happens that at the same time, these rules are coming in place that make it clear that you cannot continue to operate a 30-, 40-, or 50-year old plant and not control the pollution that comes with it.

#### Low coal prices hinder low-carbon technologies.

Reuters 5-25-12

(EU Emissions Trading Plans Face Plunging Coal Prices, 25 May 2012, http://www.huffingtonpost.com/2012/05/25/eu-emissions-trading-coal-prices\_n\_1545059.html, da 8-1-12) PC

But a glance at the economics of power generation shows it is falling coal prices that is making low-carbon nuclear and CCS especially uncompetitive right now.¶ Carbon prices would have to rise to eye-watering levels to reverse that, to about seven times present levels to make nuclear competitive with coal, for example, and far higher levels to make CCS economic.

#### CCS is key to solve climate change.

Shapiro, Policy Officer at the Carbon Capture and Storage Association, 10

(Judith, Economic and social benefits of CCS, 29 Nov 2010, http://www.globalccsinstitute.com/community/blogs/authors/judith/2010/11/29/economic-and-social-benefits-ccs, da 8-1-12) PC

Carbon Capture and Storage (CCS) is a vital tool in the global fight against climate change. With its important application to the capture and storage of carbon dioxide emissions from power stations, CCS has a crucial role to play in tackling greenhouse gas emissions whilst maintaining security of supply. The International Energy Agency (IEA) has estimated that to halve global emissions by 2050 (widely believed to be required to limit the temperature rise to 2ºC), CCS will need to contribute one fifth of the required emissions reductions, both in the power sector as well as the industrial sector. In addition, the IEA have found that attempting to halve global emissions by 2050 without CCS, would increase costs by more than 70% per year.¶ To meet global 2050 goals, the IEA has projected that we will need 100 CCS projects around the world by 2020 and more than 3000 by 2050. This is a significant scale-up from current ambitions. There are very major benefits arising from the deployment of CCS in addition to climate mitigation.

#### Warming causes extinction – 350 ppm is the limit.

Ahmed 2010 (Nafeez Ahmed, Executive Director of the Institute for Policy Research and Development, professor of International Relations and globalization at Brunel University and the University of Sussex, Spring/Summer 2010, “Globalizing Insecurity: The Convergence of Interdependent Ecological, Energy, and Economic Crises,” Spotlight on Security, Volume 5, Issue 2, online)

Perhaps the most notorious indicator is anthropogenic global warming. The landmark 2007 Fourth Assessment Report of the UN Intergovernmental Panel on Climate Change (IPCC) – which warned that at then-current rates of increase of fossil fuel emissions, the earth’s global average temperature would likely rise by 6°C by the end of the 21st century creating a largely uninhabitable planet – was a wake-up call to the international community.[v] Despite the pretensions of ‘climate sceptics,’ the peer-reviewed scientific literature has continued to produce evidence that the IPCC’s original scenarios were wrong – not because they were too alarmist, but on the contrary, because they were far too conservative. According to a paper in the Proceedings of the National Academy of Sciences, current CO2 emissions are worse than all six scenarios contemplated by the IPCC. This implies that the IPCC’s worst-case six-degree scenario severely underestimates the most probable climate trajectory under current rates of emissions.[vi] It is often presumed that a 2°C rise in global average temperatures under an atmospheric concentration of greenhouse gasses at 400 parts per million (ppm) constitutes a safe upper limit – beyond which further global warming could trigger rapid and abrupt climate changes that, in turn, could tip the whole earth climate system into a process of irreversible, runaway warming.[vii] Unfortunately, we are already well past this limit, with the level of greenhouse gasses as of mid-2005 constituting 445 ppm.[viii] Worse still, cutting-edge scientific data suggests that the safe upper limit is in fact far lower. James Hansen, director of the NASA Goddard Institute for Space Studies, argues that the absolute upper limit for CO2 emissions is 350 ppm: “If the present overshoot of this target CO2 is not brief, there is a possibility of seeding irreversible catastrophic effects.”[ix] A wealth of scientific studies has attempted to explore the role of positive-feedback mechanisms between different climate sub-systems, the operation of which could intensify the warming process. Emissions beyond 350 ppm over decades are likely to lead to the total loss of Arctic sea-ice in the summer triggering magnified absorption of sun radiation, accelerating warming; the melting of Arctic permafrost triggering massive methane injections into the atmosphere, accelerating warming; the loss of half the Amazon rainforest triggering the momentous release of billions of tonnes of stored carbon, accelerating warming; and increased microbial activity in the earth’s soil leading to further huge releases of stored carbon, accelerating warming; to name just a few. Each of these feedback sub-systems alone is sufficient by itself to lead to irreversible, catastrophic effects that could tip the whole earth climate system over the edge.[x] Recent studies now estimate that the continuation of business-as-usual would lead to global warming of three to four degrees Celsius before 2060 with multiple irreversible, catastrophic impacts; and six, even as high as eight, degrees by the end of the century – a situation endangering the survival of all life on earth.[xi]