### T 1NC

#### Interpretation –

#### Reduce means to make smaller

Merriam-Webster – 12, http://www.merriam-webster.com/dictionary/reduce

a : to draw together or cause to converge : consolidate <reduce all the questions to one>

b (1) : to diminish in size, amount, extent, or number <reduce taxes> <reduce the likelihood of war> (2) : to decrease the volume and concentrate the flavor of by boiling <add the wine and reduce the sauce for two minutes>

c : to narrow down : restrict <the Indians were reduced to small reservations>

d : to make shorter : abridge

#### Restrictions are legal limitations on an activity

Gerald N. Hill and Kathleen T. Hill – 2005, the Free Dictionary, http://legal-dictionary.thefreedictionary.com/Restrictions

restriction n. any limitation on activity, by statute, regulation or contract provision. In multi-unit real estate developments, condominium and cooperative housing projects, managed by homeowners' associations or similar organizations are usually required by state law to impose restrictions on use. Thus, the restrictions are part of the "covenants, conditions and restrictions," intended to enhance the use of common facilities and property, recorded and incorporated into the title of each owner.

#### Violation – The aff makes energy production EASIER but it doesn’t make some aspect of production legal that was previously prohibited

#### Vote Neg

#### Predictable Limits – Official regulations and statutes provide a predictable and stable list of restrictions on energy production – including affs that reduce hassles instead of legal restrictions explodes the topic. Makes it impossible to predict affs because no one knows just how much “red tape” will qualify as a “restriction” – it’s too subjective.

#### Ground – There is a huge distinction between making something more efficient and legalizing a previously prohibited activity – qualitative improvements like the aff make all our links non unique and produce such small affs that no DA would link.

### 1NC

#### Text: The United States Federal Government should offer power purchase agreements for small modular nuclear reactors to supply power to military bases in the United States.

#### DOD acting as a first mover on SMR’s is key to revitalize the domestic nuclear industry and prevents global proliferation

Loudermilk, Senior Energy Associate @ NDU, 11

(Micah J. Loudermilk, Senior Associate for the Energy & Environmental Security Policy program with The Institute for National Strategic Studies at The National Defense University, “In Defense of Small Reactors: A Response,” February 23rd 2011, http://csis.org/blog/defense-small-reactors-response)

Smith’s final contention takes issue with the argument that DOD needs to operate as a “first mover” in the small reactor market – stating: 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. Though this contention is arguably true from a weapons-related standpoint, Smith’s point does not make much sense when discussing nuclear energy. The pursuit of nuclear energy is not remotely equivalent to an arms race and it is simply not possible to draw comparisons between the two. What we do know, however, is this: the domestic nuclear industry in the U.S. has stagnated and virtually died since the Three Mile Island incident over 30 years ago. Meanwhile, foreign nuclear energy companies are surging ahead and making rapid strides in the energy industry – moving forward with advanced nuclear reactors while new countries constantly enter the market. Like it or not, the nuclear renaissance is here – the world is pressing on and the U.S. simply is not on board. More than that, DOD investment as a “first mover” in the small reactor market in fact directly supports the nonproliferation agenda. As an increasingly large number of countries seek civilian nuclear power, real discussions on proliferation begin to center not on weapons, but on the weapons risk arising from the pursuit of energy. Historically, this potential problem has been largely mitigated by the influence exerted by the U.S. in the global nuclear energy market. The U.S. is influential largely because of its historic lead in nuclear energy technology. However, with the atrophy of domestic capabilities, U.S. share of the global nuclear trade has declined precipitously as aspiring states turn elsewhere to meet their needs. Other countries, such as China, that are making rapid advances in the field, do not share the U.S. commitment to reactor safety and nonproliferation objectives. Indeed, as can be seen, DOD’s efforts as a “first mover” in the arena are imperative, not simply from a military security standpoint, but also from a mindset of preserving the nonproliferation agenda.

#### Proliferation sparks wars that escalate to great power nuclear conflict

Below 08

[Tim D.Q., Wing Commander, RAF; MA in Defence Studies, King’s College London; “Options for US nuclear disarmament: exemplary leadership or extraordinary lunacy?,” June 2008, Thesis for School of Advanced Air and Space Studies, Air University Maxwell Air Force Base, Alabama]

Proliferation. Roger Molander, of RAND Corporation, asserts that “in the near future, a large number of countries are each going to develop a small number of nuclear weapons.”50 The Union of Concerned Scientists considers this to be the greatest long term danger confronting both US and international security today. Proliferation increases risk in a number of ways. First, the more states that hold nuclear weapons, the more likely it is that one will have an insufficiently mature or robust nuclear doctrine to manage its capability responsibly. Tom Sauer suggests that developing states that do not have democratic political systems present a particularly high risk because in dictatorial regimes, the military are frequently in control, and as Sagan has observed, the military appear to be more inclined to initiate preventative attacks against adversaries than civilians.52 Second, the more widely proliferated nuclear weapons become, the more theoretical opportunities may be presented for theft of nuclear material. Third, proliferation increases the risk of nuclear intervention by an established nuclear power, including the five NWSs. Stephen Younger envisages several scenarios in which currently established nuclear powers might “feel a need” to intervene with nuclear weapons in present regional conflicts, especially if WMD are being employed or threatened. Moreover, since proliferation is frequently associated with reaction to nuclear development either within a bordering nation or regional counterpart, further proliferation is in turn likely to generate a quasi-exponential expansion of similar regional scenarios.53 Ambassador Lehman envisages a scenario in which proliferation may induce a chain reaction of related regional arms races that could result in unintended and unexpected consequences far removed from the objectives of the proliferating nations, and in the United States’ specific case, a risk that the nation could get sucked into a conventional regional conflict which is subsequently escalated into nuclear warfare by its allies or their opponents.

#### Permutation doesn’t solve the net benefit – cheap natural gas ensures no spillover for SMR’s

Forbes 2012

(5/23/12, “Small Modular Nuclear Reactors By 2022 – But No Market For Them,” http://www.forbes.com/sites/jeffmcmahon/2012/05/23/small-modular-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.

### 1NC Disad

#### Obama is still ahead but Romney is closing the gap --- especially in the critical swing state of Ohio

Murray, 10/3 (Sara, The Wall Street Journal Online, 10/3/2012, “Obama Lead Shrinks in Two Battlegrounds; Polls Tighten in Florida and Virginia, But Romney Still Faces Big Gap in Ohio,” Factiva)

Mitt Romney has closed in on President Barack Obama in the battleground states of Florida and Virginia, new polling shows, but a substantial gap with the president in Ohio leaves the Republican with a daunting path to victory in the Electoral College.

Biting into Mr. Obama's lead over the past three weeks, Mr. Romney now trails the president by a single percentage point among likely voters in Florida and by two points in Virginia, new Wall Street Journal/NBC News/Marist Poll surveys show. Both races are statistical dead heats, as Mr. Obama's leads fall within the surveys' margins of error.

But the GOP nominee trails by eight percentage points among likely voters in Ohio, the nation's largest swing state after Florida and a central component of both candidates' plans for building an Electoral College majority, the new polling shows.

The polls show that the race for the White House remains fiercely competitive roughly a month before Election Day. The state surveys mirror tightening nationwide: Mr. Obama held a three-point lead in a new nationwide Wall Street Journal/NBC News survey released Tuesday, down from five points in early September.

"This is going to be—and always was going to be—a close election," Robert Gibbs, an adviser to the Obama campaign, said in a Politico forum Wednesday. He singled out Ohio and Virginia as particularly important states for both candidates. "Places like Ohio and Virginia…have seen as much if not more attention than almost anything else."

In Florida, Mr. Obama leads Mr. Romney 47% to 46% among likely voters, after holding a five-point lead in early September. In Virginia, the president leads 48% to 46%, after topping Mr. Romney by five points in a September survey.

In Ohio, the new survey finds Mr. Obama with 51%, to 43% for Mr. Romney, after Mr. Obama led by seven percentage points in early September.

The pool of undecided voters is relatively small—just 4% in Ohio, 5% in Virginia and 6% in Florida—but a substantial shift toward Mr. Romney among independent voters in Florida in the past three weeks suggests that a larger subset remains persuadable.

"If Romney can make a better showing for who he is personally, this race could get even tighter," said Andrew Kohut, president of the nonpartisan Pew Research Center. So far, many swing voters "have a negative view of Obama's performance and a negative view of Romney personally."

The Romney campaign will need to make swift progress in Ohio if it hopes to make the state competitive. A major challenge there: More than half of likely Ohio voters—some 51%—had an unfavorable impression of Mr. Romney, compared with 42% who viewed him positively. It was roughly the opposite for the president: 52% viewed Mr. Obama favorably, while 44% had a negative impression of him.

Ben Ginsberg, counsel to the Romney campaign, said in the Politico forum it is possible for Mr. Romney to eke out an Electoral College victory without the Buckeye State, but that "it'd be a lot better to win Ohio."

Across all three swing states, the candidates were at a standoff in molding likely voters' economic perceptions. "Basically Obama and Romney are fighting to a draw as to who's better able to handle the economy," said Lee Miringoff, the director of the Marist Institute for Public Opinion, which conducted the surveys of the three states.

Mr. Romney's Medicare stance remains an issue that is sure to continue to draw attention, particularly in Florida, with its heavy concentration of seniors. Some 48% of likely voters in Florida said Mr. Obama was better prepared to deal with Medicare, compared with 43% who said Mr. Romney was.

But older voters were more amenable to Mr. Romney's plan, which would keep benefits unchanged for people in or near retirement but move younger Americans to a system where they buy insurance policies in retirement subsidized by the government. Of likely Florida voters 60 years or older, 47% said Mr. Romney would do a better job handling Medicare, compared with 43% who said the president would.

#### Natural gas expansion massively unpopular with the base

Dicker, 9/4 --- energy analyst since 2002 with all the major financial news networks (9/4/2012, Daniel, “Why Isn't Natural Gas an Election Issue?” <http://www.thestreet.com/story/11684440/1/why-isnt-natural-gas-an-election-issue.html?cm_ven=GOOGLEN> )

NEW YORK (TheStreet) -- In last week's acceptance speech, Republican Presidential candidate Mitt Romney held out this challenge: "President Obama promised to begin to slow the rise of the oceans and heal the planet. MY promise...is to help you and your family"

But what if it were possible to do both?

One of the surest ways to help protect the environment while creating jobs and revitalizing our economy is through increasing the conversion and use of natural gas here in the U.S.

Why has this opportunity towards increased reliance on natural gas been so obvious and yet so difficult for politicians of both parties to embrace?

It hasn't been solely because 2012 is an election year. Boone Pickens was on CNBC last week marking the fourth anniversary of his "Pickens Plan," the failed congressional effort to invest in truck natural gas engines and fuelling infrastructure to run them on.

In fact, if anyone wanted to see political partisanship in action slowing the real economic progress this nation could make, they'd find no better example than the history of the Pickens plan and other natural gas initiatives in Washington.

Both radical wings of each party have made advocating natural gas use impossible. Democratic environmentalists are concerned about hydraulic fracturing and its possible impact to aquifers. Republicans are reluctant to approve further federal spending of any kind as well as risk a charge of "picking winners" in natural gas -- a charge they have made successfully against Democrats.

Of course, both radical wings of both parties are wrong: Overwhelming evidence from every independent research source has concluded that hydraulic fracturing of shale for natural gas has proven to be safe to our water supplies and is getting safer all the time.

Republican reticence to support natural gas expansion belies a long history of government incentives for developing new energy sources, from as far back as our development of coal to our much discussed modern tax incentives for crude oil exploration and production.

It is a fact that our government has been picking winners in energy for as long as there's been government.

The advantages of natural gas conversion and greater use are obvious but bear repeating. Natural gas is a domestic source of energy and promises energy independence here in the U.S. Production, transport and building of infrastructure for natural gas would mean millions of new jobs. Natural gas prices are literally half that of competing oil and gasoline. Finally, carbon emissions for natural gas are about a third that for coal and other fossil fuels.

What's not to like?

But it seems both radical wings of each party continue to wield enormous influence. Neither candidate has made natural gas a cornerstone of a new and necessary energy policy.

You would think in an election year at least one candidate would move to stake out this obvious position that would provide jobs, energy independence and greater environmental sensitivity.

But maybe it's only obvious to the rest of us who are watching this campaign season unfold.

#### Base turnout is key to Obama victory

Silver, 9/6 (Nate, 9/6/2012, “Obama Would Be Big Favorite With ‘Fired Up’ Base,” http://fivethirtyeight.blogs.nytimes.com/2012/09/06/obama-would-be-big-favorite-with-fired-up-base/ )

There’s one advantage that President Obama has that Mitt Romney probably doesn’t. If he can get a good turnout from his base, he’ll be the heavy favorite to win in November — even if Mr. Romney gets a strong turnout as well. On average over the last five public surveys, 35 percent of registered voters identify themselves as Democrats and 30 percent as Republicans. That advantage is down somewhat for Democrats since 2008, but it is an advantage nevertheless. In essentially every recent presidential election, however, the Democratic candidate has performed worse among actual Election Day voters than among the broader pool of registered voters. There is no reason to think that this year will be an exception. Recent surveys that compare likely-voter with registered-voter results suggest that there could be a turnout gap of around three percentage points favoring Mr. Romney. That’s larger than the historical average, when it’s been in the range of one or two points. Our election forecasts build in a likely voter adjustment for this reason. If a pollster publishes both registered-voter and likely-voter results, we use the likely-voter version of their numbers. And if only a registered-voter version is available, we shift the numbers by two or three points toward Mr. Romney in order to make it equivalent to a likely-voter poll. But what would happen if all those registered voters really did turn out? I decided to run a version of our “now-cast” — our estimate of what would happen if the election were held today — on a registered-voter rather than likely-voter basis. (The “now-cast” is a little simpler than our Nov. 6 forecast, which also incorporates a convention bounce adjustment and measures of economic performance, and so the now-cast is a little simpler to interpret for purposes of measuring the effects of the likely-voter adjustment.) This special, registered-voter version of the “now-cast” applies just the opposite of our usual process. If both registered-voter and likely-voter versions of a poll are available, I instruct the model to use the registered-voter numbers. And if there’s only a likely-voter survey, the model shifts the numbers toward Mr. Obama by a couple of points as a proxy for a registered voter poll. In the regular, likely-voter version of our “now-cast,” Mr. Obama is estimated to have a 68 percent chance of winning the Electoral College in an election held today. But on the basis of registered voters, he would be a 91 percent favorite. Instead of being ahead in the popular vote by a hair over one point, he’d be expected to win by around four. And he’d be projected to win 322 electoral votes, rather than 291. It’s very unlikely, of course, that Democrats will turn out as high a percentage of their voters as Republicans do. The demographic groups that favor Democrats are just harder to get to the polls. But if Mr. Obama can narrow Republicans’ advantage in this area — reducing the gap between registered-voter and likely-voter polls to one or two points rather than three, he can get halfway there, and make Mr. Romney’s task much harder. That’s why, with the exception of the prime-time speeches by Michelle Obama and Bill Clinton, nearly every other speech a Democrat has given at the party’s convention in Charlotte, N.C., has been aimed at firing up different parts of the Democratic base, often with strident rhetoric. And it is why Mr. Obama may serve up a fair amount of “blue meat” in his speech on Thursday night. It will be worth watching the polls after Charlotte to see whether he can narrow the enthusiasm gap.

#### Romney will force premature conflict with Iran that decks U.S. credibility

Berger, 9/17 --- former national security advisor to U.S. President Bill Clinton from 1997 to 2001, is chair of Albright Stonebridge Group (9/17/2012, Samuel R., “Red Lines over Iran; Mitt Romney has adopted Benjamin Netanyahu's dangerous timetable for war,” <http://www.foreignpolicy.com/articles/2012/09/17/red_lines_over_iran> )

Even with all the turmoil in the Middle East, foreign policy is unlikely to have a decisive impact on the outcome of the U.S. presidential election. But the outcome of the presidential election will have a profound impact on U.S. foreign policy. Nowhere is that more consequential than the debate over whether, when, and with whom we go to war against Iran. ¶ Both Barack Obama and Mitt Romney are committed to preventing Iran from obtaining a nuclear weapon that would introduce a dangerous new dynamic into an already combustible region and threaten the survival of our ally Israel. Both have indicated that they are prepared to use military force if necessary. But there are critical differences that derive from differing perspectives of the United States and Israel.¶ The first is when military action would be necessary and appropriate. Israel's sense of vulnerability is informed by history, geography, and Iran's malevolence. But its capabilities to inflict long-term damage to hardened underground nuclear facilities in Iran are more limited than America's. The Israeli trigger of Iran's entry into a "zone of immunity" (when these facilities become invulnerable to Israeli attack) occurs earlier than it does for the United States, giving us a longer window to act effectively. That is why President Obama has said that we still have time and space to determine if negotiations and sanctions can work.¶ Israeli Prime Minister Benjamin Netanyahu, on the other hand, says that that time has run out for negotiations and patience. As he reiterated in high-profile appearances on Meet the Press and other Sunday talk shows, his argument is that the United States must set forth "red lines" for the Iranian nuclear program that will provoke a U.S. military attack if crossed by the Iranians. There are arguments for "red lines" (enhancing deterrence) and against them (war on autopilot). But Netanyahu's public insistence on a U.S. declaration of "red lines" is counterproductive. Deterrence against Iran, which gains strength from perceived unity, is undermined by public discord.¶ Romney agrees with Netanyahu -- the time for talking is over. Negotiations have failed. We need to get tougher on Iran. But given the fact that a bipartisan Congress and the president already have imposed the harshest sanctions ever on Iran -- oil exports and nearly all banking transactions -- it is hard to know how to ratchet them up much further without a deadly squeeze of average Iranians. Given the former governor's view that negotiations are exhausted and that there should be no distance between United States and Israel on Iran, a President Romney would have us on the precipice of war -- sooner rather than later. And if we are seen by the international community as acting precipitously, we will be largely on our own.¶ War may come under President Obama as well. Although the administration is reluctant to embrace the double-edged sword of "red lines," any action that demonstrates a clear move toward developing a bomb -- such as throwing out the IAEA inspectors, revelations about other secret nuclear facilities, clear and sustained evidence of enrichment above 20 percent, or further weaponization -- can be expected trigger a U.S. military response. But Iran might not take such steps, soon or ever. In the meantime, the cumulative pressure of harsh sanctions and the possibilities of creative diplomacy hold out the promise of a pathway between war and capitulation. And if war becomes our only choice, the world will see that we truly have exhausted all other avenues, that it is the last alternative and that we do not take lightly the prospect of introducing another American-led bombing campaign into a Middle East already in turmoil.

#### Attack triggers great power war and crush the global economy

Trabanco, 9 – Independent researcher of geopoltical and military affairs (1/13/09, José Miguel Alonso Trabanco, “The Middle Eastern Powder Keg Can Explode at Anytime,” <http://www.globalresearch.ca/index.php?context=va&aid=11762>)

In case of an Israeli and/or American attack against Iran, Ahmadinejad's government will certainly respond. A possible countermeasure would be to fire Persian ballistic missiles against Israel and maybe even against American military bases in the regions. Teheran will unquestionably resort to its proxies like Hamas or Hezbollah (or even some of its Shiite allies it has in Lebanon or Saudi Arabia) to carry out attacks against Israel, America and their allies, effectively setting in flames a large portion of the Middle East. The ultimate weapon at Iranian disposal is to block the Strait of Hormuz. If such chokepoint is indeed asphyxiated, that would dramatically increase the price of oil, this a very threatening retaliation because it will bring intense financial and economic havoc upon the West, which is already facing significant trouble in those respects.

In short, the necessary conditions for a major war in the Middle East are given. Such conflict could rapidly spiral out of control and thus a relatively minor clash could quickly and dangerously escalate by engulfing the whole region and perhaps even beyond. There are many key players: the Israelis, the Palestinians, the Arabs, the Persians and their respective allies and some great powers could become involved in one way or another (America, Russia, Europe, China). Therefore, any miscalculation by any of the main protagonists can trigger something no one can stop. Taking into consideration that the stakes are too high, perhaps it is not wise to be playing with fire right in the middle of a powder keg.

### 1NC

#### The United States federal government should maintain restrictions on natural gas production in the Environmental Protection Agency’s New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews and require implementation of those restrictions by 2019. The EPA will announce this policy change immediately.

#### The counterplan delays implementation for 7 years which is the absolute longest it would take to effectively implement regulations – their evidence concludes that solves disruption

ARI 12

Advanced Resources International Inc. report for the American Petroleum Institute, "Estimate of Impacts of EPA Proposals to Reduce Air Emissions from Hydraulic Fracturing Operations, February 2012, "www.api.org/~/media/Files/Policy/Hydraulic\_Fracturing/NSPS-OG-ARI-Impacts-of-EPA-Air-Rules-Final-Report.ashx

\*\*RECs = reduced emissions completions – I bolded that part of the card\*\*

On July 28, 2011, the U.S. Environmental Protection Agency (EPA) proposed a suite of regulatory requirements designed to reduce air emissions from the oil and natural gas industry (Federal Register, Vol. 76, No. 163, August 23, 2011, pp. 52738 - 52843). EPA has proposed new standards for several processes associated with oil and gas production that have not previously been subject to federal regulation. Among these processes are well completions at new hydraulically fractured gas wells and at existing gas wells that are “re-fractured.” For these wells, EPA proposes that emissions of volatile organic compounds (VOCs) would be minimized through the use of “reduced emissions completions” or RECs, which simultaneously reduce both VOC and methane emissions. When gas cannot be collected during well completion operations, emissions would be reduced through pit flaring, unless it is a safety hazard. EPA’s proposed rule imposes REC requirements on most unconventional gas wells, but requests comment on concerns that limited availability of REC equipment could adversely impact drilling and U.S. natural gas supplies necessitating a phase-in period to avoid disruptions. EPA estimates that only 3,000 to 4,000 of the 25,000 new and modified fractured gas wells completed each year currently employ RECs. ARI’s assessment of the potential impact of just the requirements for the use of RECs on hydraulically fractured wells included consideration of potential additional revenue from recovered methane and possible condensates, increased costs associated with implementing RECs on hydraulically fractured wells, and the impact of delays in unconventional resource development associated with the demand for REC equipment exceeding the supply. Two scenarios were developed addressing the use-rate of REC equipment and the rate at which REC equipment supply could be expanded. • The High REC-Set Use Rate scenario assumes 140 REC equipment sets and the necessary trained personnel to deploy this equipment are available in 2012, that 200 new REC equipment sets and the corresponding trained personnel are added per year, and each REC set can service 25 wells per year. • The Low REC-Set Use Rate scenario assumes 292 REC equipment sets and the necessary trained personnel to deploy this equipment are available in 2012, that 200 new REC equipment sets and the corresponding trained personnel are added per year, and each REC set can service only 12 wells per year. Overall, both scenarios indicate a phase-in period of REC requirements is needed to avoid disruption. In the High REC-Set Use Rate scenario, it takes approximately 3 to 4 years for REC equipment to become available to keep pace with unconventional resource development that would otherwise occur. In the Low REC-Set Use Rate scenario, it takes longer, on the order of 6 to 7 years for REC equipment to become available to allow unconventional oil and gas drilling to approach the pace and level that would otherwise occur, Figure ES-1.

**\*\*\*Their evidence starts here\*\*\***

Depending on the REC-Set Use Rate scenario assumed, the following impacts from base case levels are projected in the first 4 years after the requirements go into effect (through 2015): • Overall well drilling for unconventional resources producing natural gas over 2012 - 2015 would be reduced by 31% to 52%, amounting to reductions in drilling ranging from 12,700 to 21,400 wells. • 5.8 to 7.0 quadrillion Btu (Quads) of otherwise economic unconventional natural gas would not be developed and produced by 2015, a 9% to 11% reduction. • 1.0 to 1.8 billion barrels of otherwise economic unconventional liquids would not be developed and produced by 2015, a 21% to 37% reduction. • Federal royalties of $7.0 to $8.5 billion that would otherwise be collected would not be paid in the first 4 years after the requirements go into effect. • State revenues from severance taxes amounting to $1.9 to $2.3 billion would be delayed beyond the first 4 years after the requirements go into effect. Under either scenario of REC equipment availability, a significant slowdown in unconventional resource development would occur, resulting in less reserve additions, less production, lower royalties to the Federal government and private landowners, and lower severance tax payments to state governments. The delays in drilling results in delays in production, which result in the delays in the economic benefits associated with that production. This analysis did not attempt to estimate lost jobs associated with reduced drilling, oil and gas supply services, and indirect employment.

#### Fracking contaminates groundwater – regulations solve and spur new methane recovery tech innovation

Bullis 12

(Kevin, Senior Editor of Technology Review published by MIT, “Can Fracking Be Cleaned Up?”, June 5, 2012, http://www.technologyreview.com/news/428076/can-fracking-be-cleaned-up/)

Yet even if these chemicals can be dealt with, wastewater remains a challenge. The water that flows back to the surface is contaminated not only with the chemicals originally mixed in at the surface, but also with chemicals, heavy metals, and, in some cases, naturally occurring radioactive materials from deep underground. As the water returns to the surface, natural gas and other hydrocarbons that were released by the fracking come with it. In many cases, that gas is allowed to escape into the atmosphere until the water stops flowing. The main component of natural gas—methane—is a greenhouse gas many times more powerful than carbon dioxide, so this practice could offset any greenhouse-gas emissions reductions that would come from burning natural gas rather than coal. However, simple technology exists to capture the natural gas at this stage. Implementing these technologies will likely require regulation. "It can't just be counting on companies to adopt best practices, because you'll only have a certain percentage of the well operators doing it," says Mark Boling, president of V+ Development Solutions, which is part of Southwestern Energy, a natural-gas producer. "You have to go the rest of the way and get regulations in place so that you have a level playing field and everyone is required to do the same thing." If done right, those regulations could drive innovation by creating a market for new technologies. Ulm recommends caps on emissions that give companies flexibility to choose the best technology. The IEA calls for a combination of such caps, and in some cases specific technology requirements. "With such regulations, you could force innovation to be implemented at a high pace. Technology is what it will take to make shale gas a sustainable resource," Ulm says.

#### Horizontal drilling coming now in Kansas – causes groundwater contamination in the Ogallala aquifer

Durban 11

(Eric, Regrettably holds a journalism degree from Missouri, “Fracking's new angle in Kansas”, December 22, 2011, http://harvestpublicmedia.org/article/937/frackings-new-angle-kansas/5)

“It’s just now starting here in Kansas. We probably have a handful of horizontal drilling operations currently going on, but we anticipate that to grow,” said Doug Louis, director of the conservation division with the Kansas Corporation Commission, which regulates the state’s oil and gas industry. Statistics from the Kansas Geological Survey show 66 horizontal well permits have been issued in 2011, more than the last three years combined. Louis said northwest and south-central Kansas are seeing the most interest in horizontal fracking, which cracks open layers of rock across the horizon with a mix of water, sand and chemicals, releasing trapped oil and natural gas. Fracking itself — also called hydraulic fracturing — is not new to Kansas, which was the site of the country’s first vertical fracking in 1947. With more than 57,000 wells fracked in the state, vertical fracking has helped make Kansas the 8th largest oil and gas producing state. But it’s new techniques, allowing a horizontal approach, that’s spurring the latest boom in oil and natural gas exploration across the country. The “horizontal” interest in Kansas comes as the Environmental Protection Agency begins a national study on the impacts of hydraulic fracturing on drinking water. And in early December, an EPA report indicated that fracking may have contributed to polluted groundwater in Wyoming. Fracking has drawn public protests in the northeast U.S., but Kansas Geological Survey interim director Rex Buchanan said the production area in Kansas is not the same. “The geologic setting in Kansas is very different than it is in Pennsylvania and New York, so the kinds of concerns that people might have back there are very different than the kinds of concerns they might have here,” Buchanan said. Still, groundwater contamination is a concern. The Ogallala Aquifer supplies irrigation and domestic water for a large portion of western Kansas, where much of the states’ agriculture output lies. Joe Spease, with the Sierra Club of Kansas, said the environmental organization isn’t anti-fracking, but members do want common sense regulations to protect land owners and natural resources from contamination. “With horizontal drilling there’s a lot less certainty where the gas is going to go and where the fractures are happening,” Spease said.

Ogallala on the brink now and key to ag productivity – collapse kills productivity and causes massive water shortages

Pierce ‘11

(Charles, contributor to Slate and award-winning journalist for Esquire, “Something We Should Be Worried About But Aren’t: Water”, October 27th http://www.esquire.com/blogs/politics/ogallala-aquifer-6531527)

Make no mistake. You screw with the Ogallala Aquifer and you screw with this nation's heartbeat. Twenty percent of the irrigated farmland in the United States depends upon it. Pumping the water from it is all that has kept the Dust Bowl from coming back, year after year. Any damage to it fundamentally changes the lives of the people who depend on it, their personal economies, the overall national economy, and what we can grow to feed ourselves. Absent the aquifer, and the nation's breadbasket goes back to being a prairie, vast grasslands that the people who first crossed them referred to as a desert. You end up with dry-land corn and some dry-land wheat. And the aquifer is far easier to empty than it is to fill. The technology to fully exploit it has existed only since the 1950's, and portions of it are already dangerously low. It won't be fully recharged until the next Ice Age. Water is the next big fight in this country. By now, we are used to the big fights over energy reserves, over coal and oil. There are even some new ones, over fracking for natural gas and over things like the XL pipeline, which we will get to shortly. But there haven't been serious fights over water for a while. Now, they seem to be coming thick and fast. A report by the Congressional Budget Office as far back as 1997 said that, particularly in the West, conflicts over water would take many forms — farmers vs. cities, sportsmen vs. developers, environmentalists vs. practically everyone else. The report concluded: First and foremost, western rivers provide water to agriculture to grow crops. They also help cities meet municipal and industrial needs for water and generate electricity. Other benefits that rivers provide — such as habitat for fish and wildlife, recreation, and cultural values for Native Americans — were historically ignored in the water equation but increasingly are considered legitimate and valuable uses. Demand for water by existing agricultural and urban users outstrips available supplies in many cases, however, so demand for water for public purposes or for increased urban supplies necessarily conflicts with existing patterns of water use. The ongoing drought exacerbates all of these concerns, particularly in the most imperiled portions of the Ogallala Aquifer, which are in Oklahoma and in the Texas Panhandle, were the drought has been the most severe. This has caused the demand for water to skyrocket as the available supply dwindles. Texas did put in place some water-conservation rules that restricted the amount of groundwater that farmers could pump, but they fairly well defined the concept of locked barns and escaped horses. Moreover, Governor Rick Perry, who is now running for president, after a fashion, anyway, did manage to arrange for one of his billionaire campaign donors to get a contract to build a radioactive waste dump in an area that environmentalists say puts a portion of the aquifer in danger: Environmentalists raised concerns because the site was near the Ogallala Aquifer, which provides water for drinking and agriculture from Texas to Nebraska. The engineers and geologists reviewing the application for the commission said it didn’t address those water contamination concerns. Glenn Lewis, part of the TCEQ team that reviewed the permit, called the initial application "laughably deficient."

#### US ag solves global war from food shortages

ICAF 6

The Industrial College of the Armed Forces, Spring , Final Report: Agribusiness Industry, http://www.ndu.edu/ICAF/Industry/reports/2006/pdf/2006\_AGRIBUSINESS.pdf

The Agribusiness Industry Study also took the opportunity to look more broadly at the relationship of agriculture and security on an international basis. As far back as Thucydides, national security policy analysts defined the three major causes of conflict: fear, the search for glory, and interest. There is no greater interest than that in feeding the people, and no greater fear than that of hunger. Moreover, the environmental pressures generated by agricultural production are often exported across national boundaries, leading to international tensions. These issues were of special interest to the group in light of the international field study in China, which perpetually faces the problem of feeding 20% of the world's people on about 7% of its arable land. The environmental pressures on land, water, and air have been heavy, and raise questions as to the sustainability of their agricultural sector in the years to come. More broadly, in a world that is likely to be increasingly stressed to feed its increasing population, America's agricultural capability serves as a form of strategic asset and reserve, which policy makers must ensure is preserved despite the pressures on this sector.

## Case

### Solvency

Alt Causes to natural gas decline:

#### Export ban dooms natural gas

McCown, ’12 (Brigham, Brigham McCown, a managing director at United Transportation Advisors, was the first acting administrator of the Department of Transportation’s Pipeline and Hazardous Materials Safety Administration, The Washington Times, “Natural gas export ban would be costly” February 28, 2012, http://www.washingtontimes.com/news/2012/feb/28/natural-gas-export-ban-would-be-costly/)-mikee

As America’s shale boom increases the domestic supply of natural gas, U.S. companies such as Dominion and Cheniere Energy prudently have used avenues to export natural gas to countries in Europe and Asia where higher demand translates into higher prices. Despite the private sector’s willingness to invest billions of dollars in our country to develop the physical infrastructure necessary to export this “made in the USA” product, some in Washington are seeking to derail this economic boost by encouraging denial of export permits by the Obama administration’s Department of Energy. Rep. Ed Markey, Massachusetts Democrat, along with a few other lawmakers on Capitol Hill, is clamoring for the agency to say no to U.S. exports, despite the job growth and revenue-generating potential associated with these projects. These misguided demands for the government to curtail American natural gas exports are in contravention of our national interests, defying both economics and logic. Substantial exploration efforts by energy companies have resulted in significant discovery of new reserves as well as increased production, making natural gas extraordinarily cheap and abundant in the United States as compared with Asian and European markets, where higher demand translates into higher pricing. Using supply-and-demand economics makes sense in a commercial environment. Attempts by Washington lawmakers to take an obstructionist position against U.S. businesses are counterintuitive. Imagine the backlash if Congress opposed allowing Caterpillar to sell equipment overseas or the Department of Agriculture placed an export ban on surplus corn or wheat. How many U.S. factory workers and farmers would lose their jobs? The truth of the matter is that exporting our domestic surpluses to foreign markets where demand and prices are higher reduces our trade deficit while increasing our gross domestic product (GDP). Yet, when the target is natural gas, the rules somehow change. Washington’s disdain for fossil fuel has attracted the ire of domestic companies and our trading partners, both of which recognize that the latest anti-energy fad lacks a rational economic basis. It is difficult to understand how any American lawmaker or administration would berate China for engaging in unfair economic manipulations while at the same time giving serious consideration to stunting economic growth by deliberately curtailing U.S. exports. In fact, President Obama even went so far in his recent State of the Union address as to promise, “I will go anywhere in the world to open new markets for American products.” The president must back up his promises with policies and actions that encourage, not hinder, our economic recovery. A natural gas export ban would discourage domestic natural gas producers from making a further investment in the American economy. Consider that the proposed natural gas exports necessitate expansion of existing facilities and construction of new infrastructure, resulting in significant economic benefits. For example, Cheniere Energy is working on construction of its Sabine Pass Liquefaction facility, which the company projects will create 30,000 to 50,000 jobs.

#### State and local restrictions prevent production.

Negro, ’12 (Sorell E, associate at Robinson & Cole LLP, “Fracking Wars: Federal, State and Local Conflicts over the Regulation of Natural Gas Activities,” FEBRUARY 2012 | Vol. 35 | No. 2, Zoning and Planning Law Report)-mikee

However, in many communities sitting on top of these gas reserves, enthusiasm over domestic drilling has been met with inflamed opposition from citizens and officials who express health, safety and environ- mental concerns. A growing number of communities have banned fracking altogether, as discussed below. Fracking has proved to be a contentious issue in many localities, and many states and mu- nicipalities are faced with regulating natural gas drilling for the first time. In addition, states and local governments that have been regulating fracking are refining their rules and regulations. Thus, the regulation of fracking is in flux. Accordingly, understanding how fracking is regulated takes a bit of patience. Complicating the regulatory climate, all levels of government claim an interest in fracking regulation. While the regulation of the oil and gas industry has traditionally been left to the states, the Environmental Protection Agency (EPA) is currently re-evaluat- ing its role in the process. For example, the EPA has been working on new standards for emissions from gas drilling.6 Debate ensues over the proper roles for the federal, state and local governments in regulating how, where and if fracking occurs, and initiatives underway at the federal and state levels could significantly alter current regulato- ry schemes. The objectives of this article are to provide land use and zoning practitioners with an overview of the current regulatory scheme at each level of government, offer examples of cur- rent regulations, and show that the regulation of fracking is subject to substantial change depend- ing on which course the EPA takes and emerging state regulatory frameworks.

#### The EPA revised the implementation date of regulations from 2012 to 2015 – solves the aff even without the CP – recovered methane sales solve any economic impact, none of their ev assumes this change

Davidson 12

(Mark Davidson is Editorial Director for Platts’ North American natural gas news, Platts’ Gas Daily, Wednesday June 20th, 2012, http://s3.amazonaws.com/cuttings/cuttingpdfs/18531/075d95107cdd5ed278a19f158843771f.pdf)

The new rule requiring green completions of all fracked wells by 2015 will “level” the playing field nationally, EPA Assistant Administrator Regina McCarthy told the senators. She predicted that operators will find that the cost of installing methane control equipment will be compensated by the revenue generating by selling the recovered gas. “These win-win standards protect public health in a way the supports responsibly increasing domestic production, and the standards ultimately pay for themselves as industry captures more of a valuable natural resource,” McCarthy concluded.

### Manufacturing

#### Competitiveness theory is wrong

Amar Bhide 8, Professor of Business at Columbia, “The Venturesome Economy: How Innovation Sustains Prosperity in a More Connected World”, <http://bhide.net/venturesome_press/JACF_Venturesome_Economy_1_bhide.pdf>

Techno-nationalist arguments based on sound bytes or parsimonious economic models cannot deal with the complexity of the multiplayer game. They rarely distinguish between different levels and kinds of know-how. Instead, they equate innovation with scientific publications or patents on cutting-edge technology produced in universities or in commercial research labs. They ignore the contributions of the other players in the innovation game that don’t result in publications or patents. Techno-nationalists also tend to oversimplify the phenomenon of globalization, often assuming that high-level know-how never crosses national borders—only the final products made using the know-how are traded.19 This assumption is pivotal in theoretical models of “North-South” trade that Richard Freeman invokes to predict the woeful consequences of the erosion of U.S. technological leadership. The reality, however, is that high-level ideas cross national borders rather easily, whereas a large proportion of “final” output, especially in the service sector, does not. The Propositions My analysis of the multiplayer game and cross-border interactions suggests outcomes that differ sharply from the dire predictions of the techno-nationalists. According to my assessment, the United States is not locked into a “winner-take-all” race for scientific and technological leadership, and the growth of research capabilities in China and India—and thus their share of cutting-edge research—does not reduce U.S. prosperity. Indeed my analysis suggests that advances abroad will improve living standards in the U.S. Moreover, the benefits I identify are different from the conventional economist’s account whereby prosperity abroad increases opportunities for U.S. exporters. Instead, I show that cutting-edge research developed abroad benefits domestic production and consumption in the service sector. And contrary to the policy prescriptions of techno-nationalists, I suggest that the U.S. embrace the expansion of research capabilities abroad instead of devoting more resources to maintaining its lead in science and cutting-edge technology.20 My assessment and prescriptions differ so sharply from those of the techno-nationalists for reasons that I summarize below: The world is a long way from being “flat”—China and India aren’t anywhere close to catching up with the U.S. in their capacity to develop and use technological innovations. Starting afresh may allow China and India to leapfrog ahead in some fields, in building advanced mobile phone networks, for example. But excelling in the overall innovation game requires a great and diverse team, which, history suggests, takes a very long time to build. Consider Japan, which began to “enter the world” after the Boshin War of 1868. In the subsequent Meiji Restoration, the country abolished its feudal system and instituted a Western legal system and a quasi-parliamentary constitutional government. In a few decades, Japan had modernized its industry, its military, and its educational system. Today Japan is a highly developed economy and makes important contributions to advancing the technological frontier. But nearly a century and a half after Japan started modernizing, its overall capacity to develop and use innovations, as evidenced by the country’s average productivity, remains behind that of the U.S. Similarly, Korea and Taiwan started industrializing (as it happens, under Japanese rule) about a century ago and enjoyed miraculous rates of growth after the 1960s. In several sectors of the electronics industry, Korean and Taiwanese companies are technological leaders. Yet their overall productivity suggests they have less capacity than Japan to develop and use innovations. Is it likely, then, that within any reader’s lifetime China and India will attain the parity with the U.S. that has eluded Japan, Korea, and Taiwan? The fear of offshoring of innovation is similarly exaggerated—don’t expect to hear a giant sucking sound anytime soon. The massive relocation of innovation appears highly unlikely. The fact that U.S. companies have started R&D centers abroad that do high-level research doesn’t mean that all lower-level know-how development will quickly follow. Of the many activities included in the innovation game, only some are performed well in remote, low-cost locations. Many mid-level activities, for instance, are best conducted close to potential customers. Any catch-up, even if it takes place gradually and in the normal course of development, will to some degree reduce the U.S. “lead.” Furthermore, the global influence of techno-nationalism could accelerate this process. As alarmists in the U.S. continue to remind us, governments in “emerging” countries such as China and India—also in the thrall of techno-nationalist thinking—are making a determined effort to leap ahead in cutting-edge science and technology. But I am skeptical that these efforts are going to do any more good for China’s and India’s economy than similar efforts in Europe and Japan in the 1970s and 1980s.21 But putting aside the issue of whether investing in cutting-edge research represents a good use of Chinese and Indian resources, does whatever erosion of U.S. primacy in developing high-level know-how this might cause really threaten U.S. prosperity? Should the U.S. government respond in kind by putting even more money into research? Nobel laureate Paul Krugman has long decried what he refers to as the “dangerous obsession” with “national competitiveness.” As Krugman wrote in a 1994 article in Foreign Affairs, the widespread tendency to think that “the United States and Japan are competitors in the same sense that Coca-Cola competes with Pepsi” is “flatly, completely and demonstrably wrong.” Although “competitive problems could arise in principle, as a practical, empirical matter,” Krugman goes on to say, “the major nations of the world are not to any significant degree in economic competition with each other.”22 The techno-nationalist claim that U.S. prosperity requires that the country “maintain its scientific and technological lead” is particularly dubious: the argument fails to recognize that the development of scientific knowledge or cutting-edge technology is not a zero-sum competition. The results of scientific research are available at no charge to anyone anywhere in the world. Most arguments for the public funding of scientific research are in fact based on the unwillingness of private investors to undertake research that cannot yield a profit. Cutting-edge technology (as opposed to scientific research) has commercial value because it can be patented; but patent owners generally don’t charge higher fees to foreign licensors. The then tiny Japanese company Sony was one of the first licensors of Bell Labs’ transistor patent. Sony paid all of $50,000—and only after first obtaining special permission from the Japanese Ministry of Finance—for the license that started it on the road to becoming a household name in consumer electronics. Moreover, if patent holders choose not to grant licenses but to exploit their inventions on their own, this does not mean that the country of origin secures most of the benefit at the expense of other countries. Suppose IBM chooses to exploit internally, instead of licensing, a breakthrough from its China Research Laboratory (employing 150 research staff in Beijing). This does not help China and hurt everyone else. Rather, as I discuss at length later, the benefits go to IBM’s stockholders, to employees who make or market the product that embodies the invention, and—above all—to customers, who secure the lion’s share of the benefit from most innovations. These stockholders, employees, and customers, who number in the tens of millions, are located all over the world. In a world where breakthrough ideas easily cross national borders, the origin of ideas is inconsequential. Contrary to Thomas Friedman’s assertion, it does not matter that Google’s search algorithm was invented in California. After all, a Briton invented the protocols of the World Wide Web—in a lab in Switzerland. A Swede and a Dane in Tallinn, Estonia, started Skype, the leading provider of peer-to-peer Internet telephony. How did the foreign origins of these innovations harm the U.S. economy? The techno-nationalist preoccupation with high-level research also obscures the importance of what happens at lower levels of the innovation game. High-level breakthroughs that originate in China or India can in principle be used to develop mid- and ground-level products of value to workers and consumers everywhere. But the benefits are not automatic: realizing the value of high-level innovation requires “venturesome” lower-level players who have the resourcefulness and gumption to solve challenging technical and business problems. Without venturesome radio manufacturers such as Sony, transistors might have remained lab curiosities. Moreover, the benefits of lower-level venturesome consumption often remain in the country where it occurs, and all countries don’t have the same capacity for such consumption. Therefore, I argue, because high-level ideas cross borders easily, a nation’s “venturesome consumption”—the willingness and ability of intermediate producers and individual consumers to take a chance on and effectively use new know-how and products—is at least as important as its capacity to undertake high-level research. Maryland has a higher per capita income than Mississippi, Norway has a higher per capita income than Nigeria, and Bosnia has a higher per capita income than Bangladesh; the richer places are not ahead because they are (or once were) significant developers of breakthrough technologies. Rather, they are wealthier because of their capacity to benefit from innovations that originated elsewhere. Conversely, the city of Rochester, New York (home to Xerox, Kodak, and the University of Rochester) is reputed to have one of the highest number of patents per capita of any city in the U.S. It is far from the most economically vibrant. The United States, according to my analysis, has more than just great scientists and research labs: it also hosts an innovation game with many players who can exploit high-level breakthroughs regardless of where they originate. Therefore, the erosion of the U.S. lead in cutting-edge research, far from hurting the U.S. economy, may well be a blessing for the following reason: an increase in the world’s supply of high-level know-how provides more raw material for mid- and ground-level innovations that increase living standards in the United States. The U.S. technological lead narrowed after World War II as Western Europe and Japan rebuilt their economies and research capabilities. This led not to a decrease, but to an increase in U.S. prosperity.23 And the U.S. likely enjoys a higher standard of living because Taiwan and Korea have started contributing to the world’s supply of scientific and technological knowledge.

#### Alt cause – healthcare costs

CFR 12, Council on Foreign Relations, “Healthcare Costs and U.S. Competitiveness”, March 26, http://www.cfr.org/health-science-and-technology/healthcare-costs-us-competitiveness/p13325

The United States spent more than 17 percent of its GDP on health care, higher than any other developed nation. The nonpartisan Congressional Budget Office (CBO) estimated in 2008 that number would rise to 25 percent by 2025 without changes to federal law (PDF). Employer-funded coverage is the structural mainstay of the U.S. health insurance system. A November 2008 Kaiser Foundation report says access to employer-sponsored health insurance has been on the decline (PDF) among low-income workers, and health premiums for workers have risen 114 percent in the last decade (PDF). Small businesses are less likely than large employers to be able to provide health insurance as a benefit. At 12 percent, health care is the most expensive benefit paid by U.S. employers, according to the U.S. Chamber of Commerce. Some economists say these ballooning dollar figures place a heavy burden on companies doing business in the United States and can put them at a substantial competitive disadvantage in the international marketplace. For large multinational corporations, footing healthcare costs presents an enormous expense. General Motors, for instance, covers more than 1.1 million employees and former employees, and the company says it spends roughly $5 billion on healthcare expenses annually. GM says healthcare costs add between $1,500 and $2,000 to the sticker price of every automobile it makes. Health benefits for unionized auto workers became a central issue derailing the 2008 congressional push to provide a financial bailout to GM and its ailing Detroit rival, Chrysler.

#### \*Status quo drilling solves dependence- plan doesn’t accelerate this uniquely

Plumer, author @ The Washington Post, 8-23-12,

Brad, “Five things to know about Mitt Romney’s energy plan,” http://www.washingtonpost.com/blogs/ezra-klein/wp/2012/08/23/five-things-to-know-about-mitt-romneys-energy-plan/

1) The United States is already shrinking its imports of oil and gas. It’s unclear how much Romney’s plan would accelerate the process. Over the past decade, thanks to advances in drilling techniques, the United States has been producing ever-greater quantities of oil and gas from places like North Dakota’s shale formations. Under existing policies, according to the Energy Information Administration, the United States is on pace to eliminate all natural gas imports by 2020 and shrink its net oil imports down to 38 percent. About two-thirds of those imports will come from Canada and Mexico. So we’ll be fairly close to North American energy independence in 2020 regardless. (And, EIA notes, we’ll get even closer if the Obama administration extends its new fuel-economy standards from 2017 to 2025.)

#### Manufacturing strong now – if anything can hurt it, it will be the Eurozone

FLOYD NORRIS – NYT – 1/5/12, Manufacturing Is Surprising Bright Spot in U.S. Economy, http://www.nytimes.com/2012/01/06/business/us-manufacturing-is-a-bright-spot-for-the-economy.html

For the first time in many years, manufacturing stands out as an area of strength in the American economy. When the Labor Department reports December employment numbers on Friday, it is expected that manufacturing companies will have added jobs in two consecutive years. Until last year, there had not been a single year when manufacturing employment rose since 1997. And this week the Institute for Supply Management, which has been surveying American manufacturers since 1948, reported that its employment index for December was 55.1, the highest reading since June. Any number above 50 indicates that more companies say they are hiring than say they are reducing employment. There were new signs Thursday that the overall jobs climate was improving, as the Labor Department reported that new claims for unemployment benefits fell last week and a payroll company’s report showed strong growth in private-sector jobs in December. As stores have filled with inexpensive imports from China and other Asian countries, the perception has risen that the United States no longer makes much of anything. Certainly there has been a long decline in manufacturing employment, which peaked in 1979 at 19.6 million workers. Now even with hiring over the last two years, the figure is 11.8 million, a decline of 40 percent from the high. But those numbers obscure the fact that the United States remains a manufacturing power, albeit one that has been forced to specialize in higher-value items because its labor costs are far above those in Asia. The value of American manufactured exports over a 12-month period peaked at $1.095 trillion in the summer of 2008, just before the credit crisis caused world trade volumes to plunge. At the low, the 12-month figure fell below $800 billion, but it has since climbed back to $1.074 trillion. Those figures are not adjusted for inflation. In total exports, including manufactured goods as well as other commodities like agricultural products, the United States ranked second in the world in 2010, behind China but just ahead of Germany. For the first 10 months of 2011, Germany is slightly ahead of the United States. The United States is particularly strong in machinery, chemicals and transportation equipment, which together make up nearly half of the exports. Exports of computers and electronic products are growing, but are well below their precrisis levels. Production of cheaper computers and parts shifted to Asia long ago. Just how long the rise in manufactured exports can last depends, in part, on the health of other economies. The euro zone no longer takes as large a share of American exports as it once did, but it is still a major customer. A recession there this year, as has been widely forecast, would hurt all major exporters, including the United States. Similarly, the strong exports provide a stark reminder of how vulnerable this country could be to protectionist trade wars. The Doha round of world trade talks, which was supposed to result in the lowering of more trade barriers, has stalled. And last month China imposed punitive duties on imports of American large cars and sport utility vehicles, which total about $4 billion a year. That move was seen as retaliation for United States requests that the World Trade Organization rule that Chinese subsidies for its solar and poultry industries violated international law. The Chinese denounced those requests as protectionist. The American government denies that, of course. “Part of a foundation of a rules-based system is dispute settlement," said Ron Kirk, the United States trade representative, in an interview with Reuters after the Chinese announced the new tariffs. "That’s what we think is so important about the W.T.O. How China reacts to that is up to China. But I just cannot buy into the argument that our standing and protecting the rights of our exporters and workers is somehow igniting a trade war or being protectionist.” Since employment in the United States hit its recent low, in February 2010, the economy has added 2.4 million jobs through November, of which 302,000 were in manufacturing. With government payrolls shrinking, and financial services jobs also fewer, manufacturing employment has played an important role in keeping the economy growing. It also is helping that construction employment appears to have hit bottom. In the first 11 months of 2011, it is up a small amount. To be sure, the gains in manufacturing employment and exports have come after sharp declines during the recession and credit crisis. There are still 6 percent fewer manufacturing jobs than there were when President Obama took office at the beginning of 2009, and it seems very unlikely that he will be the first president since Bill Clinton, in his first term, to preside over growing manufacturing employment during a four-year term. During George W. Bush’s two terms, the number of manufacturing jobs fell by 17 percent in the first four years and by 12 percent in the following four years. The number declined by 1 percent in Mr. Clinton’s second term. The Institute for Supply Management survey of manufacturers has shown more companies planning to hire than to fire in every month since October 2009. That string of 27 months is the longest such string since 1972, but remains well behind the longest one, 36 months, which ended in December 1966. Over all, that survey has indicated that a plurality of companies has believed business is getting better for 29 consecutive months, and December’s reading of 53.9 was the strongest since June. This summer, one widely watched part of the Institute for Supply Management survey showed that a small plurality of companies reported new orders were falling, a fact that helped to stimulate talk of a double-dip recession. But the latest reading, of 57.6, indicates widespread strength in new orders. In an economy where there is widespread concern over consumer spending, and in which government spending and payrolls are under heavy pressure, manufacturing has become a bright spot. It is not enough to produce a strong rebound, and it remains vulnerable to weakness overseas. But it has helped to keep a weak economic recovery from turning into a new recession.

#### Manufacturing decline inevitable and it’s not key

MGI 12, Mckinsey Global Institute – research branch of the Mckinsey management consulting company, “Trading myths: Addressing misconceptions about trade, jobs, and competitiveness”, May, http://www.mckinsey.com/insights/mgi/research/productivity\_competitiveness\_and\_growth/six\_myths\_about\_trade

Myth: Mature economies are losing out to emerging markets in trade and thus face increasing trade deficits. Reality: The trade balance of mature economies has remained largely stable in the aggregate and even begun to improve. There are wide variations between individual countries, but no evidence supports claims of a wholesale deterioration of the trade balance between the mature and emerging economies over the past decade. Myth: Manufactured goods drive deteriorating trade deficits. Reality: Imports of primary resources, whose prices have been rising sharply, are the largest negative contributor to the trade balance of mature economies. In 2008, mature economies ran a 3.3 percent of GDP trade deficit in primary resources but a 0.5 percent of GDP surplus in manufactured goods and specifically a 1.6 percent surplus in knowledge-intensive manufacturing. Some individual mature countries run trade deficits in knowledge-intensive manufacturing. Myth: Trade is at the heart of the loss of manufacturing jobs. Reality: Changes in the composition of demand and ongoing productivity increases are the main reasons for the decline in the number of such jobs in mature economies. The share of manufacturing in these countries’ total employment is bound to decline further, from 12 percent today to less than 10 percent in 2030, according to our analysis. MGI finds that trade or offshoring are responsible for the loss of around 20 percent of the 5.8 million US manufacturing jobs eliminated between 2000 and 2010.

#### Next, Chemical Industry

#### No impact to the Chemical industry—

#### a. Egregious author bias- their impact evidence is from the International Council of Chemical Associations and doesn’t cite any distinct studies to prove the argument.

#### b. No internal link- their evidence doesn’t predict price hikes will utterly destroy the industry- at worst growth is stalled, no brink to industry-wide collapse

#### c. their scenarios are about portions of the chemical industry in the security sector – that would be the LAST thing to go if the industry collapsed, we’d subsidize it with government funding if we had to

#### Chemical industry dying now

NASDAQ, 2012

9-6. Subset of Ameritrade, stock market exchange. “Chemical Industry Stock Outlook - Sept. 2012 - Zacks Analyst Interviews,” http://community.nasdaq.com/News/2012-09/chemical-industry-stock-outlook-sept-2012-zacks-analyst-interviews.aspx?storyid=170806#ixzz28UcPva8c

The sluggish economy took a toll on growth in the U.S. as the nation's chemical production grew a nominal 2.1% in 2011. South America and Asia (excluding Japan) witnessed growth of 4.7% and 11.1%, respectively. Growth in Asia was led by strong contributions from China. ¶ End-Market Scenario ¶ U.S. chemical production continues its monthly declining streak as reflected in the recently released data by the American Chemistry Council ("ACC"). The Washington-based chemical industry trade group said that the Chemical Production Regional Index (CPRI) fell 0.1% in June, following a downwardly revised 0.5% decline in May. ¶ The U.S. CPRI, which was created by Moore Economics to track chemical production in seven regions across the nation, is comparable to Federal Reserve's industrial production index for chemicals. The ACC reported that chemical production dipped in the Gulf Coast, Midwest, Southeast and West Coast regions and was flat in the Ohio Valley, Mid-Atlantic and Northeast regions. ¶ On a region-by-region basis, production declined across all regions except the Gulf Coast and Ohio Valley areas. On a year-to-date basis (production for the first six months of 2012 compared with the year-ago data), production nudged up 0.2%. ¶ On a monthly comparison basis, chemical production in the Gulf Coast region, where key building block materials are produced, was down 0.4% in June. The Midwest region saw a decline of 0.2%. Productions in the Ohio Valley and Mid-Atlantic regions were flat in June. Production slipped in the Southeast (down 0.2%) and West Coast (0.1%) regions during the month while remained unchanged in the Northeast. ¶ Output from the U.S. manufacturing sector, the largest consumer of chemical products, crept up 0.2% in June, following a 0.1% fall a month ago. Within this sector, output rose in several key chemistry end-user markets including appliances, motor vehicles, computers, apparel, structural panels, rubber products, paper and printing. ¶ Demand for U.S. manufacturing has been weak in recent months given the ongoing European predicament and slowdown in Chinese manufacturing sector. The ACC noted that output clipped in a number of key segments including plastic resins, fertilizers, adhesives, organic chemicals and pharmaceuticals. However, production rose across many segments such as inorganic chemicals, industrial gases, consumer products, pesticides, coatings and synthetic rubber. ¶ The decline in chemical output was also witnessed in Europe . According to the European Chemical Industry Council ("ECIC"), chemicals production in the European Union fell 2.1% year over year in the first five months of 2012. Production edged down 0.7% year over year in May 2012. Chemicals prices rose 2.7% year over year in May, led by a 4% increase in the price for basic inorganics.

#### Can’t solve EMP attacks - Semiconductors are a technology that is vulnerable to EMP attacks, aff boosts that

#### No impact or probability to EMP

Farley 9 – Robert Farley, assistant professor at the University of Kentucky’s Patterson School of Diplomacy and International Commerce, 10-22-09, “Neocons Salivating Over Their Next Great Exaggerated "Threat": Electromagnetic Pulse Attack” <http://www.alternet.org/media/143455/neocons_salivating_over_their_next_great_exaggerated_%22threat%22%3A_electromagnetic_pulse_attack/?page=entire>

Many weapons experts doubt that an EMP attack could cause lasting or irreversible damage. Stephen Younger, former senior fellow at Los Alamos National Lab and director at the Defense Threat Reduction Agency, argues that while an EMP might create problems in the short term, it is unlikely to cause long-term devastation. Similarly, observers have questioned the capacity of North Korea or Iran, much less a terrorist organization, to develop a warhead sophisticated enough to cause widespread EMP damage. Nick Schwellenbach, a former researcher at Project on Government Oversight, suggests that the idea of a small, EMP-optimized warhead is absurd: "You have a lot of points of failure in order to get to a warhead that is EMP optimized. … [Y]ou need specialized machine tools, you need capital, but to create a weapon that creates the secondary effect that you're talking about, that's something even we can't do right now.”

#### Worst case scenario we buy the chemical products from other states- US isn’t key

NASDAQ, 2012

9-6. Subset of Ameritrade, stock market exchange. “Chemical Industry Stock Outlook - Sept. 2012 - Zacks Analyst Interviews,” http://community.nasdaq.com/News/2012-09/chemical-industry-stock-outlook-sept-2012-zacks-analyst-interviews.aspx?storyid=170806#ixzz28UcPva8c

The chemical industry, a nearly $3 trillion global business, has grown at a brisk pace for more than five decades. The fastest growing areas have involved the manufacture of synthetic organic polymers used as plastics, fibers and elastomers. The chemical industry is mainly concentrated in three areas of the world: Western Europe, North America and Japan. Europe is the largest producer, followed by the U.S. and Japan. ¶ The U.S. chemical industry represents roughly 19% of the global chemical output and employs more than 800,000 people. It is responsible for 10% of the nation's merchandise exports, aggregating $145 billion annually. Roughly 5.5 million additional jobs are backed by the purchasing activity of the chemical industry.

#### It’s fundamental administration opposition, not funding – modernization won’t happen

Beggs 2012 (June 22, Drew, “Modernization Progress of Nuclear Arsenal Proves Contentious” <http://www.fas.org/blog/nutshell/2012/06/modernization-progress-of-nuclear-arsenal-proves-contentious/>)

“I’m losing faith in your ability to carry out what was agreed to,” Corker said to D’Agostino, accusing the administration of slow-walking modernization in the hope that future arms reductions would make modernization unnecessary. D’Agostino denied the charge, arguing that progress was being made, despite a lack of obvious advancement. Kerry expressed some of his own frustrations with the lack of apparent progress in modernizing the U.S.’s arsenal. “Our word is as involved in this as your word, and I think it is critical that we follow through,” he said. However, he did acknowledge the role of the House of Representatives in not granting the budget NNSA required to fulfill its obligations.

#### Alt causes to low nuclear deterrence

Adney 2012 (September 27, Kenneth J., “ADNEY: Nuclear arsensal deteriorating” <http://www.washingtontimes.com/news/2012/sep/27/nuclear-arsensal-deteriorating/>)

Last Sunday passed with little notice. It marked 20 years since the last nuclear test conducted by the United States. The test, appropriately named “Divider,” was a divider between an era of responsible U.S. nuclear weapon policy and management and the subsequent years of negligence and decline. This test was the last gasp of a program barely started to bring our nuclear stockpile into the post-Cold War world. The time to restore and update U.S. nuclear weapon capabilities is long overdue. In 1992, President George H.W. Bush reluctantly signed into law a nuclear test moratorium in hopes of saving the Superconducting Super Collider — a never-to-be-realized particle accelerator planned in Texas. Though the law eventually expired, nuclear tests were prohibited by presidential order throughout the eight Clinton years. Complaints that the stockpile and the quality of the U.S. nuclear weapon complex would decline were muted by promises of generous funding for “non-nuclear” nuclear weapon research. Legislation was also passed making it illegal for our scientists to work on new nuclear weapons. For years, nuclear weapon scientists shouldered the unpopular but vital mission of “thinking about the unthinkable” — developing nuclear weapons to assure the credibility and reliability of our deterrent. With the passage of this law, a noble responsibility was declared illegal. Consumed by the terrorism threat, the eight years of President George W. Bush's administration were marked by continued, even if unintended, neglect of U.S. nuclear weapons. Expectations of friendship with Russia led to further reductions in the numbers of U.S. weapons, while those remaining grew older and increasingly obsolete, both technically and tactically. The Obama administration makes little pretense of responsible husbandry, even of a geriatric nuclear stockpile. It fully embraces the goal of nuclear disarmament and measures progress by how fast we dismantle and disarm. As a long-worshipped leftist goal, no justification is needed for this policy within the administration. It is reinforced by the need to reduce spending in a stagnant economy, to support profligate spending on more popular priorities and a compliant, stressed-out military. Twenty years have passed, and where are we? The number and variety of weapons in the stockpile have been reduced to levels not seen since the mid-1950s. If the Obama administration gets its way, the stockpile will soon look like it did in the 1940s. The few nuclear weapon types remaining were appropriate for a Cold War nuclear exchange with the Soviet Union but, frozen in time, it is hard to imagine they are a good fit in today’s more complex world. Our remaining nuclear systems were designed when eight-track tapes were an innovation. Many of the experienced scientists and engineers at the nuclear weapons laboratories have died, retired or been dismissed from the team. Serious thinking about modernizing our arsenal is taboo. Any suggestion that nuclear testing should be resumed is stifled by the layers of managers, bureaucrats and politicians who control the budgets. Survival is the name of the game, not science in the interest of national security. Some of our newer scientists have convinced themselves they know so much that more nuclear testing is superfluous. True, labs have computer simulations that rival most video games, but they are not the real world. The B-52 bomber is an old weapon system, but it is flown quite often. If it sat in a hangar for 20 years and only “flown” by simulator, would you trust it? Would an enemy fear it? Don’t forget that our nuclear weapon enterprise is “managed” by the Department of Energy, a bureaucracy that may be the most ineffective and mismanaged agency in American history. If you could peek behind the curtain, you shouldn’t be surprised to see a nuclear version of Solyndra. Also telling, the department’s Nevada Test Site has been given a new name: the “Nevada National Security Site.” Despite the test site’s history, political correctness demands avoidance of the “N-word” (nuclear) and the “T-word” (test).

#### Conventional deterrence outweighs nuclear primacy

George **Perkovich**, **2009,** International Commission on Nuclear Non-proliferation and Disarmament, May 2009, “Extended Deterrence On The Way To A Nuclear Free World,” International Commission on Nuclear Non-proliferation and Disarmament

For Credible Deterrence, Focus on Non-Nuclear Capabilities The most credible and perhaps least dangerous way to assure allies of U.S. commitments to defend them is to station U.S. conventional forces on allied territories, as is already the case in original NATO states and in Japan and South Korea. With U.S. conventional forces in harm’s way, an adversary attacking a U.S. ally would draw the U.S. into the conflict with greater certainty than if nuclear weapons were directly and immediately implicated. Indeed, the greater credibility that U.S. conventional forces bring to extended deterrence is one reason why Poland has been keen to have U.S. missile defense personnel based on Polish soil. Were U.S. personnel attacked, the U.S. would respond forcefully. Arguably the best way to strengthen the credibility of U.S. extended deterrence would be to stress that conventional capabilities of the U.S. and its allies alone are sufficient to defeat all foreseeable adversaries in any scenario other than nuclear war. And as long as adversaries can threaten nuclear war, the U.S. will deploy nuclear weapons to deter that threat. Of course, basing U.S. conventional forces on allied territory also invites controversy in many places, including Japan. Such controversies are much less intense than would flow from proposals to base nuclear weapons, but they point to the fundamental underlying political-psychological challenge of extended deterrence. Allies want the protection that the U.S. can provide, and worry about abandonment, but they also don’t want to be implicated in U.S. policies that could entrap them in conflicts not entirely of their making. This tension is the heart of the extended deterrence challenge. To repeat, rather than focusing on nuclear weapons, the U.S. and its allies should concentrate on building cooperation and confidence in overall political-security strategies in each region. Indeed, it is worthwhile to honestly consider whether in Northeast Asia and Central Europe and Turkey the recently expressed concerns over the future credibility of extended U.S. nuclear deterrence is a proxy for deeper concerns that are more difficult to express. For example, in Poland, Russia’s rhetoric and foreign policy, including the conflict with Georgia, elicit private worries that NATO would not actually risk confrontation with Russia to defend Poland against Russian bullying. Can NATO as a collection of 26 states with diverse interests and capabilities be relied upon stand up forcefully in behalf of Poland (and other new NATO states)? Doubts about the answer to this question at least partially explain why Poland has sought special guarantees from the U.S. It is not clear that focusing on the nuclear element of extended deterrence in this situation helps produce policies and capabilities that actually would deter or dissuade Russia from bellicosity. The types of scenarios in which Russia might bully Poland are not likely to include credible threats of Russian coercion that would make countervailing use of nuclear weapons realistic or desirable. Indeed, raising the specter of nuclear threats could undermine the credibility of extended deterrence because allied states, including the American public, would probably become alarmed in ways that would weaken resolve to push back firmly against Russian pressure. This resembles the credibility problems of extended nuclear deterrence during the Cold War. Decisions to extend NATO membership to former Warsaw Pact states were made during the 1990s when the risks of Russian coercion appeared to be a relic of history. Precisely because the threat of war against the new NATO states was low, it appeared to entail little cost and risk to extend NATO protection to them. NATO governments and societies did not carefully consider the implications. However, once commitments were made to new allies, it has become imperative to treat them seriously. Given the unfinished challenge of mobilizing collective resolve to implement NATO’s obligations, whether in Afghanistan or Eastern Europe, if risks of threats to new allies’ security rise anew, great care must be taken not to invoke prospects of nuclear crisis unless and until there are clear dangers of nuclear conflict. This is not the case today. It will seem strange and unwelcome to populations of other NATO states to call for greater salience of extended nuclear deterrence in response to a U.S.led effort to move to a nuclear-weapon free world. Many of these Western European states have always been highly ambivalent about getting caught in a nuclear conflict between the U.S. and Russia. That is, they welcome extended deterrence when it might make war less likely but they fear it when it might make war in Europe more likely, or more horrifying than it otherwise would be. Bringing this ambivalence to the foreground now could needlessly weaken alliance solidarity. It would be wiser to avoid such developments by focusing on confidence-building, threat reduction, arms control, and reduction of the salience of nuclear weapons in Russian-Western relations. If efforts to reduce threats and promote cooperation fail, then Central European allies will most need reassurance that capabilities and determination exist to counter Russian bullying by means proportionate to those Russia would use for such bullying. Careless invocations of the nuclear element of extended deterrence should be avoided.

#### Excess investment will go to China’s chemical industry- more profitable

Hu, 2012,

9-21, Haiyan, China Daily, US, “Nation's chemical industry bright: Reports,” <http://usa.chinadaily.com.cn/2012-09/21/content_15773435.htm>

\*\*KPMG = leading investment banking company globally

Multinational companies are attracted by the vast potential in China's chemical industry and plan to increase investments in this sector, according to two KPMG reports released on Wednesday.¶ Despite global economic woes, China's chemical industry is expected to expand. A majority of global respondents in the KPMG reports said that the country is their top investment target.¶ "We see continuing opportunities for China's chemicals market, despite the global economic slowdown. The output of chemicals in emerging markets is expected to outpace production in developed countries," said Norbert Meyring, partner at KPMG China, in a news release.¶ According to the company's survey, titled "2012 Chemicals and Performance Technologies Industry Outlook", of 156 senior chemical executives surveyed in the United States, Europe and across the Asia Pacific, 63 percent plan to increase capital spending over the next year.¶ The report also said 90 percent of executives said their companies will likely be involved in a merger or acquisition in the next two years, up from 83 percent in the company's 2011 survey.¶ The highest priority investment areas are new products or services, and the acquisition of a business. US executives indicated that they plan to be much more aggressive investing in these respective areas than their Asia-Pacific and European peers, said the report.¶ "Overall, chemical executives are telling us that they intend to put their money to work and boost investment in key areas. With the struggling global economy, organic growth is a challenge and input prices continue to affect production costs. All of these factors have set the stage for aggressive M&As and product development strategies as companies look to gain an edge," said Mike Shannon, global leader of KPMG's chemicals and performance technologies practice and a partner in the US firm.¶ Global chemical executives cite China, the US, and Europe as focuses of investment with China remaining a favored investment target for executives among all three regions, said the report.¶ Meyring said China's ambition to reduce carbon emissions and improve the quality and structure of industrial products will help develop its chemical industry.¶ According to another report by KPMG titled "China Chemical Industry Enters New Era with Sustainability", the China Petroleum and Chemical Industry Federation estimates that the oil and chemical industries' total output may reach 12.73 trillion yuan ($ 2 trillion) this year, a 14.5 percent increase from the previous year. The industries' profits are likely to amount to 860 billion yuan in 2012, a 5 percent increase from a year ago.¶ The federation also predicts that the combined production value of China's petrochemical and chemical industries will maintain an annual growth of 13 percent during the 12th Five-Year Plan (2011-15) period.¶ Meyring said an opportunity for the chemical industry in China lies in the nation's increased urbanization, which is driving investment toward fixed assets, such as new factories and infrastructure.¶ "Fixed asset investment is considered the strongest force to drive the country's economic growth," Meyring said.¶ Other opportunities in China include tapping into existing shale gas reserves, which it claims is the world's largest.¶ "While China has not yet started commercial production of shale gas, we see a growing sense of urgency to encourage the development of unconventional energy sources. This will have huge implications for the chemicals industry. Shale gas remains an integral part of the overall strategy in China," Meyring said.

#### No bioweapon could kill off humanity – natural resistance and technology check a superbug

Easterbrook (Gregg, The New Republic Editor) 2003 [Wired, "We're All Gonna Die!" 11/7, http://www.wired.com/wired/archive/11.07/doomsday.html]

3. Germ warfare! Like chemical agents, biological weapons have never lived up to their billing in popular culture. Consider the 1995 medical thriller Outbreak, in which a highly contagious virus takes out entire towns. The reality is quite different. Weaponized smallpox escaped from a Soviet laboratory in Aralsk, Kazakhstan, in 1971; three people died, no epidemic followed. In 1979, weapons-grade anthrax got out of a Soviet facility in Sverdlovsk (now called Ekaterinburg); 68 died, no epidemic. The loss of life was tragic, but no greater than could have been caused by a single conventional bomb. In 1989, workers at a US government facility near Washington were accidentally exposed to Ebola virus. They walked around the community and hung out with family and friends for several days before the mistake was discovered. No one died. The fact is, evolution has spent millions of years conditioning mammals to resist germs. Consider the Black Plague. It was the worst known pathogen in history, loose in a Middle Ages society of poor public health, awful sanitation, and no antibiotics. Yet it didn't kill off humanity. Most people who were caught in the epidemic survived. Any superbug introduced into today's Western world would encounter top-notch public health, excellent sanitation, and an array of medicines specifically engineered to kill bioagents. Perhaps one day some aspiring Dr. Evil will invent a bug that bypasses the immune system. Because it is possible some novel superdisease could be invented, or that existing pathogens like smallpox could be genetically altered to make them more virulent (two-thirds of those who contract natural smallpox survive), biological agents are a legitimate concern. They may turn increasingly troublesome as time passes and knowledge of biotechnology becomes harder to control, allowing individuals or small groups to cook up nasty germs as readily as they can buy guns today. But no superplague has ever come close to wiping out humanity before, and it seems unlikely to happen in the future.

### Energy Leverage

#### EU no longer dependent on Russia –

#### a. Global shale production.

Medlock et al. 11 – Dr. Kenneth B. Medlock, Ph.D. in economics, fellow in Energy and Resource Economics at the Baker Institute, and former advisor to the U.S. Department of Energy and the California Energy Commission, AND\* Amy Myers Jaffe, graduate from Princeton University, fellow of Energy Studies and director of the Energy Forum at the Baker Institute, and associate director of the Rice Energy Program, AND\* Dr. Peter R. Hartley, Ph.D in economics at Rice University, July 2011, "Shale Gas and U.S. National Security," <http://bakerinstitute.org/publications/EF-pub-DOEShaleGas-07192011.pdf>

Given the impacts across scenarios already highlighted, it is quite obvious that shale development has already had, and will continue to have, significant impacts on regional production, demand, and pricing. Shale gas development has already had a major impact on Russia’s status as a global gas exporter and will bring about a more dramatic weakening of Russia’s position in Europe over time. If the shale potential now being examined in Europe and Asia reveals any resemblance to what has come to fruition in North America, the impact will be potentially far reaching. In particular, it will carry implications for U.S. allies in Europe, who face a litany of energy security dilemmas surrounding the delivery of natural gas from Russia, North Africa, and the Middle East. In fact, had the shale play not emerged as a major new source of supply for North America, Europe’s dependence on Russia would have remained a major feature of global gas markets and natural gas geopolitics. Local shale gas eventually becomes a major feature of European supply under the Reference Case, following the North America example, but this would not have occurred had shale gas been limited to the Barnett shale play (see Figure 17). Under the Reference Case, Russian exports continue to grow, but the main destination for export growth is the Far East. The prime means of exports from Russia to the Far East is via the development of pipeline transport routes in both West and East Siberia. In particular, the case sees development of the Altai project from West Siberia to western China as well as pipeline development from Sakhalin and Kovykta beginning in 2014. While under this case Russian volumes to Europe decline only slightly, Russia’s market share in non-FSU Europe continues to erode, declining to less than 13 percent by 2040 (see Figure 18). None of the proposed Russian pipelines aimed at feeding the European market, except Nord Stream, are developed. Russian LNG exports from Murmansk, tied to the development of fields in the Barents Sea, and development of resources and LNG export capability from the Kara Sea and Yamal peninsula, do not occur well after 2030. These are clear signals of the lack of demand for Russian Arctic gas resources in particular.

#### b. If that’s not enough, the Nabucco pipeline fills in.

Medlock et al. 11 – Dr. Kenneth B. Medlock, Ph.D. in economics, fellow in Energy and Resource Economics at the Baker Institute, and former advisor to the U.S. Department of Energy and the California Energy Commission, AND\* Amy Myers Jaffe, graduate from Princeton University, fellow of Energy Studies and director of the Energy Forum at the Baker Institute, and associate director of the Rice Energy Program, AND\* Dr. Peter R. Hartley, Ph.D in economics at Rice University, July 2011, "Shale Gas and U.S. National Security," <http://bakerinstitute.org/publications/EF-pub-DOEShaleGas-07192011.pdf>

The Nabucco pipeline project has been discussed for over a decade as a further solution to diversifying the EU’s access to diverse natural gas supplies from Central Asia and Iraq. An intergovernmental agreement for the project was signed by Turkey, Romania, Bulgaria, Hungary and Austria in July 2009, and was intended to both reduce Europe’s dependence on Russian gas as well as create new transportation outlets for Caspian resources, thereby strengthening the political links between the Caspian nations and the EU. The 2,050 mile-long pipeline was aimed to carry 1.1 tcf of gas a year from the Middle East and the Caspian to Europe. However, the high expense of the project and doubts about the viability and timing of gas supplies have presented the project with substantial obstacles.27

#### No aggression -- the Russian military is in terrible shape.

Goure 11 – Vice President of the Lexington Institute, a thinktank based in Arlington, Virginia, and an analyst on national security and military issues for NBC. (Daniel, “Russian Military’s Decline Continues”, Lexington Institute, July 12, 2011, <http://www.lexingtoninstitute.org/russian-militarys-decline-continues?a=1&c=1171>, Callahan)

The past 20 years has been a tale of near-continuous decline for the ex-Soviet military. Once it was the largest military force on the planet. Of late it has fallen to a mere shadow of its former self. So low have the fortunes of Russia’s conventional military fallen that it was barely able to defeat Georgia in their short conflict in 2008. The Soviet Union was once known for its massive nuclear arsenal. Now it is barely able to maintain a viable force; most of its systems are obsolescent and aging badly. Even in the absence of new arms control agreements with the United States, Russia would be forced to significantly cut back its nuclear arsenal. According to a senior Russian government official, the situation continues to deteriorate. In a recent interview for a Russian newspaper, reported on by Leon Aron in Foreign Policy, Yuri Solomonov, that country’s chief missile designer, took on his country’s President Dimitry Medvedev. This move is significant for Russian politics, since Medvedev is seeking to extend his tenure against the wishes of current prime minister and former President Vladimir Putin who wants his old job back. Medvedev is associated with a military reform program that was intended to transform the Russian military. But in his critique Solomonov revealed that Russia’s military is heading for the ash heap. According to Solomonov, Russia is now dependent on the West for critical technologies to keep its nuclear forces in operation. The military reform program, which required a massive increase in the production of modern aircraft, ground combat systems and ships, has essentially collapsed because of weaknesses in the Russian defense industrial base. Equally interesting, Solomonov criticizes President Medvedev for his efforts to threaten Europe and the United States over its current plans to deploy a theater missile defense system. The Kremlin leader had suggested that Russia could respond to the deployment of the Aegis Ashore theater missile defense system with countervailing deployments of theater nuclear missiles. Solomonov says that Medvedev is threatening the West with a military deployment that "does not exist, did not exist, and will not exist." In addition, the Russian missile designer pointed out something which Western advocates of limited missile defenses have said for years: the Russian ICBM force could overwhelm such a defense. The Obama Administration’s effort to reset this nation’s strategic relations with Russia is based in large part on the belief that our counterpart in the decades old strategic pas de deux is still a player. In fact, it is clear that Russia continues to decline as a military and economic power even as its politics become more Byzantine. No effort at arms control will be able to mask Russia’s military decline.

#### US production doesn’t affect international prices—experts agree

Hogue, energy writer, 12

(Thomas Hogue, writer for Platts’ The Barrel, 6/14/2012, “US shale gas going nowhere fast as LNG”, The Barrel, http://www.platts.com/weblog/oilblog/2012/06/14/us\_shale\_gas\_go.html)

The idea that a wave of LNG produced from US shale gas fields is ready to crash over Asian consumer markets, disrupting traditional supply routes and oil-linked pricing mechanisms doesn't hold much water with producers in the Middle East, Australia and Southeast Asia. "Reality says that there will be a finite amount of gas out of the US. The amount of gas coming out of the US, in and of itself, if it's in the 30 million-50 million mt/year range, is not enough to fundamentally change the market," said Woodside Petroleum CEO Peter Coleman last week at the World Gas Conference in Kuala Lumpur, Malaysia. "What it does is provide another supply source and more head-to-head competition ... but it's not going to fundamentally change the market." The Woodside chief -- as head of a company operating LNG plants that ship 20.6 million mt/year to Asia -- may have a vested interested in propagating that viewpoint, but his was not an uncommon sentiment at WGC 2012. It would be reasonable in the long term to expect some North American LNG to meet a portion of the Asian demand, but it is likely to be more of a niche source of supply, said John Harris, director of global gas group at IHS CERA. "A majority of [Asia's] supply is and will be met from Malaysia, Indonesia, ME, Australia [and] Brunei," he said. Others that held similar views included Total CEO Christophe de Margerie; Santos vice president for Western Australia and Northern Territory, John Anderson; Rasgas Managing Director Hamad Rashid al-Mohannadi; and other analysts and market observers attending last week's gas industry gathering.

#### Natural Gas is NOT what Iran considers when trying to influence other countries and proliferate

#### They read NO evidence that exports can solve for Iranian aggression

#### Their Iran aggression card is from the Bush administration and contacts their warrants for international cooperation. Their internal link is empirically denied.

#### Iran prolif is almost impossible – poor management, alienated scientists, and trends. Discount their claims as alarmism.

Hymans, ‘12 (Jacques E. C., Associate Professor of International Relations at the University of Southern California. “Botching the Bomb”. By: Hymans, Jacques E. C., Foreign Affairs, 00157120, May/Jun2012, Vol. 91, Issue 3, Database: Academic Search Premier

IN THE intensifying crisis over Iran's nuclear activity, the great proliferation slowdown has gone all but unmentioned. Yet this robust global trend clearly indicates a need to guard against any hasty conclusion that Iran's nuclear program is about to achieve its ultimate aims. Iran's nuclear scientists and engineers may well find a way to inoculate themselves against Israeli bombs and computer hackers. But they face a potentially far greater obstacle in the form of Iran's long-standing authoritarian management culture. In a study of Iranian human-resource practices, the management analysts Pari Namazie and Monir Tayeb concluded that the Iranian regime has historically shown a marked preference for political loyalty over professional qualifications. "The belief," they wrote, "is that a loyal person can learn new skills, but it is much more difficult to teach loyalty to a skilled person." This is the classic attitude of authoritarian managers. And according to the Iranian political scientist Hossein Bashiriyeh, in recent years, Iran's "irregular and erratic economic policies and practices, political nepotism and general mismanagement" have greatly accelerated. It is hard to imagine that the politically charged Iranian nuclear program is sheltered from these tendencies.¶ It is surely more difficult to assess the quality of Iran's nuclear management than it is to count the number of Iranian centrifuge machines. But such an assessment is vital, because the progress of Iran's program will depend on how much professional autonomy its scientists and engineers are able to retain. In the meantime, a number of broad lessons from the great proliferation slowdown can help provide a more sober assessment of the situation.¶ The first lesson is to be wary of narrow, technocentric analyses of a state's nuclear weapons potential. Recent alarming estimates of Iran's timeline to the bomb have been based on the same assumptions that have led Israel and the United States to consistently overestimate Iran's rate of nuclear progress for the last 20 years. The majority of official U.S. and Israeli estimates during the 1990s predicted that Iran would acquire nuclear weapons by 2000. After that date passed with no Iranian bomb in sight, the estimate was simply bumped back to 2005, then to 2010, and most recently to 2015. The point is not that the most recent estimates are necessarily wrong but rather that they lack credibility. In particular, policymakers should heavily discount any intelligence assessments that do not explicitly account for the impact of management quality on Iran's proliferation timeline.¶ The second lesson of the proliferation slowdown is that policymakers should reject analyses based on assumptions about a state's capacity to build nuclear programs in secret. Ever since the mid-1990s, official proliferation assessments have freely extrapolated from minimal data, a practice that led U.S. intelligence analysts to wrongly conclude that Iraq had reconstituted its weapons of mass destruction programs after the Gulf War. The United States must guard against the possibility of an equivalent intelligence failure over Iran. This is not to deny that Tehran may be keeping some of its nuclear work secret. But it is simply unreasonable to assume, for example, that Iran has compensated for the problems it has faced with centrifuges at the Natanz uranium-enrichment facility by hiding better-working centrifuges at some unknown facility. Indeed, when Iran has tried to hide weapons-related activities in the past, it has often been precisely because the work was at the very early stages or was going badly.¶ The third lesson is that states that poorly manage their nuclear programs can bungle even the supposedly easy steps of the process. For instance, based on estimates of the size of North Korea's plutonium stockpile and the presumed ease of weapons fabrication, U.S. intelligence agencies thought that by the 1990s, North Korea had built one or two nuclear weapons. But in 2006, North Korea's first nuclear test essentially fizzled, making it clear that the "hermit kingdom" did not have any working weapons at all. Even its second try, in 2009, did not work properly. Similarly, if Iran eventually does acquire a significant quantity of weapons-grade highly enriched uranium, this should not be equated with the possession of a nuclear weapon.¶ The fourth lesson is to avoid doing anything that might motivate scientific and technical workers to commit themselves more firmly to the nuclear weapons project. Nationalist fervor can partially compensate for poor organization. Therefore, violent actions, such as aerial bombardments or assassinations of scientists, are a loser's bet. As shown by the consequences of the Israeli attack on Osiraq, such strikes are liable to unite the state's scientific and technical workers behind their otherwise illegitimate political leadership. Acts of sabotage, such as the Stuxnet computer worm, which damaged Iranian nuclear equipment in 2010, stand at the extreme boundary between sanctions and violent attacks, and therefore they should be undertaken only after very thorough consideration.¶ Traditionally, nonproliferation strategy has revolved around persuading leaders to stop desiring nuclear weapons and depriving nuclear scientists of the tools necessary to build them. But scientists have motivations, too, and policymakers must keep in mind this critical third dimension of nuclear programs' efficiency. The world is lucky that during the past few decades, the leaders of would-be nuclear weapons states have been so good at frustrating and alienating their scientists. The United States and its partners must take care not to adopt policies that resolve those leaders' management problems for them.