### CASE

### 2NC Link – Methane Leakage

#### [\_] Increasing natural gas production will cause catastrophic global because of methane leakage. That’s 1NC Romm 12 evidence

#### --Production causes leakages at levels that models show are worse than coal.

#### --Uniquely bad because it causes significant *short term* increases in emissions and causes feedbacks in a crucial time window to combat warming.

#### [\_]Natural gas production will cause methane leaks

#### Natural gas causes out-of-control warming – benefits are beyond window of opportunity and would increase warming beyond 6°F

Joe Romm, Fellow at American Progress and is the editor of Climate Progress, which New York Times columnist Tom Friedman called "the indispensable blog" “Natural Gas Is A Bridge To Nowhere Absent A Carbon Price AND Strong Standards To Reduce Methane Leakage”, Think Progress, April 9, 2012.

BRIDGE TO NOWHERE The concept of natural gas as a “bridge fuel” was pushed by the American Gas Association as far back as 1981. It’s the longest bridge in history! Heck, the Golden Gate Bridge only took 4 years to build! But the window where gas can be a major bridge fuel to a world with a livable climate appears to be almost completely closed, now. Had we acted back in the 1980s or even 1990s as climate scientists and world leaders had been urging, then, yes, an expansion of gas use might have made sense. The fact that natural gas is now a bridge fuel to nowhere was first shown by the International Energy Agency in its big June report on gas — see IEA’s “Golden Age of Gas Scenario” Leads to More Than 6°F Warming and Out-of-Control Climate Change. The IEA’s well-named GAG scenario assumes that not only does oil production peak in 2020 — but so does coal! Remember, warming beyond 6°F (3.5°C) is “incompatible with organized global community, is likely to be beyond ‘adaptation’, is devastating to the majority of ecosystems & has a high probability of not being stable (i.e. 4°C [7F] would be an interim temperature on the way to a much higher equilibrium level),” according to Professor Kevin Anderson, director of the Tyndall Centre for Climate Change in Britain (see here). We would be self-destructively irrational to risk even 5°F warming. If your goal is a livable climate, we need to transition off of all fossil fuels ASAP.

#### Routine and downstream emissions make gas GHG footprint unsustainable

Robert W. Howarth, Renee Santoro, and Anthony Ingraffea, dept of Ecology and evolutionary Biolgy at Cornell and School of Civil and Environmental engineering, “Methane and the greenhouse-gas footprint of natural gas from shale formations”, Climate Change, March 13, 2011.

8 Conclusions and implications The GHG footprint of shale gas is significantly larger than that from conventional gas, due to methane emissions with flow-back fluids and from drill out of wells during well completion. Routine production and downstream methane emissions are also large, but are the same for conventional and shale gas. Our estimates for these routine and downstream methane emission sources are within the range of those reported by most other peer-reviewed publications inventories (Hayhoe et al. 2002; Lelieveld et al. 2005). Despite this broad agreement, the uncertainty in the magnitude of fugitive emissions is large. Given the importance of methane in global warming, these emissions deserve far greater study than has occurred in the past. We urge both more direct measurements and refined accounting to better quantify lost and unaccounted for gas. The large GHG footprint of shale gas undercuts the logic of its use as a bridging fuel over coming decades, if the goal is to reduce global warming. We do not intend that our study be used to justify the continued use of either oil or coal, but rather to demonstrate that substituting shale gas for these other fossil fuels may not have the desired effect of mitigating climate warming. Finally, we note that carbon-trading markets at present under-value the greenhouse warming consequences of methane, by focusing on a 100-year time horizon and by using out-of-date global warming potentials for methane. This should be corrected, and the full GHG footprint of unconventional gas should be used in planning for alternative energy futures that adequately consider global climate change.

#### [\_] Methane leaks outweigh

#### Even small leaks undermine climate benefits of natural gas

Robert W. Howarth, Renee Santoro, and Anthony Ingraffea, dept of Ecology and evolutionary Biolgy at Cornell and School of Civil and Environmental engineering, “Methane and the greenhouse-gas footprint of natural gas from shale formations”, Climate Change, March 13, 2011.

Fugitive emissions of methane are of particular concern. Methane is the major component of natural gas and a powerful greenhouse gas. As such, small leakages are important. Recent modeling indicates methane has an even greater global warming potential than previously believed, when the indirect effects of methane on atmospheric aerosols are considered (Shindell et al. 2009). The global methane budget is poorly constrained, with multiple sources and sinks all having large uncertainties. The radiocarbon content of atmospheric methane suggests fossil fuels may be a far larger source of atmospheric methane than generally thought (Lassey et al. 2007). The GHG footprint of shale gas consists of the direct emissions of CO2 from enduse consumption, indirect emissions of CO2 from fossil fuels used to extract, develop, and transport the gas, and methane fugitive emissions and venting. Despite the high level of industrial activity involved in developing shale gas, the indirect emissions of CO2 are relatively small compared to those from the direct combustion of the fuel: 1 to 1.5 g C MJ−1 (Santoro et al. 2011) vs 15 g C MJ−1 for direct emissions (Hayhoe et al. 2002). Indirect emissions from shale gas are estimated to be only 0.04 to 0.45 g C MJ−1 greater than those for conventional gas (Wood et al. 2011). Thus, for both conventional and shale gas, the GHG footprint is dominated by the direct CO2 emissions and fugitive methane emissions. Here we present estimates for methane emissions as contributors to the GHG footprint of shale gas compared to conventional gas. Our analysis uses the most recently available data, relying particularly on a technical background document on GHG emissions from the oil and gas industry (EPA 2010) and materials discussed in that report, and a report on natural gas losses on federal lands from the General Accountability Office (GAO 2010). The EPA (2010) report is the first update on emission factors by the agency since 1996 (Harrison et al. 1996). The earlier report served as the basis for the national GHG inventory for the past decade. However, that study was not based on random sampling or a comprehensive assessment of actual industry practices, but rather only analyzed facilities of companies that voluntarily participated (Kirchgessner et al. 1997). The new EPA (2010) report notes that the 1996 “study was conducted at a time when methane emissions were not a significant concern in the discussion about GHG emissions” and that emission factors from the 1996 report “are outdated and potentially understated for some emissions sources.” Indeed, emission factors presented in EPA (2010) are much higher, by orders of magnitude for some sources.

#### Methane leakage outweighs carbon dioxide reductions

Stephen Pacalab et al, Dept of Ecology and evolutionary Biology at Princeton, Ramón A. Alvareza of Environmental Defense Fund, James J. Winebrakec of Rochester Institute of Technology, William L. Chameidesd, School of the Environment from Duke University and Steven P. Hamburge of the Environmental defense fund, “Greater focus needed on methane leakage from natural gas infrastructure”, PNAS, February 13, 2012

With growing pressure to produce more domestic energy and to reduce greenhouse gas (GHG) emissions, natural gas is increasingly seen as the fossil fuel of choice for the United States as it transitions to renewable sources. Recent reports in the scientific literature and popular press have produced confusion about the climate implications of natural gas (1–5). On the one hand, a shift to natural gas is promoted as climate mitigation because it has lower carbon per unit energy than coal or oil (6). On the other hand, methane (CH4), the prime constituent of natural gas, is itself a more potent GHG than carbon dioxide (CO2); CH4 leakage from the production, transportation and use of natural gas can offset benefits from fuel-switching.

#### Shift to natural gas causes rapid short-term warming – methane leakage is 37 times more potent than CO2

Stephen Pacalab et al, Dept of Ecology and evolutionary Biology at Princeton, Ramón A. Alvareza of Environmental Defense Fund, James J. Winebrakec of Rochester Institute of Technology, William L. Chameidesd, School of the Environment from Duke University and Steven P. Hamburge of the Environmental defense fund, “Greater focus needed on methane leakage from natural gas infrastructure”, PNAS, February 13, 2012

A shift to natural gas and away from other fossil fuels is increasingly plausible because advances in horizontal drilling and hydraulic fracturing technologies have greatly expanded the country’s extractable natural gas resources particularly by accessing gas stored in shale deep underground (7). Contrary to previous estimates of CH4 losses from the “upstream” portions of the natural gas fuel cycle (8, 9), a recent paper by Howarth et al. calculated upstream leakage rates for shale gas to be so large as to imply higher lifecycle GHG emissions from natural gas than from coal (1). (SI Text, discusses differences between our paper and Howarth et al.) Howarth et al. estimated CH4 emissions as a percentage of CH4 produced over the lifecycle of a well to be 3.6– 7.9% for shale gas and 1.7–6.0% for conventional gas. The EPA’s latest estimate of the amount of CH4 released because of leaks and venting in the natural gas network between production wells and the local distribution network is about 570 billion cubic feet for 2009, which corresponds to 2.4% of gross U.S. natural gas production (1.9–3.1% at a 95% confidence level) (6).† EPA’s reported uncertainty appears small considering that its current value is double the prior estimate, which was itself twice as high as the previously accepted amount (9). Comparing the climate implications of CH4 and CO2 emissions is complicated because of the much shorter atmospheric lifetime of CH4 relative to CO2. On a molar basis, CH4 produces 37 times more radiative forcing than CO2.‡ However, because CH4 is oxidized to CO2 with an effective lifetime of 12 yr, the integrated, or cumulative, radiative forcings from equi-molar releases of CO2 and CH4 eventually converge toward the same value. Determining whether a unit emission of CH4 is worse for the climate than a unit of CO2 depends on the time frame considered. Because accelerated rates of warming mean ecosystems and humans have less time to adapt, increased CH4 emissions due to substitution of natural gas for coal and oil may produce undesirable climate outcomes in the near-term.

#### Short term emissions are the key

Jonas Westina and Per Kågesona, a Centre for Transport Studies, Royal Institute of Technology b Department of Transport Science, Royal Institute of Technology. Both in Stockholm Sweden Can high speed rail offset its embedded emissions?, Transportation Research Part D: Transport and Environment, Volume 17, Issue 1, January 2012, Pages 1–7

A different type of partial coverage is the fact that part of the high speed rail infrastructure, in particular tunnels, may have a lifespan substantially longer than 50 years. Thus, limiting the analysis to a depreciation period of 50 years may be unfair. On the other hand, the benefits of emissions reductions in the distant future may turn out to be much less important than those that take place in the near future, as the world is getting closer and closer to the point where the accumulated concentration of greenhouse gases in the atmosphere will exceed the point where it leads to an increase of the mean average temperature of more than 2 °C.

### 2NC Impact Calculus

Magnitude-only scenario for extinction- miscalculation guarantees a hurried exchange of nuclear volleys between two largest nuclear possesors- guarantees all allies get involved in an attempt to overwhelm the other’s firepower

Probability-China is growing increasingly assertive- absent pivot they’ll escalate tensions in the SCS and force the US to respond with nuclear force

Timeframe-lack of resolve would be immediately perceived due to Obama’s public commitment to pivot, sequestration sends an even bigger signal because it will tell the world our military power is hollow

#### CONFLICT IN THE SCS ESCALATES TO FULL-SCALE NUCLEAR WAR

STRAITS TIMES 1995

[staff, “Choose Your Own Style of Democracy”, May 21, p. ln// wyo-tjc]

In his speech, Dr Mahathir also painted three scenarios for Asia.

In the first -the worst possible scenario -Asian countries would go to war against each other, he said. It might start with clashes between Asian countries over the Spratly Islands because of China's insistence that the South China Sea belonged to it along with all the islands, reefs and seabed minerals. In this scenario, the United States would offer to help and would be welcomed by Asean, he said. The Pacific Fleet begins to patrol the South China Sea. Clashes occur between the Chinese navy and the US Navy. China declares war on the US and a full-scale war breaks out with both sides resorting to nuclear weapons.

Ts/ Case

### T://s Environment

#### Devastates environmental protection spending

Slesinger Oct. 18th

[Scott Slesinger, October 18th, 2012, <http://switchboard.nrdc.org/blogs/sslesinger/when_congress_comes_back_from.html>, The Environment and the "Fiscal Cliff", uwyo//amp]

When Congress comes back from its “recess” the major issues on their plate will be taxes and spending. Without further action, i.e. Congress doing nothing, the Bush tax cuts for all Americans ends on December 31, 2012. On January 2, 2013, the failure of the budget “Supercommittee” will automatically require the Defense Department and domestic agencies, such as the Environmental Protection Agency, to take an immediate 8.2% cut for the fiscal year that already started on October 1, 2012. The environmental and conservation communities have published an initial memorandum on the impacts of the additional cuts that you can read here. Throughout the country, impacts of these cuts are breaking into the press such as this piece from the Seattle Times. My colleague Jon Devine has blogged on the clear impact of additional cuts to local communities that will slow down drinking water and sewer infrastructure improvements. Since 2010 almost all the deficit reduction has come out of nondefense domestic discretionary spending, which is already at its lowest level in decades. For years now, the allocation for environmental programs has been insufficient to allow popular and effective programs and agencies to keep up with even basic costs and needs. Any new deal needs to recognize the cuts already suffered by the domestic discretionary programs. A deal will require revenues that are now at a historic low as a percentage of economic activity. Some of the revenue should come from tax subsidies that hurt the environment, such as tax-favored treatment of dirty fuels such as oil and gas. These issues need a more thorough discussion now as when Congress returns in November.

### ADD on

#### Lack of compromise culminates in Middle Eastern war

Hutchison 9/21

[Kay Bailey Hutchison,, U.S. Senator from the great state of Texas, 9/21/2012 “A Looming Threat to National Security,” States News Service, Lexis]

Despite warnings of the dire consequences, America is teetering at the edge of a fiscal cliff, with January 1st, 2013 as the tipping point. On that date, unless Congress and the White House can reach agreement on how to cut the federal deficit, all taxpayers will be hit with higher taxes and deep cuts - called "sequestration" - will occur in almost all government spending, disrupting our already weak economy and putting our national security at risk. According to the House Armed Services Committee, if sequestration goes into effect, it would put us on course for more than $1 trillion in defense cuts over the next 10 years. What would that mean? A huge hit to our military personnel and their families; devastating cuts in funding for critical military equipment and supplies for our soldiers; and a potentially catastrophic blow to our national defense and security capabilities in a time of increasing violence and danger. All Americans feel a debt of gratitude to our men and women who serve in uniform. But Texas in particular has a culture that not only reveres the commitment and sacrifice they make to protect our freedom, we send a disproportionate number of our sons and daughters to serve. The burden is not borne solely by those who continue to answer the call of duty, but by their families as well, as they endure separation and the anxiety of a loved one going off to war. These Americans have made tremendous sacrifices. They deserve better than to face threats to their financial security and increased risks to their loved ones in uniform, purely for political gamesmanship. Sequestration would also place an additional burden on our economy. In the industries that support national defense, as many as 1 million skilled workers could be laid off. With 43 straight months of unemployment above 8 percent, it is beyond comprehension to add a virtual army to the 23 million Americans who are already out of work or under-employed. Government and private economic forecasters warn that sequestration will push the country back into recession next year. The recent murder of our Ambassador to Libya and members of his staff, attacks on US embassies and consulates and continued riots across the Middle East and North Africa are stark reminders that great portions of the world remain volatile and hostile to the US. We have the mantle of responsibility that being the world's lone super-power brings. In the absence of U.S. military leadership, upheaval in the Middle East would be worse. As any student of history can attest, instability does not confine itself to national borders. Strife that starts in one country can spread like wildfire across a region. Sequestration's cuts would reduce an additional 100,000 airmen, Marines, sailors and soldiers. That would leave us with the smallest ground force since 1940, the smallest naval fleet since 1915 and the smallest tactical fighter force in the Air Force's history. With the destabilization in the Middle East and other areas tenuous, we would be left with a crippled military, a diminished stature internationally and a loss of technological research, development and advantage - just as actors across the globe are increasing their capabilities. Sequestration can still be avoided. But that will require leadership from the President that has thus far been missing. Congress and the White House must reach a long-term agreement to reduce $1 trillion annual budget deficits, without the harsh tax increases that could stall economic growth and punish working families.

#### Middle East goes nuclear

Russell 9

[James A. Russell, Senior Lecturer, National Security Affairs, Naval Postgraduate School, ‘9 (Spring) “Strategic Stability Reconsidered: Prospects for Escalation and Nuclear War in the Middle East” IFRI, Proliferation Papers, #26, http://www.ifri.org/downloads/PP26\_Russell\_2009.pdf]

Strategic stability in the region is thus undermined by various factors: (1) asymmetric interests in the bargaining framework that can introduce unpredictable behavior from actors; (2) the presence of non-state actors that introduce unpredictability into relationships between the antagonists; (3) incompatible assumptions about the structure of the deterrent relationship that makes the bargaining framework strategically unstable; (4) perceptions by Israel and the United States that its window of opportunity for military action is closing, which could prompt a preventive attack; (5) the prospect that Iran’s response to pre-emptive attacks could involve unconventional weapons, which could prompt escalation by Israel and/or the United States; (6) the lack of a communications framework to build trust and cooperation among framework participants. These systemic weaknesses in the coercive bargaining framework all suggest that escalation by any the parties could happen either on purpose or as a result of miscalculation or the pressures of wartime circumstance. Given these factors, it is disturbingly easy to imagine scenarios under which a conflict could quickly escalate in which the regional antagonists would consider the use of chemical, biological, or nuclear weapons. It would be a mistake to believe the nuclear taboo can somehow magically keep nuclear weapons from being used in the context of an unstable strategic framework. Systemic asymmetries between actors in fact suggest a certain increase in the probability of war – a war in which escalation could happen quickly and from a variety of participants. Once such a war starts, events would likely develop a momentum all their own and decision-making would consequently be shaped in unpredictable ways. The international community must take this possibility seriously, and muster every tool at its disposal to prevent such an outcome, which would be an unprecedented disaster for the peoples of the region, with substantial risk for the entire world.

### UQ

#### Compromise now – capitol watchers agree and post campaign flexibility

SFGate, “Fiscal Cliff impasse on tax rates is a big hurdle”, 11/8/2012. <http://www.sfgate.com/news/politics/article/Fiscal-cliff-Impasse-on-tax-rates-is-big-hurdle-4020913.php#ixzz2BgX4N7mY>

A lot is at stake. A new [Congressional Budget Office](http://www.sfgate.com/?controllerName=search&action=search&channel=news%2Fpolitics&search=1&inlineLink=1&query=%22Congressional+Budget+Office%22) report on Thursday predicted that the economy would fall into recession if there is a protracted impasse in Washington and the government falls off the fiscal cliff for the entire year. Though most Capitol-watchers think that long deadlock is unlikely, the analysts say such a scenario would cause a spike in the jobless rate to 9.1 percent by next fall.¶ The analysis says that the cliff — a combination of automatic tax increases and spending cuts — would cut the deficit by $503 billion through next September, but that the fiscal austerity also would cause the economy to shrink by 0.5 percent next year and cost millions of jobs.¶ The new study estimates that the nation's gross domestic product would grow by 2.2 percent next year if all Bush-era tax rates were extended and would expand by almost 3 percent if Obama's 2 percentage point payroll tax cut and current jobless benefits for the long-term unemployed were extended as well.¶ All sides say they want a deal — and that now that the election is over everyone can show more flexibility than in the heat of the campaign.

#### Sufficient compromise now

Cinthia Murphy and Olly Ludwig, from [IndexUniverse](http://community.nasdaq.com/articles-by-author.aspx?username=indexuniverse), “Market Looks Past Election To Fiscal Cliff”, Nasqad, 11/7/2012, <http://community.nasdaq.com/News/2012-11/market-looks-past-election-to-fiscal-cliff.aspx?storyid=188285#ixzz2BgpMRcwz>

Some of Wednesday's sharp move was also about the triggering of program-trading algorithms rather than an imminent possibility that the market could completely fall apart as it did in September 2008 when the U.S. House of Representatives first rejected the bailout package for banks.¶ There was a lot more leverage in the system then than now, so the potential for wholesale panic-selling is all but missing, even if Congress dithers before tackling the fiscal cliff.¶ "They'll find a way to kick the can down the road. It won't be perfect, but they'll get something done," the hedge fund manager said about the "fiscal cliff," saying that while legislators may kick and scream along the way, they will address it in time and without a 2008-like draconian turn of events.¶ He also argued that despite gridlock in Washington, Democrats are now grasping that entitlements will have to be trimmed, and Republicans are becoming open to the idea that revenues have to go up in the form of higher taxes. That's encouraging for the restoration of long-term U.S. fiscal health, he said.

#### Yes compromise - temporary fix

Chuck Mikolajczak, Fox Business, “Wall Street falls as “fiscal cliff” concern outweighs data”, 11/8/2012. http://www.foxbusiness.com/news/2012/11/08/wall-street-falls-as-fiscal-cliff-concern-outweighs-data/

While a comprehensive legislative agreement to avoid the fiscal cliff was possible, the more likely scenario would be for political leaders to find a temporary fix in order to buy time until a new Congress and the re-elected president are sworn in at the start of the new year.

### Link

#### The president receives all the credit and/or blame that is associated with controversial supreme court rulings- it forces the media and public to highlight presidential failures and/or successes

Dunham 2012

[Rick Dunham, Washington Bureau Chief for the Houston Chronicle, June 21, 2012, Texas braces for major Supreme Court decisions on immigration, ObamaCare, <http://blog.chron.com/txpotomac/2012/06/texas-braces-for-major-supreme-court-decisions-on-immigration-obamacare/>, uwyo//amp]

Things have not been going well for President Obama. Employment news is glum, stock markets have tanked, Europe is facing an economic contagion that could threaten America’s tepid recovery and the president is looking weak as a defiant Russia re-arms Syria’s desperate dictators. And if sinking poll numbers aren’t enough to give the White House political gurus a case of political heartburn, they can pop some Prilosec and prepare for more news that’s out of their control: The Supreme Court is preparing to deliver two landmark rulings over the next ten days that could shake the Obama presidency and reshape the 2012 election year. Before adjourning for the summer on June 25, the nation’s highest court is set to pass judgment on two of the most politically charged cases of the past decade — the “ObamaCare” health reform law that is the first-term president’s proudest legislative achievement and the tough Arizona immigration enforcement law that has enraged Latino civil rights groups and hard-core Democratic activists. “The impact is just going to be huge, whichever way it cuts,” said Dallas attorney Bill Mateja, a senior official in the Justice Department under President George W. Bush. “The ramifications of these decisions, one way or another, are monstrous and hard to predict.” While the precise political impact of the Supreme Court’s rulings are indeed hard to predict — considering the decisions have not yet been announced — legal scholars and political analysts are in agreement that the controversial cases are likely to alter the dynamics of the presidential contest and force the economy-focused White House political team to re-calibrate its policy priorities. For at least the immediate aftermath of the high court decisions, public attention will be diverted from the struggling economy to two current back-burner issues, illegal immigration and the health-care law that united Republicans in opposition and cost Democrats their House majority in 2010. Twin setbacks for Obama would focus attention on the failures and futility of the president’s first three years in office: the time and political capital spent on health reform, and the administration’s inability to win comprehensive immigration reform when Democrats had complete control of Washington. University of Houston law professor Michael A. Olivas laments “the failed promise of comprehensive immigration reform.”