# \*\*\*\*1AC\*\*\*\*

## Plan text: The United States federal government should substantially increase loan guarantees for small modular thermal reactors.

# Contention One is Proliferation

## Nuclear power is increasing globally – demand ensures it’ll be large reactors

**Banks et al, Foreign Policy Energy Security Initiative nonresident fellow, 12-16**

(John P. “Nuclear Power in Developing Countries? Let's Talk about It.” 12-16. <http://www.brookings.edu/research/opinions/2012/12/16-nuclear-energy-banks-massy>. Accessed: 1/1/2013. ADC)

 While the developed world gets cold feet on … of others are seriously considering nuclear power, but commitments are pending.

## This will result in breakout proliferation-asymmetries undermine deterrence and ensure nuclear war-safeguards are key.

 (Fast/breakout, checks US influence, miscalc risk (small difference/opaqueness)

**Sokolski, Nonproliferation Policy Education Center Executive Director, 09**

(Henry, June 1, 2009, “Avoiding a Nuclear Crowd”, http://www.hoover.org/publications/policy-review/article/5534, 10/3/12, atl)

Finally, several new nuclear weapons…ever want. None of this, however, is inevitable.

## US construction is key to solve-SMR’s would out compete other models and a strong domestic industry ensures maintenance of the global gold standard.

**Miller, Bipartisan Policy Co-Chair for the Nuclear Initiative, 12**

(Dr. Warren F. “Pete” e-, Former DOE Assistant Secretary for Nuclear Energy, Senator Pete Domenici, July 2012, “Challenges and Opportunities Facing Nuclear Energy in the United States”, http://bipartisanpolicy.org/sites/default/files/Leadership%20in%20Nuclear%20Energy%20Markets.pdf, 8/14/12, atl)

Several other countries, by contrast, … development, and deployment (RD&D) programs.

## The plan causes other suppliers to model US practices-ensures no proliferation.

**Sokolski, Nonproliferation Policy Education Center Executive Director, 11**

(Henry, “The Post-Fukushima Arms Race?”, Foreign Policy, July, 29, 2011,http://www.foreignpolicy.com/articles/2011/07/29/the\_post\_fukushima\_arms\_race?print=yesandhidecomments=yesandpage=full, 10/9/12, atl)

A Japanese decision to resist temptation and adopt stricter … in time, as it has reluctantly in the past.

## Other countries follow the US lead-ensures they’ll pick SMR’s and implement safety measures

**Lieberman, American Physical Society senior government relations specialist, 11**

(Jodi, November 15, 2011 “Nonproliferation, Congress, and Nuclear Trade: Plus ça change, plus c’est la même chose” http://csis.org/files/publication/111116\_nonproliferation\_congress\_and\_nucleartrade.pdf)

 U.S. Nonproliferation Influence While 123 … security summit will be held in South Korea in 2012.

## Proliferation causes nuclear war-crisis escalation, aggression, saving face, delegation and launch on warning guarantee it.

Kroenig, Georgetown University Government assistant professor, 12

(Matthew, Assistant Professor of Government at Georgetown University and Stanton Nuclear Security Fellow at Council on Foreign Relations, “The History of Proliferation Optimism: Does It Have A Future?,” 5-26-12, http://www.npolicy.org/article.php?aid=1182andrtid=2, accessed 10-2-12, mtf)

The proliferation optimist position, while … less-resolved opponents to back down.

## Status quo nuclear power will be based off Chinese designs-guarantees accidents and meltdowns

**Tu, Carnegie Energy and Climate Program senior associate, 12**

(Kevin Jianjun. “China’s Nuclear Crossroads.” 3-11. <http://carnegieendowment.org/2012/03/11/china-s-nuclear-crossroads>. Accessed: 9/30/2012. ADC)

 It’s first important to acknowledge that the … mistake that energy-thirsty China can’t afford to make.

## Nuclear accidents wreck biodiversity

Mousseau, USC biology professor, 2011

(TA, “Conservation consequences of Chernobyl and other nuclear accidents”, Biological Conservation Volume 144, Issue 12, December 2011, Pages 2787–2798, Science Direct, ldg)

The explosion at the Chernobyl nuclear power … in species when they are rare.

**Extinction**

**Daily et al, Professor, Department of Biological Sciences Stanford, 7**

(11-19, Gretchen, Senior Fellow, Woods Institute for the Environment Director, Center for Conservation Biology Director, Interdisciplinary Program in Environment and Resources Chair, The Natural Capital Project, “ECOSYSTEM SERVICES: Benefits Supplied to Human Societies by Natural Ecosystems,” <http://www.sierraforestlegacy.org/Resources/Conservation/FireForestEcology/ForestEconomics/Economics-Daily97.pdf>) atw

In addition to the production of goods, **…**, human beings trying to colonize the moon.

# Contention Two is Warming

**Newest and most rigorous studies conclude warming is anthropogenic – no alt causes**

**Muller, University of California-Berkeley physics professor, 12**

(Richard A., former MacArthur Foundation fellow, "The Conversion of a Climate-Change Skeptic," 7-28-12, http://www.nytimes.com/2012/07/30/opinion/the-conversion-of-a-climate-change-skeptic.html?pagewanted=all, accessed 8-10-12, mtf)

Call me a converted skeptic. Three … and diplomatic spectrum about what can and should be done.

**Failure to solve warming causes extinction – geological history proves**

**Bushnell, NASA Langley Research Center chief scientist, 10**

(Dennis M. has a MS in mechanical engineering, won the Lawrence A. Sperry Award, AIAA Fluid and Plasma Dynamics Award, the AIAA Dryden Lectureship, and is the recipient of many NASA Medals for outstanding Scientific Achievement and Leadership, "Conquering Climate Change," The Futurist 44. 3, May/Jun 2010, ProQuest, accessed 10-3-12, mtf)

Unless we act, the next century could see … sound, they're actually conservative.

**Ocean acidification destroys marine biodiversity and leads to extinction**

**Romm, MIT Physics PhD, 10**

(Joe, Climate Progress editor, Senior Fellow at the American Progress, Acting Assistant Secretary of Energy for Energy Efficiency and Renewable Energy during the Clinton Administration, PhD in Physics from the Massachusetts Institute of Technology, "Nature Geoscience study: Oceans are acidifying 10 times faster today than 55 million years ago when a mass extinction of marine species occurred," 2-18-10, http://thinkprogress.org/climate/2010/02/18/205525/ocean-acidification-study-mass-extinction-of-marine-life-nature-geoscience/?mobile=nc#more-19529, accessed 10-3-12, mtf)

Marine life face some of the worst impacts. We now … **start slashing carbon dioxide emissions is now**.

**Sea level rise causes extinction – even small rises matter**

**Sato, Daily Galaxy contributing editor, 8**

Rebecca, Contributing Editor at DailyGalaxy.com, former Head Writer at Freedom FastTrack “Can Changes in Sea Level Cause Periods of Mass Extinction?—A Galaxy Exclusive,” 6-19-08, http://www.dailygalaxy.com/my\_weblog/2008/06/changes-in-sea.html, accessed 10-3-12, mtf)

For years scientists have been trying to find explanations for … to deal with the magnitude of sea level rise that we are likely to induce. We, as a society, are not.”

**Other nations will model US investment – it’s a bellwether of nuclear tech**

**Adamantiades et al., ICG Aeolian Energy, 9**

(A. Adamantiades, ICG Properties is a real estate development firm; and I. Kessides, The World Bank, "Nuclear power for sustainable development: Current status and future prospects," Energy Policy Volume 37, Issue 12, December 2009, Science Direct, accessed 8-5-12, mtf)

This paper describes the current status and future … **for action in other parts of the world**.

**Large-scale nuclear power transition solves warming – assumes resource and time restraints**

**Knapp et al., University of Zagreb professor, 10**

(Vladimir Knapp, Dubravko Pevec, and Mario Matijević, Faculty of Electrical Engineering and Computing, Department of Applied Physics, University of Zagreb in Croatia, "The potential of fission nuclear power in resolving global climate change under the constraints of nuclear fuel resources and once-through fuel cycles," Energy Policy Volume 38, Issue 11, November 2010, Science Direct, accessed 8-22-12, mtf)

In this study, we have investigated …for public acceptance of nuclear energy.

**Global commercialization key to check developing countries’ emissions**

**Kessides and Kuznetsov, World Bank chief economist, 12**

(Ioannis N., Development Research Group and The World Bank; and Vladimir, Consultant at The World Bank, "Small Modular Reactors for Enhancing Energy Security in Developing Countries," Sustainability 2012, 4.8, http://www.mdpi.com/2071-1050/4/8/1806/htm, accessed 9-29-12, mtf)

Increasing concerns related to energy … resistance, and reduced financial risk.

**Only the aff solves – alternative sources are of insufficient scope**

**Loudermilk, Institute for National Strategic Studies research associate, 11**

(Micah J., Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, contracted through ASE Inc., "Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs," IAGS Journal of Energy Security, May 2011 Issue, 5-31-11, http://www.ensec.org/index.php?option=com\_content&view=article&id=314:small-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&catid=116:content0411&Itemid=375, accessed 9-29-12, mtf)

Nuclear vs. Alternatives: a realistic picture When … of the nation’s nuclear energy portfolio.

**No risk of link turns – complete nuclear power chain significantly reduces CO2 emissions**

**Adamantiades et al., ICG Aeolian Energy, 9**

(A. Adamantiades, ICG Properties is a real estate development firm; and I. Kessides, The World Bank, "Nuclear power for sustainable development: Current status and future prospects," Energy Policy Volume 37, Issue 12, December 2009, Science Direct, accessed 8-5-12, mtf)

2.3. Global climate change In 1990 a major … effects of fossil fuel pollutants.

# Contention Three is Solvency

## Capitalization is key to nuclear commercialization-only the federal government can leverage the funds necessary

Bennett, Vice President for Public Affairs, Third Way, 10

(Matt, Josh Freed is Director of the Third Way Clean Energy initiative, Jeremy Ershow is a Policy Advisor at Third Way, “Breaking the Nuclear Financing Barrier,” February 10, http://content.thirdway.org/publications/265/Third\_Way\_Idea\_Brief\_-\_Breaking\_the\_Nuclear\_Financing\_Barrier.pdf, accessed 9-30-12, ara)

High financing costs stand in the … 2011 budget request to triple the loan volume.

## SMR’s can be commercialized quickly and are safe-studies prove they have multiple advantages

Kessides and Kuznetsov, World Bank chief economist, 12

(Ioannis N., Development Research Group and The World Bank; and Vladimir, Consultant at The World Bank, "Small Modular Reactors for Enhancing Energy Security in Developing Countries," Sustainability 2012, 4.8, http://www.mdpi.com/2071-1050/4/8/1806/htm, accessed 9-29-12, mtf)

SMRs offer a number of advantages that can … by significant economies of scale [19].

## NRC will streamline SMR’s

Sullivan, et al., partner, Hogan Lovells’ LLP, 10

(Mary Anne, partner in Hogan Lovells' energy practice in Washington, D.C., Daniel F. Stenger is a partner in Hogan Lovells' energy practice, Amy C. Roma is a senior associate in Hogan Lovells' energy practice, “Are Small Reactors the Next Big Thing in Nuclear?” 12-21-10, <http://www.elp.com/index/display/article-display/3288852302/articles/electric-light-power/volume-88/issue-6/sections/are-small-reactors-the-next-big-thing-in-nuclear.html>, accessed 9-20-12, ara)

The biggest challenge to getting SMRs to … initiative through industry working groups.

## SMR’s compete with gas-better risk premium and no volatility

**Rosner, Distinguished Service Professor, Departments of Astronomy and Astrophysics, and Physics – Chicago University, 11**

(Robert e-, Senior Fellow, Computation Institute; Director, Energy Policy Institute; Enrico Fermi Institute; Harris School of Public Policy, Stephen Goldberg, Special Assistant to the Director Argonne National Laboratory, “Small Modular Reactors – Key To Future Nuclear Power Generation In The U.S.”, Energy Policy Institute at Chicago The Harris School of Public Policy Studies, 6/2/12, atl)

In both the 2004 Chicago Study and the current … for nuclear power plants.

## We have the workforce and infrastructure

**Spencer et al, Thomas A. Roe Institute for Economic Policy Studies research fellow, 11**

(Jack. “A Big Future for Small Nuclear Reactors?” Heritage Foundation. 2-02. <http://www.heritage.org/research/reports/2011/02/a-big-future-for-small-nuclear-reactors>. Accessed: 9/7/2012. ADC)

Domestic Production. Although the … capabilities—all in the United States.

# \*\*\*\*2AC\*\*\*\*

# Solve

## Modern plants replace water-intensive old plants

Silverstein, Forbes, 12

(Ken, editor-in-chief for Energy Central's EnergyBiz Insider, “Water Shortages May Leave Energy Producers Dying of Thirst,” 5-3-12, http://www.forbes.com/sites/kensilverstein/2012/05/03/water-shortages-may-leave-energy-producers-dying-of-thirst/2/, accessed 9-27-12, ara)

“The competition between water and … lights go out or their bills start to escalate.

## SMRs solve – water use inevitable, desalination means SMRs can create the clean water they need

Licata, CEO, Blue Phoenix, 12

 (John J., founder and chief energy strategist for Blue Phoenix Inc., an independent research company focused on next generation energy, M.B.A. from the Executive MBA Program at NYU’s Leonard N. Stern School of Business, has held research, trading, and strategy positions at Dow Jones, Salomon Smith Barney, BrokerageAmerica, R&M Futures, “America, It’s OK to favor Small Modular Reactors & phase out coal,” 4-16-12, http://www.cmegroup.com/education/files/america-its-ok-to-favor-small-modular-reactors-and-phase-out-coal.pdf, accessed 9-27-12, ara)

A case can be made that building a new coal-fired … are a smarter choice over coal-fired plants

## You would have to cut down the entire Amazon to have an impact on the hydrocycle.

**D’Almeida et al., New Hampshire University Institute for the Study of Earth, Oceans and Space, 2007**

(Cassiano, “The effects of deforestation on the hydrological cycle in Amazonia: a review on scale and resolution”, INTERNATIONAL JOURNAL OF CLIMATOLOGY Int. J. Climatol. 27: 633–647 (2007), ldg)

On the basis of the predictions of many … speciﬁc deforestation extent may display.

# Environment K

## They link harder- claim an end through the oil disad and claim that Russia is the only internal link to extinction

## Perm do the plan and all nme parts of the alt- must be able to test the competitiveness of philosophical positions to the policy action of the aff

## Perm do both- recognition of the capacity of catastrophe to forge relations of empathy avoids the alt’s paralysis by foregoing possible solutions

**Recuber, CUNY sociology doctoral candidate, 2011**

(Timothy, “Consuming Catastrophe: Authenticity And Emotion In Mass-Mediated Disaster”, gradworks.umi.com/3477831.pdf, DOA: 11-3-12, ldg)

Recently the trend among scholars and … and consumer culture that disasters generate today.

## Security discourse is inevitable – rejection of environmentalism cedes power to the elites

**Liftin, University of Washington Political Science Professor, 98**

(Karen T., “Constructing Environmental Security and Ecological Interdependence”, Global Governance 5 (1998), 9/1/12, atl)

It may be tempting to jettison … of how they construct their speech acts.

## Extinction-level ecological representations spark a new social ethic and solve the alt.

**Epstein et al., Hong Kong Laboratory of Computational Oncology, 2009**

(Richard J., “The Threat That Dare Not Speak Its Name; Human Extinction”, Perspectives in Biology and Medicine, Winter, 52.1, project muse, ldg)

Final ends for all species are the same, … dismiss as “human nature” (Tudge 1989).

## Alt can’t solve no method to reduce warming – Our solvency claims in the context of deliberation make fear manageable even if their research is true

**Moser, Clark University geography PhD, 2011**

(Susanne, “Communicating Climate Change: Closing The Science-Action Gap”, <http://sciencepolicy.colorado.edu/admin/publication_files/2011.30.pdf>, DOA: 11-3-12, ldg)

 Clearly these findings pose difficult dilemmas …, rather than obstruct it (Nagda 2006).

## Threats are real and we should act on them – they exist independent of fear

**Knudsen, Sodertom political science professor, 2001**

(Olav, “Post-Copenhagen Security Studies: Desecuritizing Securitization”, Security Dialogue 2001 32: 355, SAGE, ldg)

Moreover, I have a problem with the … democratic procedures for dealing with them.

## Causes nihilism, making domination inevitable

**Kellner, Columbia University Professor Philosophy, 89**

(Douglas, Jean Baudrillard, Stanford University Press, 1989, p 107-8, 10/17/12, atl)

In Baudrillard, by contrast, life does not exist as an … ultimately lead him to embrace nihilism (see 4.4).

# Cap K

## Only evaluate arguments based off the plan text-any alternatives are self serving and regressive which makes 2AC predictability and offense impossible-evaluate the consequences of the AFF and alternative because it is the only wholistic way to evaluate prior questions.

## Perm do the plan and all nme parts of the alt

## Plan won’t be co-opted by capital – elites don’t control policymaking.

**Ralph, Leeds international politics professor, 2000**

(Jason, American democracy promotion: impulses, strategies and impacts, pg 197, ldg)

American policy undoubtedly advocates …of a continuous political process.

## There is no alternative to capitalism or a clear transition

**Kliman, Pace economics professor, 2004**

(Andrew, “Alternatives to Capitalism: What Happens After the Revolution?” <http://akliman.squarespace.com/writings/>, DOA: 11-3-12, ldg)

Have we faced the harsh reality .. choosing one path into the future rather than another.”

## Capitalism key to artificial intelligence

**Kurzweil, Co-Founder, Chancellor & Trustee, Singularity University, 2001**

(Ray, “The Law of Accelerating Returns”, 3-7, <http://research.lifeboat.com/law.htm>, ldg)

There is a vital economic imperative…visage of economic competition to stop this progression.

## AI solves every impact and averts multiple scenarios for extinction

**Howe, The Singularity Institute, 2002**

(Mitchell, “What are the Odds?”, <http://www.acceleratingfuture.com/articles/whataretheodds.htm>, ldg)

Between now and 2029, scientists … averted or remedied with surprising ease.

## Capitalism is premised on humans being ends in themselves-key to value to life

**Tracinski, Intellectual Activist editor, 2008**

(Robert, “The Moral and the Practical”, <http://www.moraldefense.com/Philosophy/Essays/The_Moral_and_the_Practical.htm>, DOA: 9-12-11, ldg)

Stated in more fundamental terms, … ever-increasing wealth and prosperity.

**Ethical policymaking must be grounded in consequences**

**Isaac, political science professor Indiana University, 2002**

(Jeffrey, “Ends, Means, and Politics, Dissent Magazine, Spring 2002, ldg)

Power is not a dirty word or an unfortunate .. undermines political effectiveness.

# Oil

## No risk of escalation, the U.S. would win in minutes

Lieber, Professor of Political Science, and Press, Professor of Political Science, 2006

(Keir A. Lieber, the author of War and the Engineers: The Primacy of Politics Over Technology, is Assistant Professor of Political Science at the University of Notre Dame. Daryl G. Press, the author of Calculating Credibility: How Leaders Assess Military Threats, is Associate Professor of Political Science at the University of Pennsylvania, Foreign Affairs, March/April) NJR

To determine how much the nuclear balance …. will only increase over time.

## Russia economy collapsing now-multiple factors overwhelm any effect of the plan

Alexandrova, ITAR-TASS, 11-7-12

(Lyudmila, “Russian economy already in crisis”, <http://indrus.in/articles/2012/11/06/russian_economy_already_in_crisis_18885.html>, DOA: 11-7-12, ldg)

The latest developments in the Russian …give a powerful impetus to internal demand.”

## NP now- Banks

## Nuclear doesn’t trade off with oil

**Styles, GSW Strategy Group managing director, 12**

(Geoffrey. “How Helpless Are We in the Face of Rising Oil Prices?” 2-24. <http://energyoutlook.blogspot.com/2012/02/how-helpless-are-we-in-face-of-rising.html>. Accessed: 10/02/2012. ADC)

 To see why requires a sense of how the oil …., they are a rhetorical diversion.

## US isn’t key – growth in developing countries outweighs

Gold, WSJ staff writer, 2012

(Russell, “Drivers Cut Back on $4 Gas”, Wall Street Journal, April 28, http://online.wsj.com/article/SB10001424052748703367004576289292254881456.html, accessed 9/18/12, SLC)

After weeks of paying steadily more … the New York Mercantile Exchange.

## High prices force diversification – solves growth

Bogatova, Mergermarket Financial Times Correspondent, 12

(Margarita, June 26, “O’Niel: Russia should be less dependent on oil prices,” <http://english.ruvr.ru/2012_06_26/79409411/>, accessed 9-7-12, ads)

Russia should keep in mind that oil prices….political platform, but that’s actually good."