Plan: The United States federal government should substantially increase technical cooperation and investment in Small Modular Reactors with Mexico

Advantage 1: International Institutions

Mexico is key for U.S. nuclear development and influence

Dobransky, 11, Steve Dobranksy: Cleveland State University International Relations Adjunct Professor, March 2011The Nuclear Penetration of the Monroe Doctrine, <http://www.airpower.au.af.mil/apjinternational/apj-s/2011/2011-1/2011_1_02_dobransky_eng_s.pdf>

As for Mexico, **the U.S. responded to its southern neighbor’s growing**

**AND**

ready to exploit the situation and fulfill the U.S.’s promise

And, rapid commercialization is key for South American exports

**Ferguson** **10** (Dr. Charles D. Ferguson is the President of the Federation of American Scientists (FAS). He is also an Adjunct Professor in the Security Studies Program at Georgetown University and an Adjunct Lecturer in the National Security Studies Program at the Johns Hopkins University. He graduated with distinction from the United States Naval Academy and served in the U.S. nuclear Navy, receiving training as a nuclear engineer at the Naval Nuclear Power School. He earned a Ph.D. in physics from Boston University.) 5/19/20, (http://www.fas.org/press/\_docs/05192010\_Testimony\_HouseScienceCommHearing%20.pdf)

The opening of the international nuclear market to India may lead to further spread of

AND

**in** setting the standards for safe, secure, and proliferation-resistant **SMRs**

that can compete in the market. Several years ago, the United States sponsored assessments to determine these criteria.9 While the Platonic ideal for small modular reactors will likely not be realized, it is worth specifying what such an SMR would be. N. W. Brown and J. A. Hasberger of the Lawrence Livermore National Laboratory assessed that reactors in developing countries must: • “achieve reliably safe operation with a minimum of maintenance and supporting infrastructure; • offer economic competitiveness with alternative energy sources available to the candidate sites; • demonstrate significant improvements in proliferation resistance relative to existing reactor systems.”10 Pointing to the available technologies at that time from Argentina, China, and Russia, they determined that “these countries tend to focus on the development of the reactor without integrated considerations of the overall fuel cycle, proliferation, or waste issues.” They emphasized that what is required for successful development of an SMR is “a comprehensive systems approach that considers all aspects of manufacturing, transportation, operation, and ultimate disposal.”

US nuclear exports to South America allows influence and prevents instability

Dobransky, 11, Steve Dobranksy: Cleveland State University International Relations Adjunct Professor, March 2011The Nuclear Penetration of the Monroe Doctrine, http://www.airpower.au.af.mil/apjinternational/apj-s/2011/2011-1/2011\_1\_02\_dobransky\_eng\_s.pdf

Finally, the U.S. can just go all-out and compete

AND

and Russia’s ascendance. And, thus, will go the Monroe Doctrine.

Regional instability causes nuclear war and extinction

**Manwaring 05** – adjunct professor of international politics at Dickinson (Max G., Retired

AND

**and their associated problems endanger global security, peace, and prosperity**.65

U.S. leadership in South America is necessary for international institutions and to contain escalatory instability

**Sabatini and Berger ‘12**, (Christopher Sabatini: editor-in-chief of Americas Quarterly and senior director of policy at Americas Society/Council of the Americas), and Ryan Berger, (Ryan Berger: policy associate at the Americas Society/Council of the Americas,) 6/13/2012, Why the U.S. can't afford to ignore Latin America, globalpublicsquare.blogs.cnn.com/2012/06/13/why-the-u-s-cant-afford-to-ignore-latin-america/

Speaking in Santiago, Chile, in March of last year, President Obama called

AND

S. “backyard” that is outside broader, global strategic concerns.

Shift in nuclear policy restores U.S. leadership in international institutions – solves every impact

Stanley 7 (Elizabeth Stanley, Ph.D. in Government – Harvard University, Assistant Professor – Georgetown University, Member – National Security Advisement Board of Sandia National Laboratories, “International Perceptions of U.S. Nuclear Policy” <http://www.prod.sandia.gov/cgi-bin/techlib/access-control.pl/2007/070903.pdf>)

Perceptual relationships, however, are another matter. The third implication of this research

AND

those reactions. The strategic interaction is complex and incredibly difficult to model.

Effective international institutions are key to solve multiple existential risks

Masciulli 11—Professor of Political Science @ St Thomas University [Joseph Masciulli, “The Governance Challenge for Global Political and Technoscientific Leaders in an Era of Globalization and Globalizing Technologies,” Bulletin of Science, Technology & Society February 2011 vol. 31 no. 1 pg. 3-5]

What is most to be feared is enhanced global disorder resulting from the combination of

AND

**survival and security to their longer term agendas**. Pg. 4-5

Advantage 2: Proliferation

U.S. SMR leadership prevents proliferation but it will be undermined

**Kurth 13** [Michael Kurth, Washington Internships for students of engineering Founded in 1980 through the collaborative efforts of several professional engineering societies, the Washington Internships for Students of Engineering (WISE) has become one of the premier Washington internship programs. The WISE goal is to prepare future leaders of the engineering profession in the United States who are aware of, and who can contribute to, the increasingly important issues at the intersection of science, technology, and public policy., sponsored by the American Nuclear Association] (Advancing the Commercialization of Small Modular Reactors http://www.wise-intern.org/journal/2013/documents/KURTHAdvancingtheCommercializationofSmallModularReactors.pdf)

The export of SMRs also has issues regarding nonproliferation. When discussing nuclear ¶ reactors

AND

government assistance. Ensuring the timely deployment of SMRs is of the utmost importance

Laguna Verde plant is likely to have an accident

Nauman 13, (Telli Nauman is a reporter for Center For International Policy America, a non-profit public policy research and advocacy think tank with offices inWashington, D.C. and New York City. It was founded in 1975 in response to the Vietnam War. The Center describes its mission as "promoting a U.S. foreign policy based on international cooperation, demilitarization and respect for human rights." Nauman is also an environmental analyst for the Americas Program . She is a founder and co-director of the independent international media project Journalism to Raise Environmental Awareness, initiated in 1994 with support from the John D. and Catherine T. MacArthur Foundation.) Mexico’s aging Laguna Verde Nuclear Plant a Fiasco http://www.cipamericas.org/archives/9498

Fissures, leaks, shutdowns, government secrecy, a failed upgrade, alleged bid

AND

part of the coast with only poorly maintained roads to offer escape routes.

Extinction

Lendman ‘11 (Stephen – BA from Harvard University and MBA from Wharton School at the University of Pennsylvania, “Nuclear Meltdown in Japan” 3/13/11 http://rense.com/general93/nucmelt.htm)

For years, Helen Caldicott warned it's coming. In her 1978 book, "

AND

or face extinction. No one listened. The Doomsday Clock keeps ticking.

The U.S. has conduits to provide technical nuclear cooperation over reactors to Mexico

Parker 07’ (Mary Ann Parker, member of Scientists Without Borders, worldwide community of change makers collaborating to accelerate and share solutions to the world's most urgent development, international scientific research and cooperation group, November 2007, https://www.llnl.gov/str/Nov07/pdfs/11\_07.4.pdf, DPatterson)

The International Atomic Energy Agency (IAEA) oversees the primary multilateral methods for helping

AND

nuclear-generated electrical power, should Morocco choose to develop this energy source

Current international market guarantees proliferation – US is key to stop

**Albright et al. 13** (David Albright, founder of the non-governmental Institute for Science and International Security (ISIS), its current president, and author of several books on proliferation of atomic weapons. Albright holds a Master of Science in physics from Indiana University and a M.Sc. inmathematics from Wright State University. He has taught physics at George Mason University in Virginia.  Andrea Stricker, Senior Policy Analyst at Institute for Science and International Security, MA in Security Policy Studies from the Elliott School of International Affairs at George Washington University and a BA in Political Science and French, certificate in Middle Eastern Studies, from the University of Arizona, Houston Wood, Professor of Mechanical and Aerospace Engineering at the University of Virginia. He earned his B.A. and M.S. degrees in mathematics from Mississippi State University, and his Ph.D. in applied mathematics from the University of Virginia, He was Visiting Scientist at Commissariat a l’Energie Atomique, Saclay, France in 1996 and at Oak Ridge National Laboratory, Oak Ridge, TN in 2004. From July – December 2007, he was Visiting Research Scholar at Princeton University in the Woodrow Wilson School and the Program on Science and Global Security, Institute for Science and International Security, 7/29/13, http://www.nps.edu/Academics/Centers/CCC/PASCC/Publications/2013/Full%20Report\_DTRA-PASCC\_29July2013-FINAL.pdf)

**As a short term projection over the next five to ten years, several additional**

**AND**

. One key part of this effort will remain smuggling of nuclear commodities.

DOE investment and exports are necessary for commercialization and influence but part 810 prevents cooperation

**Kurth 13,** [Michael Kurth, Washington Internships for students of engineering Founded in 1980 through the collaborative efforts of several professional engineering societies, the Washington Internships for Students of Engineering (WISE) has become one of the premier Washington internship programs. The WISE goal is to prepare future leaders of the engineering profession in the United States who are aware of, and who can contribute to, the increasingly important issues at the intersection of science, technology, and public policy., sponsored by the American Nuclear Association] (Advancing the Commercialization of Small Modular Reactors http://www.wise-intern.org/journal/2013/documents/KURTHAdvancingtheCommercializationofSmallModularReactors.pdf)

Extensive domestic deployment and international deployment will occur if the second phase of the SMR

AND

the DOE with other departments willing to purchase power from private sector utilities.

**Cooperation agreements with Mexico would bypass 810**

**NNSA and DOE 13** (<http://nnsa.energy.gov/sites/default/files/nnsa/07-13-inlinefiles/2013-07-31%20SNOPR.pdf>) (NNSA) is part of the United States Department of Energy. It works to improve national security through the military application of nuclear energy. The NNSA maintains and improves the safety, reliability, and performance of the United States nuclear weapons stockpile through the use of science, technology, and engineering. It is also responsible for many nuclear nonproliferation, counter-terrorism, counter-proliferation,)

Several NOPR commenters noted that the United States has had a long, peaceful nuclear

AND

basis to designate additional countries as generally authorized, DOE would welcome them.

SMRs are breakthroughs in safety and proliferation resistant technology

**Kurth 13,** [Michael Kurth, Washington Internships for students of engineering Founded in 1980 through the collaborative efforts of several professional engineering societies, the Washington Internships for Students of Engineering (WISE) has become one of the premier Washington internship programs. The WISE goal is to prepare future leaders of the engineering profession in the United States who are aware of, and who can contribute to, the increasingly important issues at the intersection of science, technology, and public policy., sponsored by the American Nuclear Association] (Advancing the Commercialization of Small Modular Reactors http://www.wise-intern.org/journal/2013/documents/KURTHAdvancingtheCommercializationofSmallModularReactors.pdf)

S**mall** m**odular** r**eactor**s **have several key technical features that enable them entrance to new market**

**AND**

[9-12]. These SMR designs greatly reduce the safety systems reliance

Extinction – new proliferators are uniquely unstable – deterrence won’t save us

**Kroenig 12,** (Matthew Kroenig, Assistant Professor of Government, Georgetown University and Stanton Nuclear Security Fellow, Council on Foreign Relations, June 4, 2012, “The history of proliferation optimism: does it have a future?” http://npolicy.org/article\_file/The\_History\_of\_Proliferation\_Optimism.pdf)

Nuclear War. **The greatest threat posed by the spread of nuclear weapons is nuclear**

**AND**

**that a future** Middle East **crisis could result in a devastating nuclear exchange.**

Asia prolif escalates to global nuclear war

**Cirincione, 2000** – Director of the Non-Proliferation Project at the Carnegie Endowment for International Peace (Spring 2000, Joseph, Foreign Policy, “The Asian Nuclear Reaction Chain”, JStor)

The blocks would fall quickest and hardest in Asia, where proliferation pressures are already

AND

, perhaps, the first combat use of a nuclear weapon since 1945.

Iran and Saudi prolif causes regional nuclear war

**Allison ‘6** (Graham, Dir. – Belfer Center for Science and International Affairs – Harvard JFK School of Gov., Boston globe, “The Nightmare This Time”, 3-12, L/N)

Barry **Posen**, professor of political science at MIT, has presented the most cogent

AND

fingers on more triggers and consequently more prospects of a nuclear weapons launch.

**Multiple factors ensure miscalc**

**Evans and Kawaguchi 9**—President of the International Crisis Group & Former Foreign Minister of Japan [December 15, 2009, Gareth Evans (Co-chair of the International Commission on Nuclear Non-proliferation and Disarmament and Professorial fellow in the School of Social and Political Sciences @ University of Melbourne) & Yoriko Kawaguchi (Co-chair of the International Commission on Nuclear Non-proliferation and Disarmament), “Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers,” International Commission on Nuclear Non-proliferation and Disarmament Report, pg. 31-32, http://www.icnnd.org/Reference/reports/ent/part-ii-3.html]

3.1 Ensuring that no new states join the ranks of those already nucleararmed

AND

**nuclear power centres divided by multiple and cross-cutting sources of conflict**.

Prolif flips ethics, nothing can compare to nuclear weapons

**Ford 11** Chris Ford, Senior Fellow at the Hudson Institute in Washington, D.C. He previously served as U.S. Special Representative for Nuclear Nonproliferation, Principal Deputy Assistant Secretary of State, and General Counsel to the U.S. Senate Select Committee on Intelligence, 1/10/11, Havea and Have-Nots: "Unfairness in nuclear Weapons possession," www.newparadigmsforum.com/NPFtestsite/?p=658

First, however, let’s provide some context. As I noted above, it

AND

**there are more important considerations in play. Let us not forget this.**

Nuclear terrorism causes extinction – expert consensus

Hellman 8 (Martin E. Hellman, emeritus prof of engineering @ Stanford, “Risk Analysis of Nuclear Deterrence” SPRING 2008 THE BENT OF TAU BETA PI, http://www.nuclearrisk.org/paper.pdf)

The threat of nuclear terrorism looms much larger in the public’s mind than the threat

AND

assume that preventing World War III is a necessity—not an option.

Any WMD terrorist attack results in nuclear great power war

**Ayson 10,** Professor of Strategic Studies and Director of the Centre for Strategic Studies: New Zealand at the Victoria University of Wellington, 2010 (Robert,“After a Terrorist Nuclear Attack: Envisaging Catalytic Effects,” *Studies in Conflict & Terrorism*, Volume 33, Issue 7, July, Available Online to Subscribing Institutions via InformaWorld)

But these two nuclear worlds—**a non-state actor nuclear attack and a**

**AND**

be admitted that any **preemption would probably still meet with a devastating response.**

Brazilian prolif leads to regional prolif, nuclear war, and area access and denial for the US

Ghoshal 13, (Debalina Ghoshal is an Associate Fellow at the Centre for Air Power Studies, Western Air Command, New Delhi, India. [South America goes nuclear: Now Brazil] {<http://www.gatestoneinstitute.org/3941/nuclear-brazil>)

If Brazil develops a nuclear submarine, it would be South America's first,[2

AND

of collapsed or ineffective deterrence, easily leads to all-out war.

Brazil nuclear submarines sets the precedent for global usage

**Moltz 12,** (James Clay Moltz: Professor, Associate Chair for Research, and Director of the Project on Advanced Systems and Concepts for Countering Weapons of Mass Destruction, Dr. Moltz received his Ph.D. and M.A. in Political Science from the University of California, Berkeley. He also holds an M.A. in Russian and East European Studies and a B.A. in International Relations (with Distinction) from Stanford University.) (<http://www.dtic.mil/dtic/tr/fulltext/u2/a578475.pdf>) (Submarine and Autonomous Vessel Proliferation: Implications for Future Strategic Stability at Sea)

Although Argentina and rival Brazil engaged in a nuclear rapprochement over the last three decades

AND

cycle is still difficult to tell. But the trend is worrisome.

Area access and denial leads to deterrence collapse and war

Alcazar, 12, (Vincent Alcazar**,** Colonel, USAF, Winter 2012) Crisis Management and the Anti-Access/Area Denial Problem, http://www.au.af.mil/au/ssq/2012/winter/alcazar.pdf

America’s political and military leaders rely on unimpeded US force movements across strategic distances to

AND

its conventional deterrence, and undercut its ability to manage escalation and deescalation.

Agile naval capability contains aggressors and manages power transitions, every hotspot is at risk. Naval arms racing guarantees world war III

Eaglen and McGrath 11, research fellow for national security – Heritage, and McGrath, former naval officer and director – Delex Consulting, Studies and Analysis, served as the primary author of the current maritime strategy., 5/16/’11

(Mackenzie and Bryan, “Thinking About a Day Without Sea Power: Implications for U.S. Defense Policy,” Heritage Foundation)

Modern American sea power—represented for the purposes of this paper by the U

AND

the international supply chain with impacts in the billions of dollars.[16]

the Nation truly needs us, we will all be going to the same place, wherever that may be.

Agile naval capability is critical to maintain power transitions and to prevent multiple wars over Chinese SLOCS and a litany of hotspots that go nuclear

**Munson, ’11** – Major Peter J., Marine aviator and Middle East foreign area officer, having served most recently as Officer in Charge, Detachment A, Marine Aerial Refueler Transport Squadron 352, in support of Operation Enduring Freedom; author of Iraq in Transition [“ Back to Our Roots: Marines’ future in the Indo-Pacific”. January. Marine Corps Gazette. http://www.mca-marines.org/gazette/back-to-our-roots]

A decade of war has focused Marines’ minds on insurgency, culture, and the

AND

will all be going to the same place, wherever that may be.

Even if hegemony is impossible, American military engagement is key to prevent global chaos and extinction – there’s no alternative

**Brzezinski, ’12** [Zbigniew Brzezinski, CSIS counselor and trustee and cochair of the CSIS Advisory Board, Robert E. Osgood Professor of American Foreign Policy at the School of Advanced International Studies @ Johns Hopkins University, cochair of the American Committee for Peace in the Caucasus and a member of the International Advisory Board of the Atlantic Council, recipient of numerous honors and awards. “After America”. Foreign Policy, Jan/Feb 2012. http://www.foreignpolicy.com/articles/2012/01/03/after\_america?page=0,1]

Not so long ago, a high-ranking **Chinese official, who** obviously had

**AND**

policy -- or start bracing itself for a dangerous slide into global turmoil.

There are infinite root causes of violence, only deterrence solves

**Moore, 04** Walter L. Brown Professor of Law at the University of Virginia School of Law **(John Norton Moore**, “**Solving the War Puzzle: beyond the democratic peace,” pg 41-43)**

**If major interstate war is predominantly a product of a synergy between a potential nondemocratic**

**AND**

**objective altogether or imposes punishing costs making the gamble not worth the risk.**

Only deterrence is an empirically verifiable solution to war

John Norton **Moore 4**, Dir. Center for Security Law @ University of Virginia, 7-time Presidential appointee, & Honorary Editor of the American Journal of International Law, Solving the War Puzzle: Beyond the Democratic Peace, page 27-31

As so broadly conceived, there is strong evidence that **deterrence**, that is**,**

AND

**totality of external factors**, **that is,** **deterrence, that become crucial.**