### Plan

#### The United States Department of Defense should procure small modular reactors for use on military bases within the United States.

### Grids

#### Grid disruptions are inevitable - only SMR’s can solveRobitaille 12

(George, Department of Army Civilian, United States Army War College, “Small Modular Reactors: The Army’s Secure Source of Energy?” 21-03-2012, Strategy Research Project)

In recent years, the U.S Department of Defense (DoD) gas fired power plants on the environment.\

#### Cyber-attack’s coming ---actors are probing US grid weaknesses

Reed 10/11

John, Reports on the frontiers of cyber war and the latest in military technology for Killer Apps at Foreign Policy, "U.S. energy companies victims of potentially destructive cyber intrusions", 2012, killerapps.foreignpolicy.com/posts/2012/10/11/us\_energy\_companies\_victims\_of\_potentially\_destructive\_cyber\_attacks

Foreign actors are probing the networks and he noted that Stuxnet itself passed through power plants on its way to Iran. "Stuxnet infected thousands of computer systems all around the globe, I know there were power plants infected by Stuxnet very far away from Iran," Kaspersky said.

#### Disruptions cause nuclear lashout – SMRs solve but renewables fail

Andres and Breetz 11

(Richard B. Andres is Professor of ¶ national Security Strategy at the ¶ national War College and a Senior fellow and energy and environmental ¶ Security and Policy Chair in the Center ¶ for Strategic research, institute for national Strategic Studies, at the national Defense University. Hanna L. Breetz is a doctoral candidate in the Department of Political Science at the Massachusetts institute of technology, “Small Nuclear Reactors ¶ for Military Installations:¶ Capabilities, Costs, and ¶ Technological Implications” Institute for National Strategic Studies, <http://www.ndu.edu/press/lib/pdf/strforum/sf-262.pdf>, SEH)

Grid Vulnerability**. DOD is unable to provide its ……….**  **the powerful incentive to ¶ do so in order to win an ongoing battle or war would ¶ be greatly reduced.**

#### Grid failures risks terrorism

Defense Science Board 8

(The DSB is a Federal ¶ Advisory Committee established to provide independent advice to the Secretary of ¶ Defense, “More Fight – Less Fuel” <http://www.acq.osd.mil/dsb/reports/ADA477619.pdf>, SEH)

**DoD’s key problem with electricity ……** are dependent on the commercial grids serving their locations. ¶ Security of their power supplies and continuation of their missions is as important as ¶ within the U.S.

#### Numerous attempts prove our impact

Wagner 9/11

(Dr. Abraham R. Wagner is a Professor of International and Public Affairs at the ¶ Arnold A. Saltzman Institute of War & Peace Studies at Columbia University. “Counter-Terrorism Technologies -- Taking Stock on 9/11” 09/11/2012 2:13 pm accessed online September 11, 2012 at <http://www.huffingtonpost.com/abraham-r-wagner/counterterrorism-technolo_b_1874521.html>, TSW)

On this 11th anniversary of the 9/11 attacks, …… but multiple bureaucracies have generated a set of plans and an even larger set of excuses as to why the fundamental problems in this area remain to be solved.

#### Terrorists are targeting Syrian bioweapons now and will use them

Blair ‘12

(Charles P. Blair joined FAS in June 2010. He is the Senior Fellow on State and Non-State Threats. Born and raised in Los Alamos, New Mexico, Mr. Blair was an exchange student in Moscow in the mid-1980s, witnessing firsthand the closing salvos of the Cold War. Since the end of that era, Mr. Blair has worked on issues relating to the diffusion and diversification of weapons of mass destruction (WMD) in the context of proliferation amid the rise of mass casualty terrorism incidents and the centripetal and centrifugal elements of globalization. Mr. Blair’s work focuses on state and violent non-state actors (VNSA) – amid a dystopic and increasingly tribal world. “Fearful of a nuclear Iran? The real WMD nightmare is Syria” 1 MARCH 2012 accessed online August 22, 2012 at http://www.thebulletin.org/web-edition/op-eds/fearful-of-nuclear-iran-the-real-wmd-nightmare-syria)

As possible military action against Iran's suspected nuclear weapons program looms …… , of any political or religious persuasion, in the Middle East and around the world.

#### New gene manipulation takes out your defense

MSNBC 2011

(“Clinton warns of bioweapon threat from gene tech,” pg online @ http://www.msnbc.msn.com/id/45584359/ns/… “For an international verification system — akin to that for nuclear weapons — saying it is too complicated to monitor every lab's activities.”)

GENEVA — New gene assembly technology….. — akin to that for nuclear weapons — saying it is too complicated to monitor every lab's activities

#### Extinction

Ochs 2

**(**Richard, Naturalist – Grand Teton National park with Masters in Natural Resource Management – Rutgers, “Biological Weapons must be abolished immediately” 6-9, http://www.freefromterror.net/other\_articles/abolish.html)

Of all the weapons of mass destruction, the genetically engineered **……**  **HUMAN EXTINCTION IS NOW POSSIBLE**.

### Leadership

#### The commercial industry is the key internal link to nuclear leadership – federal investment is key

Pete Domenici and Warren F. “Pete” Miller, part time Research Professor at Texas A and M University and former assistant secretary for nuclear energy at the U.S. Department of Energy, July 2012, “Maintaining U.S. Leadership in Global Nuclear Energy Markets,” Bipartisan Policy Center,<http://bipartisanpolicy.org/sites/default/files/Leadership%20in%20Nuclear%20Energy%20Markets.pdf>

As an active participant in commercial markets, ….. of State have jurisdiction over commercial nuclear trade, global safety and security, and nonproliferation.

#### Plan key to a robust manufacturing sector in the US that spreads the model around the world

Rosner and Goldberg ‘11

[Robert, Stephen, University of Chicago, Energy Policy Institute, Small Modular Reactors – Key to Future Nuclear Power Generation in the U.S., http://epic.uchicago.edu/sites/epic.uchicago.edu/files/uploads/SMRWhite\_Paper\_Dec.14.2011copy.pdf]

As stated earlier, SMRs have the potential to ….. which has been lost to suppliers in France, Japan, Korea, Russia, and, now rapidly emerging, China.

#### Brink of widespread prolif now

CFR 7-5-2012, “The Global Nuclear Nonproliferation Regime,” Council on Foreign Relations, <http://www.cfr.org/proliferation/global-nuclear-nonproliferation-regime/p18984>

Nuclear weapons proliferation, whether by state ….. let alone pave the way for "the [peace and security](http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered%22%20%5Ct%20%22_blank) of a world without nuclear weapons."

#### Ensures safe nuclear technology - allows the US to promote non-proliferation objectives, otherwise wildfire prolif is inevitable

Loudermilk 2011

(Micah, research associate with the Energy & Environmental Security Policy program at National Defense University, “Small Nuclear Reactors and US Energy Security: Concepts, Capabilities, and Costs”, Journal of Energy Security, 5-31-11,

<http://www.ensec.org/index.php?view=article&catid=116%3Acontent0411&id=314%3Asmall-nuclear-reactors-and-us-energy-security-concepts-capabilities-and-costs&tmpl=component&print=1&page=&option=com_content&Itemid=375>, accessed 8-1-12, RSR)

Reactor safety itself notwithstanding, many argue ….. , spent fuel reprocessing, and developing reactor technologies.

#### Arsenals create imbalances that undermine deterrent relationships

Sokolski 9

Henry Sokolski, Executive Director of the Nonproliferation Policy Education Center, 6/1/2009, Avoiding a Nuclear Crowd, http://www.hoover.org/publications/policy-review/article/5534

Finally, several new nuclear weapons contenders are also likely ….. we may soon see a future that neither the proponents of nuclear abolition, nor their critics, would ever want. None of this, however, is inevitable.

#### Proliferations causes extinction – nuclear arms races and miscalculated nuclear war

Utgoff 2’

Utgoff**,** 2002 (Deputy Director of the Strategy Forces, and Resources Division of the Institute for Defense Analyses, Victor, “Proliferation, Missile Defence, and American Ambitions,” Survival, Volume 44, Number 2, Summer)

First, the dynamics of getting to a highly proliferated world …. every once in a while we will all gather on a hill to bury the bodies of dead cities or even whole nations.

#### Cold War no longer applies—nuclear war

Cimbala 8

Stephen Cimbala, Ph.D., Penn State Brandywine Political Science Distinguished Professor, 2008, Anticipatory Attacks: Nuclear Crisis Stability in Future Asia, Comparative Strategy Volume 27, Issue 2

The spread of nuclear weapons in Asia …. Western concepts might be inaccurate guides to the avoidance of war outside of Europe.

#### Preemption uniquely likely with new proliferators now

Cimbala ‘7 (Stephen, Distinguished Prof. Pol. Sci. – Penn. State Brandywine, Journal of Slavic Military Studies, “NUCLEAR PROLIFERATION AND DETERRENCE IN ASIA: THE VIEW FROM VLADIVOSTOK”, 20, InformaWorld)

Deterrence (or compellence) theories depend for their … archduke **into a war of unprecedented destruction.**

###  Solvency

#### Incentives now, but they are insufficient

DoD Energy Blog 11

DoD Energy Blog, 2/16/11, Good Things in Small Packages:Small Reactors for Military Power Good Things in Small Packages:Small Reactors for Military Power, dodenergy.blogspot.com/2011/02/good-things-in-small-packagessmall.html

They conclude that DOD should lead the … been with other alternative energy production means.

#### DoD acquisition of SMR’s ensures rapid military adoption, commercialization, and U.S. leadership

Andres and Breetz 11

Richard Andres, Professor of National Security Strategy at the National War College and a Senior Fellow and Energy and Environmental Security and Policy Chair in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University, and Hanna Breetz, doctoral candidate in the Department of Political Science at The Massachusetts Institute of Technology, Small Nuclear Reactorsfor Military Installations:Capabilities, Costs, andTechnological Implications, [www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf](http://www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf)

Thus far, this paper has reviewed two of DOD’s … reliability, performance, and proliferation resistance.

#### Military procurement solves commercial use and avoids regulations

Andres and Loudermilk 10

(Richard B. Andres, Professor of ¶ national Security Strategy at the ¶ national War College and a Senior fellow and energy and environmental ¶ Security and Policy Chair in the Center ¶ for Strategic research, institute for national Strategic Studies, at the national Defense University, Micah J, Research Associate for the Energy & Environmental Security Policy program with the Institute for National Strategic Studies at National Defense University, “Small Reactors and the Military’s Role in Securing America’s Nuclear IndustryPosted” <http://robertmayer.wordpress.com/2010/08/28/small-reactors-and-the-militarys-role-in-securing-americas-nuclear-industryposted/>, SEH)

Unlike private industry, the military does … their adoption can be achieved.

#### We have the personnel

ITA 11

(International Trade Administration, “The Commercial Outlook for U.S. Small Modular Nuclear Reactors” Manufacturing and Services Competitiveness Report, February 2011, US Department of Commerce)

A serious obstacle to the … could make sense for U.S. companies, as opposed to the localiza-tion that is typically necessary for building larger reactors.

#### DOD has the expertiseCohen 12

Armond Cohen 12, Executive Director of the Clean Air Task Force, “DoD: A Model for Energy Innovation?”, May 29, <http://www.catf.us/blogs/ahead/2012/05/29/dod-a-model-for-energy-innovation/>

Unlike most other agencies, including the …. power at military bases, or, conceivably, zero-carbon liquid fuels other than anything resembling current generation biofuels.

#### SMRs will replace large reactos and provide 75% of power by 2030.

Energy Policy Institute 10 (Energy Policy Institute, Center for Advanced Energy Studies, Economic and Employment Impacts of Small Modular Reactors, June 2010, <http://epi.boisestate.edu/media/3494/economic%20and%20employment%20impacts%20of%20smrs.pdf>)

The disruptive technology market share … on water as a coolant opening up areas previously unsuited for nuclear plants such as the arid, western U.S.