



VANGUARD

PROVIDING INFORMATION ON NATIONAL SECURITY FOR STATE & LOCAL POLICYMAKERS

09 September 2009

Volume 2 · Issue 39

Smart grid advocates differ on EMP preparation

By Mead Treadwell and Jeremy Thompson, editors

A past issue of the Vanguard reported on the volatility of our electric power grid and some responses to its patchwork construction ([Vanguard 2-34, "The volatility of the power grid"](#)). A more developed response is the nebulous term "smart grid." When it comes to EMP, the question is: Will smart grid make us more vulnerable? Proponents of smart grid shouldn't consider this a hostile question. The question is not necessarily implying that smart grid shouldn't be pursued.

Some advocates argue that EMP simply should not be a smart grid issue. The reasons given by these advocates will depend on how realistic they consider the findings of the EMP Commission. They may accept the findings of the Commission, but typically they argue that the threat shouldn't be taken seriously, because it isn't likely to happen ([Vanguard 2-35, "The problem with defining likelihood"](#)).

But other smart grid advocates, like Rep. Roscoe Bartlett (R-Maryland), says that we should invest in preparing smart grid for EMP by developing new technologies to protect the grid. In an interview last month, he made the point that EMP from a nuclear blast isn't the only threat smart grid advocates need to worry about.

"We may avoid this [an EMP blast from a nuclear weapon], but there is one event that we will not avoid: a solar electromagnetic interference, that is, a solar storm," says Bartlett. "If we have a big one like the one that occurred back in 1859, it would shut down the whole grid for quite a long time. That was quite an enormous storm."

Bartlett said that as little as \$100 million would go a long way toward developing the necessary protective technology.

[Roscoe Bartlett on grid security](#)

[Why an electromagnetic threat shouldn't be a smart grid issue](#)

EMP conference begins in Buffalo, NY

By Jeremy Thompson

This week features a conference on the threat of Electromagnetic Pulse in Buffalo, New York. With an estimated attendance of more than 600, the conference will be addressed by the members of the EMP Commission, members of Congress, non-profits, as well as members of the intelligence community and technical community.

The opening session focused on the need for understanding the threat and a unified response.

“It takes an Executive branch effort across a whole set of multi-faceted actions to drive mitigating actions,” said William O. Studeman, former acting director of the Central Intelligence Agency. “We need to be able to create the defenses and the critical infrastructure protections where one gets a sense that the executive branch leadership is actually at work. Today, the executive branch is still missing in action or attempting to decide what they want to do for the future. There’s also a continuing naiveté and serendipity in EMP awareness across the country, across the government, and across our society...At the federal level, the Department of Homeland Security must lead.”

Be sure to read next week’s issue for more highlights from the conference.

[Trying to make an EMPACT](#)

From the Wires this Week

Communications and Information Security

FCC releases emergency-preparedness report (Urgent Communications, 09/08/09)

http://urgentcomm.com/policy_and_law/news/fcc-emergency-preparedness-20090908/

The FCC will take several steps designed to improve its ability to respond during large-scale emergencies, the commission said in a report. Entitled “FCC’s Preparedness for a Major Public Emergency,” the report was prepared by the FCC’s public-safety and homeland security bureau (PSHSB), which conducted a 30-day state-of-readiness review launched by Chairman Julius Genachowski.

World War 3.0: Ten critical trends for cybersecurity (NewsFactor.com, 09/02/09)

http://www.newsfactor.com/story.xhtml?story_id=0020002HDYSG&page=1

Real-world attacks over the Internet also are possible. In March 2007, the Department of Energy’s Idaho National Laboratory conducted an experiment to determine whether a power plant could be compromised by hacking alone. The result was a diesel generator smoking and on fire due to some malicious data that could easily have been sent to it over the Internet from anywhere in the world. In

January 2008, a CIA analyst told American utilities that hackers had infiltrated electric companies in several locations outside the United States. In at least one case, they had managed to shut off power to multiple cities.

Missile Defense/Satellite Technology/EMP

Electro-magnetic pulse (Washington Times, 09/08/09)

<http://washingtontimes.com/news/2009/sep/08/electro-magnetic-pulse/>

Frank Gaffney writes, "With hurricane season upon us once again, the recent anniversary of one of the most deadly and destructive in our nation's history, the mega-storm called Katrina, was an occasion for remembering what can happen if we are unprepared."

Forstchen book makes reader think about what's really crucial (Fredricksburg.com, 09/06/09)

<http://fredericksburg.com/News/FLS/2009/092009/09062009/490203>

Forstchen's fictional "One Second After" describes the chaos that ensues in the U.S. after a single nuclear missile strikes directly over the middle of the country. The blast sets off an electromagnetic pulse that destroys the country's electrical grid. Among many other things, the book makes you realize just how fleeting our definition of wealth is. Money quickly becomes worthless in the Black Mountain, N.C., town where the story is set.

Energy/Transportation/Maritime/Infrastructure

Addressing global warming (GlobalSecurity.org, 09/07/09)

<http://sitrep.globalsecurity.org/articles/090907459-addressing-global-warming-secu.htm>

Global warming can significantly exacerbate security challenges facing the nation. There is a National Security Strategy, based on the Department of Defense's Quadrennial Defense Review (the latest version now in progress); the Department of State has recently begun a parallel Quadrennial Diplomacy and Development Review. But both of these are departmental efforts. There is still no government element responsible for developing an overall national strategy, and that is what is needed to address the challenge of global warming with a program of global development.

Announcements

To receive an EMP briefing

The Institute of the North and the Claremont Institute in Claremont, California support state legislators and emergency management groups by providing briefings on electromagnetic pulse (EMP) attack scenarios and preparedness. If you would like your committee or organization to receive one of these briefings, please contact [Jeremy Thompson](mailto:jeremy@instituteofthenorth.com) by email or call 907.771.2446.

To receive a copy of *Missile Defense and the Role of the States*

In February 2007, the Institute of the North and the Claremont Institute published a report on *Missile Defense and the Role of the States*, a survey of Adjutants General on questions regarding missile defense and electromagnetic pulse. To receive a hard copy of the report, please contact [Jeremy Thompson](#). You can also view the report online at: <http://www.institutenorth.org/servlet/download?id=304>.

To view the IWG report

The Institute of the North's Defense and Security program is a member of the Independent Working Group on Missile Defense, the Space Relationship, & the Twenty-First Century, a non-partisan group of defense experts who meet regularly to discuss issues and projects related to missile defense. To view the 2009 report online, please visit: <http://www.institutenorth.org/servlet/download?id=564>

To submit material

We are always looking for well-written editorials on the impact of national security at the state and local level. If you would like to submit an editorial for publication in the Vanguard newsletter, please forward factual and relevant articles of 500-750 words in length to the [Institute](#).

The Vanguard online

To view past and current issues of the Vanguard newsletter online, please visit: http://www.institutenorth.org/servlet/content/security_and_defense_program.html.

Unsubscribe

If you wish to be removed from our mailing list, please email the [Institute](#) with the word "unsubscribe" in the message field.

About the program

The Security and Defense program at the Institute of the North conducts research and educates policymakers on strategic issues relating to the defense of the United States that particularly concern decision makers in Alaska and at the state and local level throughout the nation.

The Institute of the North, based in Anchorage, Alaska, is a non-profit educational and research organization founded in 1994 by former Secretary of the Interior and twice Governor of Alaska Walter J. Hickel, focusing on strategic and natural resource issues.
The Institute of the North · 509 West Third Avenue, Suite 107 · Anchorage, AK 99501
Phone: 907.771.2446 · Fax: 907.771.2466

