

Hearing to examine the threat posed by electromagnetic pulse and policy options to protect energy infrastructure and to improve capabilities for adequate system restoration

10 a.m., May 4, 2017
Dirksen Senate Office Building
Room 366

Speaker Gingrich:

Good morning, I'd like to thank Chairman Murkowski, Ranking Member Cantwell, and the committee members for inviting me to testify today about the very real danger that electromagnetic pulse poses to the United States.

I wrote about this danger in my book *To Save America* in 2011.

Then, I acknowledged that we have known about the threat of electromagnetic pulse (EMP) since the mid-twentieth century. We learned then that setting off a nuclear explosion in the right way, and at the right altitude could simulate an enormous lightning strike, which could damage electronic devices and render them inoperable. Writing that book, I learned that testing hydrogen bombs in the Pacific resulted in burning out lights in Honolulu, which was 1,200 miles away from the test site.

As I wrote in 2011, anyone who has ever had a household appliance ruined by a power surge can understand the danger of EMPs, but our military has not fully assessed how an EMP strike could impact people in cities across the United States – and especially along the East Coast.

In 2004, Congressman Roscoe Bartlett called together a panel of nuclear physicists to study this issue. And according to their report, one EMP weapon detonated over Omaha would cripple half the economy. Further, they found that Russia, China and North Korea were working to develop EMP weapons – and the United States was quite vulnerable to an EMP attack.

Bill Forstchen, a friend who has co-authored books with me, wrote a sobering and horrifying novel about an EMP attack on the United States. The book is called *One Second After*, and in it Forstchen described how a small North Carolina town would be affected over the course of a year after a successful EMP attack. The story really illustrates how terrible such an assault could be.

As I argued in *To Save America*, within the next decade, there is no question that the United State should take action to develop a hardened, more resilient electrical system that could better withstand an EMP attack. Frankly, it is a matter of national survival.

The Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack reported in 2008 that, “the electromagnetic pulse generated by a high altitude nuclear explosion is one of a small number of threats that can hold our society at risk of catastrophic consequences.”

The report went on to say: “Because of the ubiquitous dependence of U.S. society on the electrical power system, its vulnerability to an EMP attack, coupled with the EMP’s particular damage mechanisms, creates the possibility of long-term, catastrophic consequences. The implicit invitation to take advantage of this vulnerability, when coupled with increasing proliferation of nuclear weapons and their delivery systems, is a serious concern. A single EMP attack may seriously degrade or shut down a large part of the electric power grid in the geographic area of EMP exposure effectively instantaneously. There is also a possibility of functional collapse of grids beyond the exposed area, as electrical effects propagate from one region to another.”

Just consider if one of these pulses were to be unleashed and disabled the power infrastructure on the East Coast. This is not simply about the lights going out. Consider the consequences of hospitals and

public safety agencies being without power, communication, or transportation for a significant amount of time.

This is a topic I am incredibly concerned – and passionate – about. I look forward to speaking with you about it today.