Testimony by Congressman Trent Franks
Homeland Security Committee Subcommittee on
Cybersecurity, Infrastructure Protection and Security Technologies
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Good afternoon Chairman Perry, Ranking Member Clarke and fellow distinguished Members on the committee. I believe the subject of this hearing is one of profound implication and importance and consequently I am grateful to you all for allowing me to testify here today.

With each passing year, our society becomes increasingly dependent on technology and an abundant supply of electricity. Our entire American way of life relies upon electrical power and technology. Our household appliances, food distribution systems, telephone and computer networks, communication devices, water and sewage plants would grind to a halt without it. Nearly every single facet of modern human life in America is susceptible to being crippled by a major Electromagnetic Pulse or Geomagnetic Disturbance event. We are so reliant on our electric power grid that we specifically consider it “critical infrastructure”.

Mr. Chairman and Members of the Committee, it strikes at my very core when I think of the men, women and children in cities and rural towns across America with a possibility of no access to food, water or transportation. In a matter of weeks or months at most, a worst case scenario could bring devastation beyond imagination.

The effects of geomagnetic storms and electromagnetic pulses on electric infrastructure are well-documented, with nearly every space, weather and EMP expert recognizing the dramatic disruptions and cataclysmic collapses these pulses can bring to electric grids. In 2008, the EMP Commission testified before The Armed Services Committee, of which I am a member, that the US society and economy are so critically dependent upon the availability of electricity that a significant collapse of the grid, precipitated by a major natural or man-made EMP event, could result in catastrophic civilian casualties. This conclusion is echoed by separate reports recently compiled by the DOD, DHS, DOE, NAS, along with various other government agencies and independent researchers. All came to very similar conclusions. We now have 11 government studies on the severe threat and vulnerabilities we face from EMP and GMD.

Recent Events

Mr. Chairman, as you can see, we have known the potentially devastating effects of sufficiently intense electromagnetic pulse on the electronic systems and its risk to our national security. More troubling, our enemies know.

More than a year ago, an unknown number of shooters with AK-47s knocked out 17 large transformers during a highly-choreographed assault on the PG&E Metcalf Transmission Substation in California. While the power company was able to avoid blackouts, the damage to the facility took nearly four weeks to repair.

This is not an isolated incident and world-wide adversaries are taking notice in the vulnerability of our grid. Just last month, Connecticut officials released a report discussing their efforts to protect utility and distribution companies because hackers and cyber attackers around the world have made attempts to penetrate their systems.

The Threats

We as a nation have spent billions of dollars over the years hardening our nuclear triad, our missile-defense capabilities, and numerous other critical elements of our national security apparatus against the effects of electromagnetic pulse, particularly the type of electromagnetic pulse that might be generated against us by an enemy. However, our civilian grid, which the Defense Department relies upon for nearly 99% of its electricity needs, is completely vulnerable to the same kind of danger. This constitutes an invitation on the part of certain enemies of the United States to use the asymmetric capability of an EMP weapon against us.

We also face the threat of a natural EMP event. Since the last occurrence of a major geomagnetic storm in 1921, the nation's high voltage and extra high voltage systems have increased in size more than tenfold. We are currently entering an interval of increased solar activity and are likely to encounter an increasing number of geomagnetic events on earth.

Legislation

To this end, I introduced The Critical Infrastructure Protection Act, HR 3410, which currently lays before your Committee. I'd like to thank Ranking Member Clarke, and my EMP Caucus co-chair for cosponsoring this critical legislation. HR 3410 enhances the Department of Homeland Security's threat assessments for geomagnetic disturbances and electromagnetic pulse blackouts which will enable practical steps to protect the electric grid that serves our Nation. This legislation will also help the United States prepare for such an event by implementing large scale blackouts into existing national planning scenarios. It allows us to plan for protecting and recovering the electric grid and other critical infrastructure from an EMP event. In addition, it advances an educational awareness program to protect critical infrastructure and constructs a campaign to proactively educate emergency planners and emergency responders at all levels of government.

Summary

Mr. Chairman, the challenge to ultimately and fully protect our people and nation from all of the various perils of natural or manmade electromagnetic pulse will be long and lingering. But the time to protect our nation from the most devastating scenario is now; the threat is real, and the implications are sobering.

Your actions today to protect America may gain you no fame or fanfare in the annals of history. However, it may happen in your lifetime that a natural or man-made EMP event so big has an effect so small that no one but a

few will recognize the disaster that was averted. For the sake of our children and future generations, I pray it happens exactly that way.

Thank you and God bless all of you. Thank you and I yield back the balance of my time.