Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack

Established by Congress in FY2001 National Defense Authorization Act Title XIV Continued FY2016 NDAA Section 1089

April 20, 2017

The Honorable Rick Perry Secretary of Energy U.S. Department of Energy Washington, D.C. 20585

Dear Secretary Perry:

Congratulations on your confirmation as Secretary of Energy. No doubt you are aware of President Trump's promise to protect the nation's electric grid and other critical infrastructures from cyber-attack and "all other threats."

As Chairman of the statutory Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack, originally established by Congress in the FY2001 National Defense Authorization Act under Title XIV, and continuing today (most recently re-established in the FY2016 NDAA, Section 1089), the Commission would like to meet with you to discuss the Department of Energy plans, programs, resources, and milestones to protect our nation from the current, existential threat from natural and manmade EMP. The Commission would like to include a discussion of the priority and plans the Department of Energy has to support the Department of Homeland Security in implementation of the Critical Infrastructure Protection Act.

Under the Critical Infrastructure Protection Act (FY 2017 National Defense Authorization Act, Section 1913, "EMP and GMD Planning, Research and Development, and Protection and Preparedness" p. 1762) the Department of Homeland Security is directed: to develop plans to protect the electric grid and other critical infrastructures from EMP; to educate and train federal, state and local emergency planners and first responders on the EMP threat; and to conduct research and development to mitigate EMP.

The EMP Commission would like to be of assistance to the Department of Energy and to DHS. Some salient points from our analysis and recommendations to date:

--Nuclear EMP attack is the ultimate cyber weapon in the military doctrines and plans of Russia, China, North Korea, and Iran for Combined-Arms Cyber Warfare that they see as a decisive new Revolution in Military Affairs.

- --Protecting the grid from the worst threat—nuclear EMP attack—can also mitigate lesser threats, including natural EMP from solar storms, non-nuclear EMP from radiofrequency weapons, cyber-attacks, physical sabotage, and severe weather.
- --State electric grids can be "islanded" by installation of surge arrestors, blocking devices, faraday cages and other devices to protect individual States, even though they may be part of a larger regional electric grid, from a prolonged catastrophic blackout induced by EMP or other causes. For example, Texas State Senator Bob Hall has introduced legislation to EMP harden the Texas electric grid.
- --The Commission is very concerned that the 2014 Obama Administration intelligence community assessment of nuclear EMP is profoundly erroneous, and perhaps the worst work ever produced on EMP, and that has been used to thwart efforts to protect the nation against nuclear EMP attack by dismissing the threat, despite overwhelming evidence to the contrary.
- --The Commission is very concerned over misleading and erroneous studies by the North American Electric Reliability Corporation (NERC) and others that grossly underestimate the natural EMP threat from solar storms, and dangerously, have become the basis for grossly inadequate standards for EMP/GMD protection approved by the Obama Administration's U.S. Federal Energy Regulatory Commission (FERC).
- --The Commission is also concerned over misleading and erroneous studies recently completed by industry's Electric Power Research Institute, in cooperation with Obama Administration holdovers in the Department of Energy, that grossly underestimate the nuclear EMP threat.

The last point above is one of the most important purposes of this letter—to advise you that under the Obama Administration the Department of Energy has been part of the problem, not part of the solution to protecting the nation's electric grid from the existential threat that is EMP. Attached find a letter from the Congressional EMP Caucus to then Secretary of Energy Moniz protesting the past EPRI-DOE dismissal of the nuclear EMP threat to the grid—that continues even now at DOE.

We look forward to cooperating with the Department of Energy to help protect our nation's critical infrastructures from the catastrophic consequences of EMP and other threats.

Sincerely,

Dr. William R. Graham

Chairman

Commission to Assess the Threat to the United States from

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