

April 10, 2019

Senate Committee on Natural Resources & Economic Development
Texas Senate, Sam Houston Building, 325
Austin TX 78711-2068

Subject: SB 76 & establishing a Texas-based Grid Security Council

I want to place my whole-hearted support for the passing of Senate Bill 76. The issue of grid resilience was presented to me in 2011 by the esteemed Dr. Daniel Baker, Director of the Laboratory on Atmospheric and Space Physics (LASP) located in Boulder, Colorado. Up to that point in my life I had wrongly assumed that the nation's electrical power grid was a safe and reliable product of modern civilization.

In a short but impactful conversation with Dr. Baker it became clear that not only was I wrong about the grid being secure and resilient but that the danger of placing blind confidence in the electrical grid was simply a matter of being uniformed.

Dr. Baker continued that the electric grid is vulnerable to a wide range of threats that could cut off power to families and businesses, including physical, cyber, EMP, and space weather threats.

Dr. Baker summarized his briefing by saying just a few simple words, *"...the electrical power grid we have created is like a thinly veiled cocoon providing little to no security to those wanting to do it harm."*

Since that meeting in 2011, I began to read a handful of recently de-classified reports. These scientific studies made me keenly aware of how frail our electrical grid could be against very simple breaches in security. A national control systems software expert, for example, indicated that with just a few lines of malware code, large industrial plants could be brought to their knees.

Passage of Texas Senate Bill 76 would help lessen the risk to Texas and the nation.

As a volunteer to an educational advisory arm of the US Congressional EMP Caucus, the EMP Task Force on National and Homeland Security advocates for our nation's grid to be resilient. This includes the entire electrical infrastructure of the United States consisting of power plants generating electricity, transmission and distribution lines, and transformers and substations, which all work together to bring power to American homes and businesses. Texas, being one of the nation's three power grids is a key player to security. The stability, reliability, and security of the electric grid are important components to prevent extensive power outages that could interfere with the everyday lives of millions of Americans.

Further, in accordance with the Texas Energy Assurance Plan of November of 2012 to defend the Texas electric grid and other critical infrastructures, it should come as no surprise that SB 76 supports the Plan listed below:

- Identify threats, vulnerabilities, interdependencies and consequences in the energy sector as they relate to electricity, natural gas and oil;
- Describe prevention and mitigation strategies applicable to energy emergencies;
- Document emergency response and recovery processes implemented during short-term and long-term emergencies and
- Explore new energy issues and their effects on energy assurance.

Recently, a Presidential Executive Order placed the US Government on notice that it must protect against extremes in the Electromagnetic Spectrum which reinforces the importance of Senator Bob Hall's Senate Bill 76.

Passage of Texas Senate Bill 76 would help lessen the risk to Texas and the nation and greatly supports the spirit and intent of the President's Order.

Sincerely,

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