

**U.S. Senate Committee on Homeland Security and Governmental Affairs**  
**“Perspectives on Protecting the Electric Grid from an Electromagnetic Pulse  
or Geomagnetic Disturbance”**

**February 27, 2019**

**Ranking Member Gary Peters**

**Statement for the Record**

Thank you, Mr. Chairman. I mentioned at our organizing meeting that I am looking forward to working with you to examine and strengthen the security of our nation. The Senate Homeland Security and Governmental Affairs Committee has a long history of conducting rigorous oversight and advancing bipartisan legislation.

I am confident that we will work together to continue that tradition.

I would also like to take a moment to again welcome our new Committee members, Senators Kyrsten Sinema, Jacky Rosen, Mitt Romney, Rick Scott, and Josh Hawley. It’s the nature of Congress for committee membership to shift with every new session, but the important contributions of Senators Claire McCaskill, Heidi Heitkamp, and John McCain to this Committee, the institution of the Senate, and to our country will long endure.

The purpose of this roundtable is to hear perspectives from government, industry, academia and nonprofits on the threats posed by electromagnetic pulse (EMP) and geomagnetic disturbance, or GMD, events.

These threats have the potential to impact the electric grid, causing widespread power outages, disrupting daily life and could even cost our economy billions and possibly trillions of dollars in lost productivity.

During today’s discussion, we will hear from experts about the possible catastrophic consequences of EMP or GMD threats, as well as what government can, and should, do to make our electric grid and other critical infrastructure resilient to these potential disasters.

I am particularly interested in safeguarding our infrastructure from space weather events, which are naturally occurring eruptions from the Sun.

In addition to harming the electric grid, space weather events also have the potential to disrupt cell phone communications, GPS satellites, air traffic control and other critical operations.

Despite the serious consequences posed by space weather induced GMDs, our understanding of these events and our ability to forecast them is lacking. Experts say our current capacity to predict space weather is so underdeveloped that it is comparable to our ability to predict weather on Earth a century ago.

In both of the last two Congresses, I introduced the Space Weather Research and Forecasting Act, a bill to advance our scientific understanding of these events, clearly define roles for the agencies responsible for prediction, and streamline U.S. government coordination in reacting to them. I intend to reintroduce the bill in the coming weeks.

Two of the panelists at this roundtable helped me refine this legislation over the years. Dr. Justin Kasper, University of Michigan Associate Professor of Space Science and Engineering, studies the impact of space weather on Earth and our ability to generate early warnings using satellite monitors in deep space.

His work as a principal investigator on NASA's Parker Solar Probe improves our understanding of the Sun and space weather events.

Caitlin Durkovich and I met during her tenure at the Department of Homeland Security (DHS) where she served as Assistant Secretary for Infrastructure Protection during the last administration. Her background as co-chair of the Space Weather Operations, Research and Mitigation (SWORM) Task Force, uniquely positions her as a valuable resource for the Committee's work on this topic.

Thank you to both Dr. Kasper and Ms. Durkovich for joining us today. I look forward to hearing from all of the panelists about how to protect our infrastructure and keep this nation safe.