

Michael Mabee
(516) 808-0883
civildefensebook@gmail.com
<https://michaelmabee.info/>

USGS Geomagnetism Program

House Committee on Appropriations
Subcommittee on Interior, Environment, and Related Agencies
Public Witness Written Testimony (non-tribal programs)
March 6, 2020

Written Testimony of Michael Mabee on USGS Geomagnetism Program

Chair McCollum and Ranking Member Joyce,

I am a private citizen and an electric grid security researcher whose work has been quoted in the Wall Street Journal, the Washington Post and other security and electric industry trade publications.¹ I write today in support of the testimony of David Jonas Bardin before your subcommittee on February 6, 2020² as well as the supplemental written testimony Mr. Bardin provided on February 16, 2020.³ I fully endorse Mr. Bardin's testimony in this matter.

In addition, I would like to point out that the information and data developed by the USGS Geomagnetism Program is critical to the security of our critical infrastructures for another reason: It is the most reliable and unbiased scientific data available. Unfortunately, there is questionable and outright erroneous data being promulgated and advocated by the very industry that financially benefits from underestimating electromagnetic pulse and geomagnetic disturbance threats: The electric utility industry.

For example, the Electric Power Research Institute (EPRI), which is funded by the electric utility industry, published a report on April 29, 2019⁴ which seriously underestimated the threat and potential impact of an EMP on the electric grid. This EPRI report was specifically funded by the electric utility industry.⁵

¹ See: <https://michaelmabee.info/michael-mabee-in-the-press/> (accessed March 5, 2020).

² Thematic Testimony of David Jonas Bardin on USGS Geomagnetism Program. Before the House Committee on Appropriations. [EMP, GMD] February 6, 2020. <http://bit.ly/2HPeHCk> (accessed March 5, 2020).

³ Testimony of David Jonas Bardin before the House Committee on Appropriations. USGS Geomagnetism Program. February 16, 2020. <http://bit.ly/37Ok2Ex> (accessed March 5, 2020).

⁴ Electric Power Research Institute (EPRI). High-Altitude Electromagnetic Pulse and the Bulk Power System: Potential Impacts and Mitigation Strategies. April 29, 2019. <https://www.epri.com/#/pages/product/000000003002014979/?lang=en-US> (accessed March 5, 2020).

⁵ See Testimony of Randy Horton before the Federal Energy Regulatory Commission (FERC) June 22, 2017 Technical Conference about the EPRI EMP study: "To address these issues, EPRI initiated a three-year research project in April 2016 with financial support from fifty-six electric utilities, to improve understanding of the potential impacts of HEMP on the bulk-power system and to develop cost-effective mitigation options." (Page 2.) <https://www.ferc.gov/CalendarFiles/20170717080646-Horton,%20EPRI.pdf> (accessed March 5, 2020).

EPRI's "studies" of the EMP threat have been discredited by national experts such as the Electromagnetic Defense Task Force (EDTF)⁶ and the Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack ("EMP Commission").⁷

In fact, Dr. William Graham, Chairman of the EMP Commission noted:

"In 2016, the Electric Power Research Institute (EPRI), which is funded by the electric power industry, published an erroneous report that significantly underestimates the nuclear E3 EMP threat to electric grids. EPRI and others have used the report to lobby against Federal and State initiatives to protect the electric grid against nuclear EMP attack."⁸

Indeed, the electric industry and some government agencies appear poised to rely on the EPRI report as the basis for national security decision making, completely disregarding other sources which may better analyze the threats we face.

The United States needs the unbiased, scientific data from the USGS Geomagnetism Program to help ensure that Congress, regulators and decision makers have reliable information to assess the natural and man-made threats to the critical infrastructures. Information that comes from the very industry that benefits financially by understating the threats cannot stand alone in our decision making on matters of national security.

The USGS Geomagnetism Program provides this critical and reliable information. It is imperative to our national security that Congress continue to provide ample support to the USGS Geomagnetism Program to continue their important work.

I appreciate your subcommittee's past attention to appropriating funds to this important program as I believe it is critical to the national security of the United States.



Michael Mabee

⁶ Electromagnetic Defense Task Force (EDTF). Electromagnetic Pulse Threats to America's Electric Grid: Counterpoints to Electric Power Research Institute Positions. August 27, 2019. <https://othjournal.com/2019/08/27/electromagnetic-pulse-threats-to-americas-electric-grid-counterpoints-to-electric-power-research-institute-positions/> (accessed March 5, 2020).

⁷ Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack. Dr. William R. Graham. "Chairman's Report." July 2017. <http://bit.ly/2XklKK8> (accessed March 5, 2020).

⁸ Ibid. Page 15.