

HB 15-1363– Infrastructure resistance to EMP and Solar Flare

Sponsors: Rep. Ginal | Sen. Hill

House Committee: Transportation and Energy

Purpose:

- To identify the vulnerability of Colorado's electrical grid system against Electromagnetic pulse (EMP) and geomagnetic storms due to increased solar flare activity, prevent and protect our power grid.
- State legislatures and the PUC have the legal authority to protect states from EMPs and make sure the states electrical grids are safe. Other states are working on bills like this: ME, NY, FL, OK, NH, MA, UT, NM, VA, MD, AZ, NC, TX

Background:

- Electromagnetic Pulse is one or more pulses of electromagnetic energy capable of disabling, disrupting or destroying the infrastructure of the electrical grid system in Colorado.
 - In 2004 and 2008 the Congressional Electromagnetic Pulse Commission found that EMP caused by detonation of a nuclear weapon at high altitude could take down the U.S. electric grid, with catastrophic consequences. To date nothing has been done by the federal government to address the vulnerabilities to our electrical infrastructures. The Shield Act and the Critical Infrastructure Protection Act 2013 have not received any action from the U.S. Congress.
- Geomagnetic storm is a temporary disturbance of the Earth's field resulting from solar activity:
 - 1859, geomagnetic storm: Carrington Effect
 - 1921, geomagnetic storm
 - Oct 1965, Northeast U.S. Blackout
 - March 1989, geomagnetic solar storm Quebec.
 - Aug 2003 Northeast and Midwest Blackout

What this bill does:

- This legislation recommends that the commission study and report:
 - Identify the vulnerable components of the state's electrical grid and potential mitigation measures on these components;
 - Estimate a range of costs and timeframe for implementing mitigation measures;
 - Examine the positive and negative effects of requiring utilities to incorporate mitigation measures into the construction or retrofitting of facilities, and the potential effect these requirements may have on the electric grid outside of the state; and
 - Propose funding sources, including sources of funding through federal agencies.
- The PUC is to report its findings to the Colorado General Assembly by January 20, 2016, and may employ data experts to assist in the preparation of the report.

Funding:

- Cash funds are required from gifts, grants, and donations by up to \$66,000 in FY 2015-16 in an account within the Fixed Utility Fund (FUF). Any contributions collected in a lesser amount by September 1, 2015, will be remitted, and the study abandoned.
- Gifts, grants and donations is not subject to TABOR, so there is no TABOR impact.

Please Support HB15-1363