

## FOR IMMEDIATE RELEASE

### Weekend Geomagnetic Solar Storm a Reminder that Electric Grid Protection Is Needed

Nashua, NH—January 2, 2016—The [Space Weather Prediction Center](#) at NOAA, the National Oceanic and Atmospheric Administration, reported a geomagnetic solar storm over the weekend starting on New Year’s Day. The storm measured G2, or “moderate,” on a scale of G1 to G5. According to the [NOAA Alert](#) issued on December 31 at 9:08pm Eastern Time, “power grid fluctuations can occur” and “high-latitude power systems may experience voltage alarms.”

Electrical currents induced during solar storms can damage utility equipment, especially large transformers used for long-distance transmission. In March 1989, a solar storm blacked out the province of Quebec, Canada. During the same storm, wide-area blackouts in the United States were narrowly avoided. Utilities in northern latitudes reported over 100 system impacts, including tripping off of major equipment. [According to the NRC](#), a large transformer at the Salem nuclear power plant in New Jersey melted, causing millions of dollars in damages.

A [2010 series of reports](#) commissioned by the [Department of Homeland Security](#) and other federal agencies concluded that a severe geomagnetic solar storm could cause 130 million Americans to lose grid power for over a year. Areas most affected would be the eastern United States from Maine to Washington, DC and the Pacific Northwest.

In October 2015, President Obama’s National Science and Technology Council released its [National Space Weather Strategy](#) and Action Plan, a series of government initiatives that would encourage government agencies and private industry to protect the electric grid and other critical infrastructure from geomagnetic solar storms. A key goal of the [Action Plan](#) is to “work with industry to achieve long-term reduction of vulnerability to space weather events by implementing measures at locations most susceptible to space weather.” While [85 percent](#) of electricity is supplied by private companies, action could be immediately taken at major federally-owned utilities, including the [Bonneville Power Administration](#), [Tennessee Valley Authority](#), [Western Area Power Administration](#), and [Southwest Power Administration](#). The [Bureau of Reclamation](#) and [U.S. Army Corps of Engineers](#) operate large hydroelectric plants in the western United States that are especially vulnerable to damage from solar storms.

The [Foundation for Resilient Societies](#) is a Nashua, New Hampshire-based non-profit group that participated in the drafting of the National Space Weather Strategy through the public comment process. “Electric utilities have failed to safeguard their most critical and hard-to-replace equipment from solar storms, despite the commercial availability of inexpensive protective devices,” said Thomas Popik, chairman of Resilient Societies. “Quick installation of surge blockers at government-owned generation plants and grid substations could protect ratepayers from heavy financial losses if a severe solar storm hit the earth.”

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