

# Electric Power and Power Electronics Institute

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**WEEKLY SEMINAR SERIES – SPRING 2018**  
Monday, March 19th, 2018, 3:00 p.m. – 4:00 p.m., ETB 1035

## **GEOHAZARDS AND GICs: HOW CAN SPACE WEATHER AND THE EARTH'S GEOLOGY AFFECT THE POWER GRID?**



Dr. Jenn Gannon  
GMD Division at Computational Physics, Inc.

### **Abstract**

Like volcanos, earthquakes, and tsunamis, space weather can be a significant geohazard. During a geomagnetic storm, violent magnetic fluctuations in the Earth's space environment interact strongly with deep geologic structures. This interaction produces electric fields at the ground level, and geomagnetically induced currents (GICs) can occur in long conductors such as power transmission lines. This talk will give a background on the space weather and geological conditions that can create the GIC hazard and will discuss the current understanding and open questions in GIC geoscience.

### **Biography**

Dr. Jenn Gannon spent a decade as a federal research scientist studying space weather and geoscience, first at the NOAA Space Weather Prediction Center, and then at the USGS Geomagnetism Program. She then moved to the private sector, where she leads the GMD Division at Computational Physics, Inc. in Boulder, CO. Her research focus is the effect of space weather on built infrastructure, including geomagnetically induced currents.