

March 6, 2012



**Office of Electricity
Delivery & Energy
Reliability**



Electricity Advisory Committee – Energy Infrastructure Issues

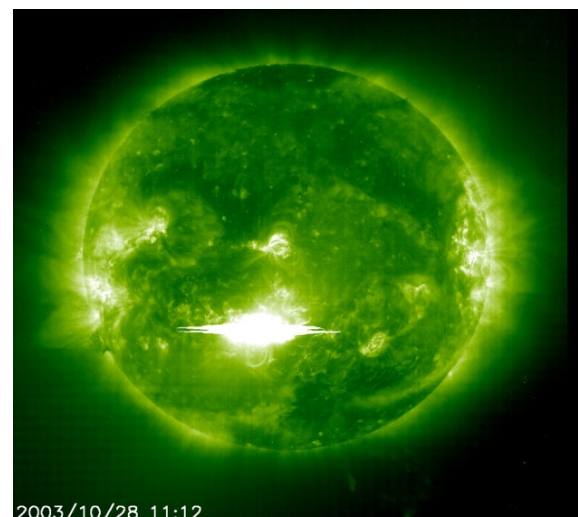
Deputy Assistant Secretary William Bryan



Key Issue: Understanding the Consequences of Geomagnetic Disturbances

Quasi-DC currents, emanating from the sun, can enter and exit the power system at transformer grounds, disrupting the normal operation of the power system and, in some cases, causing damage equipment. To understand the potential impacts,

- **What should the federal government do to mitigate a geomagnetic disturbance?**
- **With whom (stakeholders) should the federal government engage in addressing GMD solutions?**





Key Issue: Criticality Methodology

- **DOE/OE is currently developing a criticality methodology for assessing energy sector risk.**
 - Purpose - to use an objective-based approach to identify and quantify energy infrastructure of concern within a limited geographic scope
 - Dynamic process, responsive to different objectives and scenarios
 - Geographically scalable (local, metropolitan, or regional level)
 - Emphasis on consequence
 - Intent is not to generate a master national list
- **What “Objectives/Key Areas” should be analyzed?**
- **From whom should DOE receive input and guidance?**
- **How should results be used?**



Key Issue: Electricity Reserve

- **Development of an Electricity Reserve**
 - Power when and where you need it in the event of an outage
 - Is it feasible/cost effective to create an electricity reserve?
 - How should they be deployed and integrated?
 - Types of deployable units (size)
 - Location
 - Usage