

Agenda

GMD Planning Studies Workshop

December 9, 2015 | 9:00 a.m. to 3:00 p.m. Eastern

NERC Headquarters
Atlanta, GA

Listen-only webinar: ReadyTalk.com
Dial-in: 1.866.740.1260 | Access code 6251541 | Security Code: 120915

Welcome and Administrative Items (9:00 a.m.)

NERC Antitrust Compliance Guidelines and Public Announcement

Agenda Items

Topic 1: GMD Background (9:00 - 10:30)

1. What is a geomagnetic disturbance (GMD)
2. Induced geoelectric fields and interaction with the power system
3. Effect of ground conductivity
4. Effect of geomagnetic latitude

Break (10:30 - 10:45)

Topic 2: Geomagnetically Induced Currents (10:45 - 12:00)

5. Overview of the induction process
6. Modeling GIC in the power system
 - a. Overview
 - b. Network parameters
 - c. Geoelectric field orientation

Lunch (12:00 - 1:00)

Topic 3: GIC Effects on the Power System (1:00 - 1:45)

7. Transformer half-cycle saturation
8. Transformer reactive power absorption and power system voltage impacts

- 9. Integration of GIC distribution and load flow
- 10. Transformer harmonics and their impacts
- 11. Transformer thermal assessment

Break (1:45 - 2:00)

Topic 4: Proposed Reliability Standard TPL-007-1 (2:00 - 2:45)

- 12. Overview
- 13. Description of the proposed benchmark GMD event
- 14. Studies required in a GMD Vulnerability Assessment
- 15. Example of a GIC and power flow analysis using a commercially available tool
- 16. Example of a transformer thermal assessment

Conclusion (2:45 - 3:00)

- 17. Wrap-up