NERC

Responding to Geomagnetic Disturbance Workshop Agenda

April 19, 2011 | 1:00PM – 6:00 PM April 20, 2011 | 8:00 AM – 12:00 PM

JW Marriott Atlanta Buckhead 3300 Lenox Road Atlanta, GA 30326 (404) 262-3344

Agenda Geomagnetic Disturbance Workshop Tuesday, April 19, 2011

Tuesuay, April 13, 2011			
~Time	Item	Leader	
1:00 pm	1. Administrative Matters		
	a. Welcome and Introductions	Mark Lauby	
	b. Antitrust Guidelines	Eric Rollison	
	c. Arrangements and Meeting Logistics	Eric Rollison	
	d. Agenda Review	Mark Lauby	
1:15 pm	2. Keynote 1: NERC's Response to Geomagnetic Disturbances	Gerry Cauley NERC CEO	
1:30 pm	3. Keynote 2: The Development of Solar Storms and tracking their impacts on Earth	William Murtagh, NOAA	
2:10 pm	4. Gathering Input from Attendees on Important GMD Coverage Topics	John Moura	
2:15 pm	 5. Panel 1: Current GMD Alert Capabilities and Equipment Protection to Respond to a GMD a. How are utilities monitoring GIC in their systems? b. How do utilities respond to GMD alerts? c. What types of equipment protections have been 	Donald Watkins, BPA Sébastien Guillon, HQT <i>Moderated by:</i>	
	d. Question and Answer period	Eric Rollison, NERC	

Tuesday, April 19, 2011				
~Time	Item	Leader		
3:30 pm	Break			
3:45 pm	 6. Panel 2: Current Operational Planning Practices to Respond to GMD a. A GMD Alert has been received. What are the steps that these entities take to harden their systems from a: Operations Planning Perspective Real Time Operations Perspective b. Question and Answer Period 	Frank Koza, PJM Luis Marti, HydroOne Sean Eagleton, ConEd <i>Moderated by:</i> <i>John Moura, NERC</i>		
5:00 pm	7. Review of Attendee Submitted Questions	John Moura, NERC		
5:30 pm	8. NERC Critical Infrastructure Strategic Coordinated Action Plan	Mark Lauby, NERC		
6:00 pm	Adjourn Day 1			

Wednesday, April 20, 2011			
~Time	Item	Leader	
8:00 am	9. NERC Alert Draft Review	Eric Rollison, NERC	
	a. Types of NERC Alerts		
	b. NERC Alert Development Process		
	c. Draft NERC Alert Review		
9:00 am	10. Panel 3: Mitigating the impact of GMD Events on the Bulk Power System of North America (Long- Term System Considerations)	Luis Marti, HydroOne John Kappenman, Storm Analysis	
	a. Modeling and Simulation Considerations	Consultants	
	b. Inventory Assessment Considerations	Richard Lordan, EPRI	
	c. Equipment Protection		
	d. Question and Answer Period	<i>Moderated by:</i> Mark Lauby, NERC	
10:15 am	Break		
10:30 am	11. Panel 4: Additional Research Needed to Manage Geomagnetic Disturbances	Luis Marti, HydroOne Sébastien Guillon, HQT	
	a. Areas of Concern for Research	John Kappenman,	
	i. Susceptibility of major equipment and system operation under high HV harmonic levels	Storm Analysis Consultants	
	 ii. Protection and control – are the new IEDs actually immune to GIC 	Moderated by: Eric Rollison, NERC	
	iii. Managing the interconnected system		
	 iv. Impact of renewable generation during a GMD event 		
11:00 am	12. GMD Task Force Status Update and Next Steps	Don Watkins, BPA	
11:15 am	13. Open Forum of Attendee Issues	All	
11:30 am	14. Review of Workshop output	Eric Rollison, NERC	
11:45 am	15. Next Steps and Expected Publication Dates of Materials	Mark Lauby, NERC	





Antitrust Compliance Guidelines

I. General

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

II. Prohibited Activities

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.
- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.
- Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

III. Activities That Are Permitted

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely



impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation, Bylaws, and Rules of Procedure are followed in conducting NERC business.

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of the mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.
- Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meeting.