

Meeting Notes Disturbance Monitoring Standard Drafting Team

February 18, 2009 | 1-3 p.m. EDT
Dial-In Number: 1-732-694-2061 | Conference Code: 1228021809
WebEx Site: <https://nerc.webex.com/>
WebEx Meeting Number: 710 497 943 | Password: standards

1. Administrative

1.1. Roll Call

Stephanie Monzon will conduct roll call. The members of the drafting team in attendance were:

- **Navin B. Bhatt** — American Electric Power (Chair)
- Felix Amarth — Georgia Transmission Corporation
- Terry L. Conrad – Concurrent Technologies Corp.
- James R. Detweiler — FirstEnergy Corp.
- Barry G. Goodpaster — Exelon Business Services Company
- Robert (Bob) Millard — ReliabilityFirst Corporation
- Steven Myers — Electric Reliability Council of Texas, Inc.
- Jeffrey M. Pond — National Grid
- Jack Soehren — ITC Holdings
- Stephanie Monzon — North American Electric Reliability Corporation
- Alan D. Baker — Florida Power & Light Company
- Bharat Bhargava — Southern California Edison Co.
- Daniel J. Hansen — Reliant Energy, Inc.
- Charles Jensen - JEA
- Tracy M. Lynd — Consumers Energy Co.
- Charlie Childs — Ametek Power Instruments
- Richard Dernbach — Los Angeles Department of Water & Power
- Susan McGill – PJM Interconnection
- Larry E. Smith — Alabama Power Company
- Willy Haffecke — Springfield Missouri City Utilities

Observers:

- Richard Ferner – WAPA

- Anthony Jablonski – ReliabilityFirst Corporation

2. NERC Antitrust Compliance Guidelines

- 2.1.1. Navin Bhatt reviewed the NERC Antitrust Compliance Guidelines with the group.

3. Discussion Technical Paper

3.1. From 1/22/09 Notes:

- 3.1.1. The team will discuss the approach for the technical paper and refine the outline.

Top 100 Buses

- Top 100 buses — add this to the technical paper. Chuck and Felix suggested that we need similar analysis for the regions but will propose language based on the FRCC top 100 buses. It may be helpful for the other members of the drafting team look into the top 100 for their regions. Create a spreadsheet to include/append to the technical paper that includes top 100 buses by region.
 - Chuck will propose a spreadsheet for FRCC. This will help to collect this information for the other regions.
 - Larry Smith, and Felix to determine if conclusion can be made by the data collected.
 - **By - February 16, 2009**
- 2/18 – the team reviewed Felix’s e-mail/data and agreed that collecting data from other regions would be helpful in supporting the team’s thresholds – top 100 buses and / or 10,000 MVA short circuit level

Major Event Analysis

- Include event analysis experience and any conclusions that may be drawn from historical events (the August 14 blackout, etc.). Navin Bhatt and Tracy will work on proposed language and may reach out to Bob Cummings.
 - Chuck indicated that the NERC Blackout report on the website (major outages) does not include facilities under 200kV that contributed to the outages. Chuck will send the report to Navin.
 - Navin and Tracy will work on collecting more information for this section. **By - February 16, 2009**
- 2/18 – Navin will call Bob C. to discuss his concerns/comments on the draft standard. Tracy – discussed the need to better understand the NERC definition of a major disturbance (what constitutes a major disturbance). Tracy will look through the “Major Disturbances of the Year” reports published by NERC (yearly) for data that would support the technical paper.

- Navin – will send out a 2002 Disturbance Report to the team (as a sample of the reports that will be reviewed).

Monitoring Special Protection Systems and Remedial Action Schemes:

- Include the impact of under voltage load shedding and special protection system on DME thresholds. Richard will do some research on this to determine if it is in fact impactful. Larry Smith will also do some research.
- 2/18 - The team agreed that UVLS is applicable at the distribution level and not appropriate for the technical paper as a justification for the DME standard. The team did decide to address monitoring special protection system and remedial action schemes.

Critical Clearing Times

- Include critical clearing time (on bus level very short) — recognized locations where we need to reduce back up clearing. Chuck will do some research this and try to collect information.
 - Chuck will work on the clearing times for FRCC. This will help to collect this information for the other regions.
- 2/18 – Chuck and Felix will send out a spreadsheet with critical clearing column (breaker failure backup clearing time) but Chuck notes that the data doesn't indicate a strong correlation with critical buses.
- The team will review the data for FRCC provided by Chuck and the data provided by Felix to determine if there is a correlation. The team will then determine if it should be included in the technical paper.
- Jack will provide MVA spread (number of elements) for lower Michigan.

Stability

- Felix to send an email that elaborates on adding this topic to the technical paper.
- 2/18 – Felix, Chuck and Larry will work on the language to be included in the technical paper.

Pmu installation – Navin

- Some team members do not think that it may be entirely appropriate to include pmu data into the technical paper since pmus are not included in the standard. This may cause confusion if included in the technical paper but not in the standard.

- Navin will collect some data for the team to look over (# of installations and at kV level) – we will decide whether or not to include in the technical paper after reviewing some of the data that will be collected.

4. Action Items

| Action Items | Status: | Assigned To: |
|---|---|--|
| The group must resolve how to develop requirements for maintenance and testing of disturbance monitoring equipment (DME). Possible options include, adding maintenance and testing requirements to the draft PRC-002 standard, asking the Standards Committee to transfer the maintenance and testing requirements to the standard drafting team (SDT) for Project 2007-17 Protection System Maintenance and Testing, or some other solution. Ultimately, the maintenance and testing requirements for DME should “look and feel” like the maintenance and testing requirements developed by the SDT for Project 2007-17 Protection System Maintenance and Testing. | <p>In Progress</p> <p>This issue will be addressed in the comment form to solicit industry feedback on how to proceed.</p> <p>Discussed at the 12/08/08 call:</p> <p>The team reviewed the status of the issue clarifying that the team was going to post the standard and solicit industry feedback on omitting these requirements. The team would use this feedback to propose an alternate to the SC or NERC staff – possibly create a supplemental to SAR to the Maintenance project.</p> | All |
| Navin to lead a small group in drafting the measures for the requirements. Jack Soehren, Felix Amarh, and Barry Goodpaster volunteered to assist Navin. | Closed | Navin Bhatt, Jack Soehren, Felix Amarh, and Barry Goodpaster |
| Steve Myers, Larry Brusseau, and Bob Millard to draft the VRFs and VSLs . | Will Remain Open | Steve Myers, Larry Brusseau, and Bob Millard |
| Chuck, Jim and Alan will be proposing language for R5.1 and R5.2. | Completed | Chuck, Alan and Jim. |
| Willy will review the comment form to ensure that references to the standard are still correct. | Completed | Willy H. |
| Jim will look over the mapping form to ensure that references to the standard are still correct. | Completed | Jim D. |

5. Next Steps

Stephanie reviewed the plan for the webinar. The webinar will take place on March 12, 2009 from 11AM – 12:30PM EST. Joanne Rura from NERC announced the webinar to the industry this week. The speakers will be Jeff, Chuck and Navin. Stephanie will kick-off and provide a brief introduction.

6. Adjourn

Attachment 1 Antitrust 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 meetings.