

Meeting Agenda

Disturbance Monitoring SDT — Project 2007-11

Tuesday, May 5, 2009 | 8 a.m.–5 p.m. EDT

Wednesday, May 6, 2009 | 8 a.m.–5 p.m. EDT

Florida Power & Light

700 Universe Blvd

Juno Beach, FL

Dial-in Number: 281-540-4943

Conference Code: 6762229123

1. Administrative

Roll Call

Stephanie Monzon will conduct roll call. Those present are listed below:

- **Navin B. Bhatt** — American Electric Power (Chair)
- Terry L. Conrad — Concurrent Technologies Corp.
- James R. Detweiler — FirstEnergy Corp.
- Barry G. Goodpaster — Exelon Business Services Company
- 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.
- Susan McGill — PJM
- Larry E. Smith — Alabama Power Company
- Felix Amarth — Georgia Transmission Corporation
- Robert (Bob) Millard — ReliabilityFirst Corporation
- Charlie Childs — Ametek Power Instruments
- Richard Dernbach — Los Angeles Department of Water & Power
- Willy Haffecke — Springfield Missouri City Utilities

Observers:

- Anthony Jablonski — RFC
- Richard Ferner — WAPA

2. NERC Antitrust Compliance Guidelines

Stephanie Monzon reviewed the NERC Antitrust Compliance Guidelines with the group.

3. Regional Data Analysis — Chuck Jensen

4. Discussion of Major Issues Identified in Comments:

Question # 1 — No substantial issues although there were comments that addressed issues brought up in other questions. Small group will recommend responses to be reviewed by the team over e-mail.

- DDR Location
- Criteria for disturbance monitoring (PNNL)

Question #2

- Implementation schedule
- Moving requirements to additional compliance section of the standard
- Maintenance and testing requirements
- Generator size (MRO)
- Imposing new requirements on GO's — E ON US
- Relationship between TO and GO — ownership issue (Jim will take the lead on drafting a response to these comments and/or make suggested revisions to the draft standard — see action items list)
- Bus potential (ring buses — line and bus potentials) SERC PCS (to be handled by this sub team. Jim suggested that we look at the RFC DME standard to leverage language that addresses similar requirements)

Question #3

- Maintenance and testing requirements
- Allow for missing data — FPL
- Time gap if M&T requirements are included in another standard
- DME is not as important as Protection and Control equipment

Team Discussion — The following topics were identified as requiring team discussion:

- 1. Purpose of Standard**
- 2. DME Location**

3. Thresholds (200 kV, 7 lines, etc.)

(Notes from Tampa)

The team discussed making the threshold 10,000 MVA at the bus. This does not apply to all categories — and no kV threshold. This captures the major buses.

The team is trying to accommodate industry recommendation of other voltage levels other than 200 kV (below) and recommending that 10,000 MVA as criteria because it is directly related to the impact that these busses will have on the region from a stability perspective.

4. Substation Definition

Bus is defined as the representation in short circuit program of the node that indicated you have interconnected lines and join have a short circuit capacity that node occurs at a voltage level. A substation can have several buses and several bus elements. The standard should not refer to substations but rather buses. The point of interconnect should be defined as the high side of the GSU.

5. Disturbance and Event Definition

The FAQ should include a reference to EOP-004's reference to Disturbance. The team decided not to define Disturbance since it is already defined in the NERC Glossary (albeit very vague). The team felt that if they clarified the location and threshold that it was not necessary to define Disturbance.

6. DDR

20 lowest impedance buses for each TO and GO was proposed. We need several proposals for the DDR Threshold — Chuck, Alan, Felix, Jack, Richard and Jim. We need regions to provide short circuit data. We also need a data request to TOs and GOs for short circuit data (voltage, amps and MVA). This sub team will work on a spreadsheet including the information to be provided in the request. Stephanie will work with Gerry to issue the data request to the Regions.

7. SOE

Larry will come up with proposal for SOE threshold for the Day 3 discussion. Larry began the discussion by asking if the team had concerns with the 10,000 MVA criteria for SOE. In addition, Larry asked if circuit breaker status is sufficient. Some comments indicated that it is not adequate to do SOE on circuit breaker status only. The team; however, feels that circuit breaker status is sufficient to analyze the event.

There was a discussion on location of where we want SOE? Do we want it at the same location as the (10,000 MVA) for FR?

8. GO's

Generator Owners connected to BES Substation buses having available three phase short circuit MVA of 10,000 MVA or above (calculated under normal operating conditions with all facilities and units in service) and either of the following

- A generating unit of 20 MVA or higher nameplate rating or
- Generating plants with an aggregate plant total nameplate capacity of 75 MVA or higher

9. Fault Recording

10,000 MVA (irrespective of the number of elements connected) and above for TOs:

Exceptions considered on Day 3:

- Radial lines that do not have generation are excluded (if the team decides to use a number of lines) keep as reference but don't include exception in standard
- And don't have to monitor both ends of the line
- Exempt entire bus if all lines connected to the bus are monitored at the next bus at the same voltage level.

Transmission Owners with BES Substation buses having available three phase short circuit MVA of 10,000 MVA or above (calculated under normal operating conditions with all facilities and units in service)

10. GOs:

Generator Owners connected to BES Substation buses having available three phase short circuit MVA of 10,000 MVA or above (calculated under normal operating conditions with all facilities and units in service) and either of the following

- A generating unit of 150 MVA or higher nameplate rating or
- Generating plants with an aggregate plant total nameplate capacity of 300 MVA or higher

Threshold Short Circuit Level — Chuck will propose a defined term to be applied to this standard

11. Maintenance and Testing Discussion:

The team reviewed the suggestion made by WECC to move R6 from PRC-018-1 into the proposed standard. The team decided that this was a feasible approach to addressing the maintenance and testing requirements. Richard

suggested that we should reword Requirement R6 . Richard volunteered to reword for review by the team.

12. Allow for Missing Data

13. Unclear what is 50% compliance in the implementation plan

14. Issues with Triggering

15. Integration to Legacy Equipment

5. First Pass Response to Comments

The first draft of the proposed standard was posted for industry comment. The comment period closed March 18, 2009.

6. 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.	In Progress This issue will be addressed in the comment form to solicit industry feedback on how to proceed. Discussed at the 12/08/08 call: 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.	All
Navin to lead a small group in drafting the measures for the requirements. Jack Soehren, Felix Amarth, and Barry Goodpaster volunteered to assist Navin.	Closed	Navin Bhatt, Jack Soehren, Felix Amarth, and Barry Goodpaster
Steve Myers 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.
Jim D. will take the lead on drafting a response to	Created 4/1	Jim D.

Action Items	Status:	Assigned To:
these comments and/or make suggested revisions to the draft standard		
Threshold Short Circuit Level – Chuck will propose a defined term to be applied to this standard	Created 4/1	Chuck J.
The team reviewed the suggestion made by WECC to move R6 from PRC-018-1 into the proposed standard. The team decided that this was a feasible approach to addressing the maintenance and testing requirements. Richard suggested that we should reword Requirement R6. Richard volunteered to reword for review by the team.	Created 4/1	Richard F.
Need several proposals for the DDR Threshold – Chuck, Alan, Felix, Jack, Richard & Jim. Need regions to provide short circuit data. We need a data request to TOs and GOs for short circuit data (voltage, amps and MVA). This sub team will work on a spreadsheet including the information to be provided in the request. Stephanie will work with Gerry to issue the data request to the Regions if the team determines this is best approach (issuing a data request).	Created 4/1	Chuck, Alan, Felix, Jack, Richard & Jim.
The sub teams will prepare draft responses to the questions that were assigned to the teams. They will email their draft response to the team by April 20, 2009 in preparation for the team conference call on April 27, 2009.	Created 4/1	Team

7. Next Steps

8. 2009 Schedule

Date and Time	Location	Comments
February 18, 2009	Conference Call	To discuss the technical paper
March 2, 2009	Conference Call	Webinar presenters and NERC staff required on this call to prep for the webinar
March 12, 2009 — 11 a.m.–12:30 p.m. EST	Industry Webinar	Need to confirm date with team and speakers
March 30, 2009 — 1–5 p.m. EST March 31, 2009 — 8 a.m.–5 p.m. EST April 1, 2009 — 8 a.m.–5 p.m. EST	FRCC Offices Tampa, FL	Confirmed by Chuck.
April 27, 2009	Conference Call	To identify the comments that require discussion with

		the entire team during our May 5–6 meeting.
May 5, 2009 — 8 a.m.–5 p.m. May 6, 2009 — 8 a.m.–5 p.m.	FPL Juno Beach	Confirmed
June 3, 2009 — 8 a.m.–3 p.m.	Conference Call	The team decided to conduct a conference call on June 3 — 1–4 p.m. EST

9. Other

10. Adjourn