

Draft Meeting Notes Generator Verification — Project 2006-09

January 6–8, 2009

Administrative

A regularly scheduled meeting of the Generator Verification SDT was held at a Florida Power and Light Company generating station in Ft. Lauderdale, Florida from 1–5 p.m. on January 6, from 7:30 a.m.–5:30 p.m. on January 7 and from 8 a.m.–noon on January 8, 2009.

Introductions

The host, Ken Stenroos welcomed everyone to the Florida Power and Light facility and provided an orientation and a review of applicable safety and security rules.

The chair, Bob Millard welcomed everyone to the meeting and reviewed the agenda. The following attended the meeting either in person or by phone. Note that some of those participating via phone only participated in a portion of the meeting.

Members:

- Robert Millard, ReliabilityFirst
- Thomas Bradish, Reliant Energy
- Donald Davies, WECC
- Les Hajagos, Kestrel Power Engineering
- Gary Humphries, Duke Energy
- Venkat Sharma Kolluri, Entergy
- David Kral, Xcel Energy
- Daniel Leonard, GE Energy
- Craig Quist, PacifiCorp
- Vladimir Stanisic, Ontario Power Generation
- Ken Stenroos, Florida Power & Light
- Lee Taylor, Southern Company Services
- Rickey Terrill, TXU Power
- Chifong Thomas, Pacific Gas & Electric
- Edward Wingard, AEP
- Harry Tom, NERC

Observers:

- Don Ans, Manitoba Hydro
- Brendan Kirby, AEW
- Scott Berry, Indiana Municipal Power Agency
- Bill Shultz, Southern Company
- Howard Illian, Energy Mark, Inc.
- Maureen Long, NERC

Antitrust Guidelines

Participants were reminded to respect the Antitrust Guidelines. There were no questions on the Antitrust Guidelines.

Meeting Goals

The chair led a discussion of the work remaining and the team agreed to work on MOD-026 and PRC-024 with a goal of bringing these to “completion” or “near completion” and ready for posting soon after the meeting.

Review of December 11, 2008 Meeting with FERC Staff (Exhibit A)

Bob Millard reviewed the presentation he made during the meeting with FERC staff, and shared the reaction to the information provided. In addition to Bob, who attended the meeting in person, two other SDT members participated in the meeting by conference call — Rick Terrell and Lee Taylor. Concerns identified by FERC staff are highlighted below:

MOD-024

- Will this get rid of “paper capacity”?
- Will this help operations planning?
- Reminder that the Order directs “verification” of some type with details left up to the standard.

MOD-025

(No concerns identified)

MOD-026

- Is there a process for the models to get tweaked if a voltage transient and the response were not as expected?
- Performances of units by themselves and as part of a big group of units are sometimes different.
- The applicability needs to capture units that run at night or during less typical times when such units are especially dominant - hesitation about providing an “exemption” for low capacity factor units.
- There is the opportunity to observe governors during black start testing.

PRC-024

- Did team use information from events?
- Should this be a performance standard (dealing with entire unit) or a relay standard (dealing with a portion of the unit)?

MOD-026-1 (Exhibit B)

The SDT reviewed the comments from NERC staff and discussed the comments and suggestions and began to make conforming changes to the standard. Lee Taylor agreed to use the comments from the SDT to make a clean copy of the conforming changes to the standard. The draft, as compiled during the meeting, is included as Exhibit A. (See schedule below.)

PRC-24-1 (Exhibit C)

The SDT reviewed comments from NERC staff and completed development of a near final draft of the standard during the meeting that includes all requirements, time horizons, violation risk factors and measures. The draft, as compiled during the meeting, is included as Exhibit B. Harry Tom and his subteam will work to produce a final edit for review of the entire SDT in accordance with the project schedule at the end of these meeting notes.

VRFs: Brendan Kirby suggested that since the impact a violation has on the Bulk Electric System is dependent on the size of the unit and proposed setting more than one VRF for some of the requirements. The team adopted this approach even though it doesn't fully comply with the "guidelines" for setting VRFs. The intent of the VRFs is to reflect the risk to the BES of a violation, and providing variable VRFs supports this intent.

VSLs: Brendan Kirby also proposed using charts to identify specific deviations that result in specific VSLs. The SDT agreed with the approach and Harry Tom and his subteam will work to develop VSLs for each requirement, using this approach. **(See Exhibit D)**

Comment form: The SDT made some conforming edits to the comment form and the PRC-024 subteam will review the form again to ensure that it provides sufficient background information to provide stakeholders with the proper background when reviewing the standard and providing comments. **(See Exhibit E)**

During the course of the meeting, the System Protection and Control Task Force sent a note to the SDT:

When I read PRC-023, it appears to be directed at relay loadability for BES transmission elements. Where PRC-023 refers to Generator Owners, it refers to the transmission elements owned by GOs. PRC-023 does not appear to be directed at generation protection. In the associated reference document the Introduction section lists the systems that are included in PRC-023 and lists the systems that are excluded. Item 2.3 specifically lists generator protective relays as being excluded from the standard. While a relay loadability of .85 may be appropriate for transmission elements, I fail to see the connection to generation elements. Although both are a part of the BES, the functions are very different and may require completely different settings to protect the equipment and provide the better result for the reliability of the BES. Anyone should feel free to correct me if I am wrong.

The team discussed the comment from the SPCTF and believes that the scope of PRC-023 is limited to generator protection — and there is no conflict with PRC-023 which focuses on transmission protection. The team responded to the comment during the course of the meeting.

Action Items and Short-term Project Milestones

PRC-024

- January 8, 2009 — Maureen to send the draft from the meeting to the team for review
- January 9–16, 2009 — PRC Subteam to send final draft of standard, comment form and mapping document to the entire team
- January 16–27, 2009 — SDT to send any last comments to entire team for consideration
- February — April 1, 2009 — 45 day posting for comment

WebEx for PRC-024 – Thursday February 26

- Volunteers to put together concepts — Craig, Chifong, Brendan, Rick, Dave, Gary, Bill — Harry as chair
- Outline concepts and first draft of slides for WebEx by February 6
- Comment from team on slides — February 13
- Final presentation — February 20

MOD-026

- January 8–21 — Lee Taylor to complete draft of standard and comment form
- January 21–28 — SDT to send any last comments to entire team for consideration
- January 28–February 4 — Lee to consolidate/resolve comments and submit to standards staff
- February 16 — Standards staff to post for 45 days (February 16–April 1, 2009)

WebEx second week of March on Concepts for MOD-024; MOD-026 posting

- Volunteers to put together concepts — Vlad, Bob, Lee, Ken Tom
- Outline concepts and first draft of slides for WebEx by February 6
- Comment from team on slides — February 13
- Final presentation — February 20

MOD-024

January 8–April 14 — MOD-024 subteam to develop a new draft of MOD-024 and submit to Harry Tom for inclusion in the agenda for the April 21–22, 2009 meeting

Next Meetings:

April 21–22, 8 a.m.–5 p.m. and 8 a.m.–4 p.m. in Dallas — host is TXU Power — Rick Terrill is host

Meeting purpose:

- Consider the comments submitted by stakeholders on MOD-026 and PRC-024
- Subteam to bring new draft to meeting: MOD-024

May 12–13, 8 a.m.–5 p.m. and 8 a.m.–4 p.m. in Charlotte — host is Duke Energy — Gary Humphries is host

Meeting purpose:

- Complete MOD-024
- Work on MOD-025 and MOD-027

Thank You

Before leaving the meeting, the team thanked the host, Ken Stenroos, for the extra effort he put forth in making arrangements for the team to use the FPL meeting facilities, for providing the team with food, and an informative tour of the facility. His extra efforts were very much appreciated!