

Meeting Notes

Project 2010-13.2 Phase 2 of Relay Loadability: Generation Standard Drafting Team

January 9, 2013

Conference Call with ReadyTalk Web Access

Administrative

1. Introductions

The meeting was brought to order by Mr. Rogers, chair, at 11:00 a.m. ET, Wednesday, January 9, 2013. Mr. Rogers noted that the goal of the meeting was to finalize documents from the Atlanta meeting last month. Those in attendance were:

Name	Company	Member/ Observer
Charles Rogers (Chair)	Consumers Electric	Member
Jeff Billo	ERCOT	Member
S. Bryan Burch	Southern Company	Member
Steven Hataway	Florida Power and Light Company	Member
Jonathan Hayes	Southwest Power Pool, Inc.	Member
Mike Jensen	Pacific Gas and Electric Company	Member
Sudhir Thakur	Exelon Generation	Member
Benson Vuong	Salt River Project	Member
David Youngblood	Luminant Power	Member
Scott Barfield-McGinnis (Standard Developer)	North American Electric Reliability Corporation	Observer
Ken Hubona	Federal Energy Regulatory Commission	Observer

Name	Company	Member/ Observer
Phil Tatro (Technical Advisor)	North American Electric Reliability Corporation	Observer

2. Determination of Quorum

The rule for NERC Standard Drafting Team (SDT or team) states that a quorum requires two-thirds of the voting members of the SDT. Quorum was achieved as nine of the eleven members were present.

3. NERC Antitrust Compliance Guidelines and Public Announcement

NERC Antitrust Compliance Guidelines and public disclaimer were reviewed by Mr. Barfield. There were no questions. Mr. Barfield updated members joining the call late concerning NERC Antitrust.

4. Review Roster

Mr. Barfield noted there have been no changes to the roster.

Agenda

1. Open business from last meeting (Reviewed)

- a. Mr. Barfield –
 - i. Issue a Doodle to check availability for a conference call the week of January 7, 2013 for the dates January 8, 9 and 10, 2013 only. (Complete)
 - ii. Finalize the supplemental Standard Authorization Request (SAR) for inclusion in the next Standards Committee (SC) meeting to be held January 10, 2013 via conference call. (Complete – SC meeting moved to January 16 and 17, 2013)
- b. Mr. Tatro to check the Technical Justification Resource Document: Project 2010-07 Generator Requirements at the Transmission Interface (Updated July 16, 2012). (Complete – Mr. Tatro provided suggested text for updating the Applicability section 3.2 and 3.2.4 of the standard)
- c. Team – Finish reviewing all documents and issue discussion items to Mr. Barfield prior to the January 2013 conference call. (Complete)

2. Finalize documents

The team began with reviewing the draft 2 of the standard. Several minor errors were corrected. A question was raised about Option 7 including the 0.95 per unit voltage criteria, but not Options 8 and 9. The 0.95 per unit (Option 7a) was reinserted at the last meeting after discussion. Mr. Barfield noted that upon his review and mapping the Table 1 changes from the previous posting to this draft 2 version, that 7a should have been included and was apparently overlooked. The team

discussed including the 0.95 per unit option for both Options 8 and 9. Mr. Barfield reviewed the initial Table 1 created from the non-RBS standard and noted to the team that the phase time overcurrent relay (51) was originally included the 0.95 per unit provision. This satisfied the team's concern and the 0.95 per unit option and therefore was added to Options 8 and 9.

Mr. Billo discovered two clerical errors where technical text was duplicated. Mr. Barfield deleted the duplications. Other team members identified several typos and those were corrected as well. The team reviewed Mr. Tatro's proposed changes to the Applicability section 3.2.4 for consistency with the first three items (3.2.1-3.2.3). The consensus was that it was best to insert "Generation interconnection Facility" and remove "Lines that radially connect a generating plant to the Transmission system." Mr. Thakur raised a concern that may create confusion in the technical basis sections covering asynchronous generators. The concern was that the word "rise" in the sentence, "Asynchronous generators do not produce as much reactive power as synchronous generators, the voltage [rise] due to reactive power flow through the generator step-up transformer is not as significant" was not the best word to use. The team decided that it would be more appropriate to use the word "drop" instead of "rise."

Mr. Jensen raised a concern about the circumstances in the "Lines that Radially connect..." section. The concern was that it did not seem to adequately cover the possible configurations. The team reviewed and decided to rephrase sentences in the paragraph for clarity. The drafting team ended the review of the standard with the calculations that were added. There were concerns about a few errors and Mr. Jensen offered to input the variables into a software application and generate the equations and calculations for this section of the standard. The team agreed that would be a good approach. Mr. Jensen would work with several other members to confirm the accuracy of the calculations.

The team reviewed the draft 2 comment form, Violation Risk Factor/Violation Severity Level Justifications, and Implementation Plan for posting. The comment form was updated to reflect changes to the Applicability question and the Implementation Plan had one "general consideration" removed because it was not necessary. In the Implementation Plan the heading "Load-responsive protective relays which become applicable to the standard" (i.e., at a later date) was implicit that more than a 48-month period was not necessary. The reasoning was there would be few facilities, smaller in size, and entities would have more flexibility to implement the requirements.

3. Review of the schedule

Mr. Barfield updated the team regarding the 19-week slide in the schedule. The goal is to post Friday, January 18, 2013 with the approval of the supplemental SAR to revise PRC-023-2 for consistency with the draft 2 of PRC-025-1. The SC meeting date changed to January 16-17, 2013 which pushed the posting out another week. Given the SC meeting change, the team had to move the next in-person meeting to the end of March 2013 to respond to the initial ballot and comments.

4. Action items

- a. Mr. Barfield:
 - i. Issue announcement for the quality review response meeting scheduled for January 17, 2013.
 - ii. Prepare announcement for March 2013 meeting.
 - iii. Issue documents to the team from this meeting.
- b. Mr. Jensen:
 - i. Mathcad® calculations for Guidelines and Technical Basis document.
 - ii. Confirm meeting facility use for the week of March 25-29, 2013.

5. Next steps

- a. Obtain SC approval of the PRC-023-2 supplemental SAR for posting with draft 2 of PRC-025-1.
- b. Post draft 2 of PRC-025-1 for its second formal comment period for 45-days.
- c. Conduct an initial ballot of draft 2 of PRC-025-1 in the last 10 days of the comment period.
- d. Arrange SDT meeting in March 2013 to respond to comments from the 45-day comment period and initial ballot.

6. Future meeting(s) – Tentative dates and times:

PG&E – Fresno, CA

- a. Tuesday, March 26, 2013 | 8:00 a.m. – 5:00 p.m. ET
- b. Wednesday, March 27, 2013 | 8:00 a.m. – 5:00 p.m. ET
- c. Thursday, March 28, 2013 | 8:00 a.m. – 5:00 p.m. ET
- d. Friday, March 29, 2013 | 8:00 a.m. – Noon ET

7. Adjourn

The meeting adjourned at 2:10 p.m. ET on January 9, 2013.