

Meeting Notes

Project 2010-17 Definition of Bulk Electric System Standard Drafting Team

June 27-28, 2012

Exelon
Chicago, IL

Administrative

1. Introductions

The chair called the meeting to order at 8:00 a.m. CT on Wednesday, June 27, 2012, in the offices of Exelon in Chicago, IL. Meeting participants were:

Members		
Jennifer Dearing, NYPA	Brian Evans-Mongeon, Utility Services	Phil Fedora, NPCC
Ajay Garg, Hydro One	Pete Heidrich, FRCC, Chair	John Hughes, ELCON
Barry Lawson, NRECA, Vice Chair	Jeff Mitchell, RFC	Rich Salgo, Sierra Pacific
Jason Snodgrass, GTC	Ed Dobrowolski, NERC Coordinator	
Observers		
Paul Cummings, Redding	David Dockery, AECl	Tom Duffy, CHGE
Jeff Gindling, Duke	Chris de Graffenried, Con Ed	Bill Harm, PJM
Jonathan Hayes, SPP	Bill Hughes, Redding	John Martinsen, Snohomish
Susan Morris, FERC	Alain Pageau, HQ	DeWayne Scott, TVA
Ken Shortt, PacifiCorp	Tim Soles, Occidental	Bob Stroh, FERC

2. Determination of Quorum

The rule for NERC Standard Drafting Teams (SDT) states that a quorum requires two-thirds of the voting members of the SDT to be physically present. Quorum was achieved.

3. NERC Antitrust Compliance Guidelines and Public Announcement

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.

Participants are reminded that this meeting is public. Notice of the meeting was posted on the NERC website and widely distributed. The notice included the number for dial-in participation. Participants should keep in mind that the audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.

4. **Review Current Team Roster**

There were no changes to the roster.

5. **Review Meeting Agenda and Objectives**

The agenda was approved as drafted. The objective of the meeting was to provide updates on liaison work efforts, discuss next steps, and perform a final in-person review of the guidance document.

Agenda

1. **Liaison Reports**

a. Standards Committee – Pete Heidrich

The Standards Committee has not met since the last SDT meeting.

b. Member Representatives Committee (MRC)/Board of Trustees (BOT) – Pete Heidrich

The MRC and BOT will meet in August 2012. There should be an agenda slot for this project with the emphasis expected to be progress on the technical justification work efforts.

c. Planning Committee Executive Committee (PC Ex Com) – Jeff Mitchell

The PC Ex Com is looking at the 100 kV bright-line issue as well as overseeing the work done by Systems Analysis and Modeling Subcommittee (SAMS) and Reliability Assessment Subcommittee (RAS).

Several alternatives to the 100 kV bright-line such as surge impedance loading (SIL), distribution factors, and MVA capability have been explored but this work is still underway.

The final report will show the technical rationale for all recommendations and the work is on schedule at this time.

d. SAMS – Bill Harm

The SAMS is investigating the local network power flow issue and the Reactive Resource threshold value question. Bill Harm distributed a Power Point presentation prior to the meeting that was the basis for the discussion.

All suggested changes have been made from a planning perspective. A 300 MW cap for load within the local network is being suggested and the power flow issue is based on normal and N-1 Contingency flows at peak.

The SDT questioned whether SAMS had received the correct assignment as several of the suggestions appear out of scope. The perspective was questioned as well since the Bulk Electric System (BES) definition deals with Real-time issues and is a bright-line with no study requirements. The suggestions made conflict with the local network comments provided by the SDT in Phase 1 of the project. The SDT stated that if SAMS wishes to make out of scope comments about an aspect of the proposed definition that they must do this through the official posting and comment process. The work now must be constrained by the scope of the SAR and the specific request made by the BES SDT and Standards Committee (SC) or it violates standards process.

It appears that the continent-wide studies anticipated by the SDT and SC to provide technical rationales are not within the capabilities of the PC, SAMS, or RAS. Justification for responses will need to be provided by other methods.

The SDT requested a conference call be set up among the SDT leadership and the appropriate PC representatives to make certain that the assignments are understood and that all are on the same page. Jeff Mitchell will provide the contact information for the PC representatives and Ed Dobrowolski will coordinate the call.

Action Item – Jeff Mitchell will provide the contact information for PC representatives for the conference call concerning the scope of the assignment to the PC.

Action Item – Ed Dobrowolski will coordinate and set up a conference call between SC leadership and appropriate PC representatives on the scope of the assignment to the PC.

The preliminary conclusion on Inclusion I5 is that all Reactive Resources should be required to be in the BES regardless of size. While this represents the status quo, a technical rationale for this decision still needs to be provided.

e. RAS – Phil Fedora

The RAS is researching the generation threshold issues. Phil Fedora distributed a Power Point presentation prior to the meeting that was utilized to direct the discussion.

RAS is looking at several options for the capacity question and everything is still on the table.

The SDT reminded Phil Fedora to make sure that RAS maintains the 100 kV connection criteria in their work.

2. **Review of FERC Notice of Proposed Rulemaking (NOPR) and Discussion of Response Plan – Pete Heidrich**

The NOPR was issued on June 22, 2012 but won't be official until it is published in the Federal Register. Responses to the NOPR must be submitted within 60 days of publication in the Federal

Register. The result was favorable but several clarifications have been requested and the responses to these requests could influence the final order. NERC Legal will make the official response for NERC to the NOPR but the SDT has been requested to provide responses to the technical questions. In order to let NERC Legal have enough time to do what they need to do for the submittal, the SDT will need to supply their responses in approximately 30 days.

A small sub-group of the SDT will draft straw man responses to all of the pertinent questions (Rules of Procedure questions will need to be answered by the ROP Team). The sub-group consists of Pete Heidrich, Barry Lawson, Rich Salgo, Jennifer Sterling, Bill Harm, and Ed Dobrowolski. When the straw man responses are complete, they will be distributed to the SDT only for review which will be finalized on a group conference call.

Anyone can respond to the NOPR.

3. Review of Guidance Document

The document was not completed due to time constraints but the majority of the document was available for review.

NERC Legal reviewed the opening paragraphs and provided comments which have been incorporated into the draft.

On page 2, the 3 step process cited there doesn't really apply to all of the diagrams so it should be deleted. This is due to the adopted philosophy that the individual diagrams should be restricted to showing only those items pertinent to the part of the definition they are explaining, i.e., diagrams for Exclusion E1 should be providing guidance on Exclusion E1 and not other inclusions or exclusions which are handled in their respective parts of the document. However, this points out the need for a new section where the 3 step process is shown so that users can see how to step through the process in real world situations.

Figure numbers will be shown on all diagrams.

The Inclusion I1 diagrams will be simplified to only show transformers and no other 'peripheral' equipment. Both 2 and 3 winding examples should be included.

Starting with Inclusion I2, the terms 'unit' and 'Element' should be deleted in favor of wording from the inclusion itself.

While there are on-going discussions as to the extent of Inclusion I4, for the Phase 1 guidance document, collector systems are not included. There should be separate diagrams for wind (a.c.) and solar (d.c.).

The text in Inclusion I5 needs to be made consistent with the other sections of the document.

Exclusion E1 diagrams should emphasize the point of connection. A statement should be added in the front of the document that protection systems and equipment are not shown as they are covered in specific standards and not pertinent to the BES definition. There should be a second

diagram to show the normally closed switch condition immediately following the normally open switch diagram.

Parking lot items to be added to standing agenda:

- a. Point of connection for radial systems
- b. Necessity for separate Exclusion E1c

The SDT still needs to describe net capacity for Exclusion E2. John Hughes and Tim Soles volunteered to draft a straw man by July 6, 2012 for delivery to the CRWG for consideration. RFC, ERCOT, FRCC, and SERC have already provided input to this effort. Jonathan Hayes will report back for SPP.

Action Item – Jonathan Hayes to report back on net capacity considerations at SERC.

Action Item – John Hughes and Tim Soles will draft a straw man description of net capacity by July 6, 2012.

Exclusion E3 needs to emphasize the points of connection. The transformers need to be greater than or equal to on the low side. Line voltages should be identified and then copied to the high-side of the transformers with a note stating that these are simply sample voltages. The bus at the top of the diagram needs to be fixed.

The SDT agreed that no diagrams are needed for Exclusion E4. However, the discussion pointed out the Inclusion I5 diagrams need a note stating that it is assumed there are no Exclusion E4 situations in the diagrams.

4. Definition Clarification Items

- a. Non-retail generation (SAR) - **Complete**
- b. Inclusion I4 (SAR) - Dispersed generation vs. distributed resources
- c. Flowgates in Exclusion E3 (AECI)

The current language only references monitored Flowgates and doesn't mention the contingent elements. AECI raised the question of whether this was correct. The SDT agreed that the reference should be to both monitored and contingent and made appropriate changes to the language of Exclusion E3 for Phase 2. This item is now complete.

- d. Ownership in Exclusion E4 (AECI)

AECI questioned whether ownership was a factor in the determination. Entities could own and operate Reactive Resources for retail customers that aren't behind-the-meter. The SDT agreed and drafted revised language but did not finalize it. Further discussion is needed before this item is marked as complete.

- e. Dedicated step-up transformer in Inclusion I2 (PEPCO)

The described scenario is unique and best suited for the exception process. This item is now complete.

Items 'f' through 'i' need research to show the exact problem before they can be discussed. This will be provided for the next meeting.

- f. Normally open designation in Exclusion E1 (WECC)
- g. Gross or net ratings (ACES)
- h. Retail Load, Retail Generation, and Retail Meter (ISONE)
- i. Reactive resources in Exclusions E1 and E3

Items 'j' and 'k' were not discussed due to time constraints.

- j. Relationship between the BES definition and the ERO Statement of Compliance Registry Criteria established in FERC Order 693
- k. Appropriate 'points of demarcation' between Transmission, Generation, and Distribution

The 2 items marked as 'Parking Lot' in Section 3 of this document will be added to the standing agenda.

5. Phase 2 Schedule

With the assurances from the PC that they will meet the December deadline, the project is on schedule at this time.

6. Next Steps

With the issuance of the NOPR, it is now time to move forward with the posting of the guidance document for industry comment. Pete Heidrich will make the corrections agreed upon at this meeting and issue the document to the BES SDT for one final review before posting. This review will be completed through e-mail and will be restricted to corrections of conceptual errors and typos. There will be no further face-to-face discussions prior to the posting as all interpretive and personal issues have been discussed in depth.

7. Future Meeting(s)

The next meeting will be in Tucker, GA at Georgia Transmission Corporation (GTC) on July 31 – August 1, 2012 from 8:00 a.m. to 5:00 p.m. local time each day. Details to follow.

8. Action Item Review

The following action items were developed during this meeting:

- a. Jeff Mitchell will provide the contact information for PC representatives for the conference call concerning the scope of the assignment to the PC.
- b. Ed Dobrowolski will coordinate and set up a conference call between SC leadership and appropriate PC representatives on the scope of the assignment to the PC.

- c. Jonathan Hayes to report back on net capacity considerations at SERC.
- d. John Hughes and Tim Soles will draft a straw man description of net capacity by July 6, 2012.

9. Adjourn

The chair thanked Exelon for their hospitality adjourned the meeting at 4:30 p.m. CT on Thursday, June 28, 2012.