

PROJECT 2010-17 DEFINITION OF BES (PHASE 2)

Meeting Notes

Tuesday, May 1, 2012 | 8:30 a.m. – 5:00 p.m. EDT

Wednesday, May 2, 2012 | 8:30 a.m. – 5:00 p.m. EDT

NERC 3353 Peachtree Road NE Suite 600, North Tower Atlanta, GA 30326

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Administrative

1. Introduction

The Chair called the meeting to order at 8:30 a.m. on Tuesday, May 1, 2012 in the NERC offices in Atlanta, GA. Meeting participants were:

| Members | | |
|-----------------------------|---------------------------------------|---------------------------------------|
| Jennifer Dering, NYPA | Brian Evans-Mongeon, Utility Services | Ajay Garg, Hydro One |
| Pete Heidrich, FRCC (Chair) | John Hughes, ELCON | Barry Lawson, NRECA (Vice Chair) |
| Jeff Mitchell, RFC | Rich Salgo, Sierra | Jason Snodgrass, GTC |
| Jennifer Sterling, Exelon | Jonathan Sykes, PG&E | Ed Dobrowolski, NERC (Coordinator) |
| Observers | | |
| Richard Dearman, TVA | David Dockery, AECl | Tom Duffy, Central Hudson |
| Jeff Gindling, Duke | Mike Green, EES | Bill Harm, PJM |
| Bill Hughes, Redding | Lorissa Jones, BPA | Ruth Kloecker, ITC |
| Susan Morris, FERC | Alain Pageau, HQ | DeWayne Scott, TVA |
| Tim Soles, Occidental | Phil Tatro, NERC | Henry Tsay, NPCC |

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**

The NERC Antitrust Compliance Guidelines and public announcement warning were issued.

4. **Membership Changes and Roster Updates**

There were no changes to the members information.

5. **Review Meeting Agenda and Objectives**

No changes were made to the agenda. The main objective of the meeting was to review the guidance document.

Agenda

1. **Updates on Phase 2 – Pete Heidrich**

a. **Operating and Planning Committees**

The Operating Committee is not going to be deeply involved. The Planning Committee is taking the lead in the activities and the Operating Committee will follow the developments through a liaison with the Planning Committee's Executive Committee (PC Ex Com).

The PC Ex Com will handle the bright-line voltage criteria study. Pete Heidrich, Barry Lawson, and Ed Dobrowolski have been added to the mail list for this group and will monitor the activities. Jeff Mitchell is Chair of the Planning Committee and thus Chair of the PC Ex Com as well.

The Reliability Assessment Subcommittee (RAS) will deal with the generation threshold study. Phil Fedora is a member of this group and will liaise for the SDT.

The Systems Analysis and Modeling Subcommittee (SAMS) will work on the reactive power threshold and the local network power flow issue. Bill Harm is a member of this group and will act as liaison for the SDT.

The liaisons will provide periodic reports at SDT meetings.

The Planning Committee has an absolute deadline of no later than December 20, 2012 for providing the results of its work.

Subcommittee meetings are open so SDT members could dial-in if so desired. Bill Harm and Phil Fedora will send out meeting notices to the SDT to facilitate this effort.

AI – Bill Harm will send SAMS meeting notice information to the SDT and Phil Fedora will provide RAS meeting information to the SDT.

The PC Ex Com is a closed session as other matters are also discussed.

b. Standards Committee

i. SAR status

The Standards Committee approved the project schedule, accepted the revised SAR, and approved the project for development at its April meeting.

c. MRC/BOT

The MRC and BOT both meet next week. Pete Heidrich is on the agenda and will provide a project update. He will provide a copy of the presentation to the SDT.

AI – Pete Heidrich will distribute a copy of the MRC/BOT presentation to the SDT members.

A question was raised on the City of Holland order. Pete Heidrich pointed out that the ruling was based on the present BES definition and not the revision from the SDT Phase 1 work. It would therefore be premature to discuss the ruling with regard to its effect on the revised definition.

2. Review of Guidance Document

Pete Heidrich provided a draft guidance document that built on the efforts of the individual sub-teams in previous meetings. The SDT reviewed the document and made the following recommendations and changes:

- Introduction
 - A question was raised as to whether NERC Legal had reviewed the disclaimer. Ed Dobrowolski stated that the disclaimer was copied from other NERC documents but that it will be sent to NERC Legal for review.
AI – Ed Dobrowolski to send a copy of the introduction to NERC Legal for their review.
 - Pete Heidrich informed the SDT that the guidance document will not be posted until after FERC responds to the Phase 1 filing. Posting the document prior to that time may result in confusion and wasted effort.
 - The SDT provided some minor grammatical changes to the displayed document.
- Inclusion I1 (Jeff Mitchell and Ken Shortt)
 - Page 4 – grammatical changes to the text box
 - All references to BES and non-BES should be bold throughout the document
 - Need figure identifiers on every figure throughout the document
 - Don't use gray text, use black instead
 - Line 1 isn't always identified in diagrams

- Page 7
 - This figure is too complicated for this section and should be deleted. It is more pertinent to Exclusion E3.
 - The 2 transformers on the top of the page are not excluded
 - The low side of the transformers need to show greater than or equal to 100 kV.
 - There should be a BES box around the reactive resource.
- Inclusion I2 (Jennifer Dering, Bill Harm, and Ajay Garg)
 - Page 9
 - Reference should be to Inclusion I2 and not Inclusion I1
 - Add inclusion of transformer under Inclusion I1 in text box
 - Delete the breaker above the unit through the document
 - Combine pages 9 and 10 with one half showing BES and the other non-BES
 - When moving page 10, delete the BES/non-BES line
 - When moving page 10, use the same language as page 9 in the text box
 - Page 11
 - Copy the language in the text box for page 9 in the text box here
 - Place language in the beginning of the diagram section stating that the particular diagrams are only referring to the particular inclusions or exclusions being discussed, e.g., items in the Inclusion I1 diagrams are only pointing out examples for Inclusion I1 and not for any other inclusion or exclusion
 - Page 13 – Place red box around BES unit
- Inclusion I4 (Phil Fedora, Brian Evans-Mongeon, and Russ Noble)
 - Introduction seems overly complicated and was considerably reduced
 - Page 17
 - Need to identify that the common point of connection is the high side of the transformer that connects to the BES
 - Delete the breaker on the low side of the transformer
 - Delete turbine blades from diagrams
 - Page 18 – Non-BES designation is missing on the last transformer to the right

- Page 19
 - Delete the PCS Shelter reference
 - Delete the inverter boxes and use non-BES boxes as the photovoltaic generators
 - Delete the first breaker in the line
- Inclusion I5 (Jason Snodgrass and Jeff Gindling)
 - Page 21 – on device 1, extend the non-BES box to the left to include the transformer bushings
 - Page 23 – this diagram belongs under Exclusion E3
- Exclusion E1 (Jonathan Sykes, Barry Lawson, Alain Pageau, and Jonathan Hayes)
 - Introduction – several grammatical edits were made by the SDT
 - Page 28 – more examples are needed to show the different generation levels similar to Inclusion I2 diagrams while also showing whether the radial exclusion applies or not
 - Page 29
 - A non-retail example is required
 - The load transformer voltages are reversed
 - Page 31 – grammatical changes were made to the radial exclusion text box
- Exclusion E2 (John Hughes and Tim Soles)
 - Introduction – delete last paragraph but add net capacity (How to handle net capacity should be researched with the various regions – assignments were made as follows for report back at the next meeting: RFC – Jeff Mitchell, FRCC – Pete Heidrich, NPCC – Phil Fedora and Henry Tsay, TRE – Time Soles, MRO & SPP – Ruth Kloecker, SERC – Jason Snodgrass)

AI – Assigned team members and attendees (RFC – Jeff Mitchell, FRCC – Pete Heidrich, NPCC – Phil Fedora and Henry Tsay, TRE – Time Soles, MRO & SPP – Ruth Kloecker, SERC – Jason Snodgrass) are to research how the regions presently handle net capacity and will report back to the SDT at the next meeting.

 - Page 34 – place a directional arrow on the steam line
 - Page 35 – change kV to MVA in the text box

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- Exclusion E3 (Rich Salgo, Ken Shortt, Bill Hughes, and Richard Dearman)
 - Page 38 – carry forward changes discussed under Inclusions I1 and I5
- Exclusion E4 – not completed as yet due to time constraints

3. Definition Clarification Items

a. Non-retail generation (SAR)

The section on Exclusion E1 in the guidance document contains clarification on this item. The guidance document will be posted for industry comment after FERC responds to the Phase 1 filing and it is expected that any changes to what is currently provided will be driven by those comments. Therefore, no further action on this item is anticipated at this time.

b. Inclusion I4 Clarification (SAR) and Dispersed Generation vs. Distributed Resources (SDT)

Is wind being treated differently than other resources in Inclusion I2, e.g., why aren't generator leads included in Inclusion I4 as they are in Inclusion I2? This was done intentionally due to the voltage levels that are in play with wind resources. The question was raised as to whether this needs to be re-considered. The sticky point is how you consider dedicated collectors. You could consider them 'lumped' and analagous to Inclusion I2. The SDT debated the point at length and made tentative wording changes to both Inclusions I2 and I4 to reflect these changes. The collector systems and everything leading up to them would be included in the BES by this language. This change makes Inclusion I2 consistent with Inclusion I4. There may be unintended consequences to this decision. Each SDT member was asked to study the proposed changes for correctness and to think about unintended consequences of these changes in preparation for detailed discussion at the next meeting.

AI - Each SDT member was asked to study the proposed changes to Inclusions I2 and I4 for correctness and to think about unintended consequences of these changes in preparation for detailed discussion at the next meeting.

c. Flowgates in Exclusion E3 (AECI)

d. Ownership in Exclusion E4 (AECI)

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

f. Normally open designation in Exclusion E1 (WECC)

g. Gross or net ratings (ACES)

h. Retail Load, Retail Generation, and Retail Meter (ISONE)

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- i. Reactive resources in Exclusions E1 and E3
- j. The relationship between the BES definition and the ERO Statement of Compliance Registry Criteria established in FERC Order 693
- k. The appropriate 'points of demarcation' between Transmission, Generation, and Distribution

4. Phase 2 Schedule

In order to maintain an approximately 18 month schedule, some slight variations from a traditional schedule were requested. The schedule was built on the concept that only minor clarifying changes would be made to wording and the significant changes, depending on the Planning Committee findings, would be in threshold values.

A set timeline is shown for the guidance document. However, it will not be posted until after FERC responds to the Phase 1 filing.

5. Next Steps

The SDT will continue to work on refining the guidance document and the clarification items. The goal is to have the guidance document ready and waiting when the FERC response is delivered so that it can be published for comment as soon as possible after that if changes aren't required by the response. The clarification items must be finalized by the time the SDT hears back for the Planning Committee on their technical analysis and justification work so that there is no delay in the schedule and that all changes are posted together.

6. Future Meetings

The next meeting of the SDT will be in Chicago, IL at Exelon headquarters on June 27 and 28, 2012. Details will follow.

7. Action Item Review

The following action items were developed during the meeting:

- Bill Harm will send SAMS meeting notice information to the SDT and Phil Fedora will provide RAS meeting information to the SDT.
- Pete Heidrich will distribute a copy of the MRC/BOT presentation to the SDT members.
- Ed Dobrowolski to send a copy of the introduction to NERC Legal for their review.
- Assigned team members and attendees (RFC – Jeff Mitchell, FRCC – Pete Heidrich, NPCC – Phil Fedora and Henry Tsay, TRE – Time Soles, MRO & SPP – Ruth Kloecker, SERC – Jason Snodgrass) are to research how the regions presently handle net capacity and will report back to the SDT at the next meeting.

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- Each SDT member was asked to study the proposed changes to Inclusions I2 and I4 for correctness and to think about unintended consequences of these changes in preparation for detailed discussion at the next meeting.

8. **Adjourn**

The Chair thanked NERC for their hospitality and adjourned the meeting at 4:00 p.m. on Wednesday, May 2, 2012.