

Meeting Notes

Project 2010-17 Definition of Bulk Electric System (Phase 2) Standard Drafting Team

May 22-23, 2013

Salt Lake City, UT

Administrative

1. Introductions

The chair called the meeting to order at 9:00 a.m MT on Wednesday, May 22, 2013 at WECC in Salt Lake City, UT. Meeting participants were:

Members			
Jennifer Dering, NYPA	Brian Evans-Mongeon, Utility Services	Phil Fedora, NPCC	Ajay Garg, Hydro One
Pete Heidrich, FRCC, Chair	John Hughes, ELCON (day two only)	Barry Lawson, NRECA, Vice Chair	Rich Salgo, Sierra Pacific
Jason Snodgrass, GTC	Jonathan Sykes, PG&E	Ed Dobrowolski, NERC	
Observers			
Sean Cavote, NERC	David Dockery, AECL	Tom Duffy, CHGE	Jeff Gindling, Duke
Mike Green, EES	Ruth Kloecker, ITC	Ken Lotterhos, Navigant	Susan Morris, FERC
Alain Pageau, HQ	Herb Schrayshuen, Power Advisors	Ken Shortt, Pacificorp	Phil Tatro, NERC
David Thompson, TVA	Stacey Tyrewala, NERC		

2. WECC Logistics and Safety Information

Safety and logistical information was provided by the WECC staff.

3. Determination of Quorum

Quorum was achieved.

4. NERC Antitrust Compliance Guidelines and Public Announcement

The NERC Antitrust Compliance Guidelines and public announcement were delivered.

5. SDT Participant Conduct Policy

The SDT participant conduct policy was reviewed.

6. SDT E-mail List Policy

The SDT e-mail list policy was reviewed.

7. Membership Changes and Roster Updates

Brian Evans-Mongeon reported a change in mail address.

8. Review Agenda and Objectives

The agenda was reviewed and approved.

The objective of the meeting was to finalize the documents required for the first posting and initial ballot.

9. Review of Previous Action Items

- Pete Heidrich will submit a letter to the Planning Committee expressing the dissatisfaction of the SDT with the draft Planning Committee report. This letter needs to be sent prior to the Planning Committee meeting in December. See item #11. This item is closed.
- The sub-team working on the request for a generation threshold study will produce a framework for the document to be sent to the SC by the end of March 2013. See item #11. This item is closed.
- A sub-group led by Pete Heidrich will work on suggested changes to the ERO Statement of Compliance Registry Criteria and present the results to the SDT for review no later than the end of March 2013. See item #12. This item is completed.
- Pete Heidrich will develop a spreadsheet for the presentation of the applicability sub-group research findings. This item was completed prior to the meeting.
- The two applicability sub-groups will present their findings to the SDT no later than the end of March 2013. This item was completed prior to the meeting.

10. Review of the Final Planning Committee Report and Approval of Actions in Phase 2

The SDT confirmed its prior decision on the acceptance of the Planning Committee Report.

11. Report from the Generator Threshold Study Memo Sub-team – Brian Evans-Mongeon

The sub-team distributed a draft memo dated March 29, 2013 that was the basis for this discussion.

The general feeling of the SDT is that it has fulfilled its obligation to industry on this topic although a minority of the SDT wanted the proposed memo to be sent on to the Standards Committee. Cost and resource issues would almost certainly cause any further requests on the issue to be denied. The

exception process could end up providing insight into the validity of the threshold values. The work of the BESBPWG could help with this issue as well.

The proposed memo will not be sent on and this matter is closed.

12. **Report from the Sub-team Working on Possible Changes to the ERO Statement of Compliance Registry Criteria due to the Revised BES Definition – Pete Heidrich**

The scope of this assignment was limited to only those items and issues that were directly affected by the revised definition. In addition, the SDT looked at the consistent and correct use of the terms BPS and BES in the document.

The redline of the document will be turned over to the Standards Committee who will decide what to do with the proposed revisions and who to send it to.

At this point in time, the SDT had lost quorum so the members who were not present will be polled through e-mail for comments.

While not in scope, the SDT will include a note in its submittal about the need to review the document for proper use of the terms element and facility.

13. **Finalize Changes to Phase 2 Definition due to Order 773-A**

There are two directives that the SDT needs to address in Phase 2:

- Paragraph 40 – “With respect to NERC’s request for clarification, we agree that removing the phrase “or above 100 kV but” from the definition of local networks in the first sentence of exclusion E3 is an appropriate way to meet the Commission’s directive to remove the 100 kV minimum operating voltage in the local network definition.”
- Paragraph 50 – “... we direct NERC to modify the exclusions pursuant to FPA section 215(d)(5) to ensure that generator interconnection facilities at or above 100 kV connected to bulk electric system generators identified in inclusion I2 are not excluded from the bulk electric system.” Note – This is for both radial systems and local networks.

This will necessitate changes to Exclusions E1 b) and c) as well as Exclusion E3.

The sub-100 kV loop analysis was not a directive. It was a statement by FERC on how radial systems will be interpreted under the revised Phase 1 definition and did not require any language change in Phase 2.

14. **Discuss Other Alternatives to be Considered for Phase 2**

The final ruling on the Phase 1 definition left compliance concerns regarding the directives and the period between the effective date for Phase 1 and the implementation of Phase 2. The ERO is going to request a delay in the effective date for Phase 1 to alleviate these concerns. However, there is no guarantee that such a request will be granted. Therefore, it is imperative that the SDT act as quickly as possible with regard to Phase 2.

In order to maximize the chances for Phase 2 acceptance, the SDT should avoid making any unnecessary changes.

The SDT reviewed each of the proposed changes:

- Inclusion I1 – This inclusion could be viewed as an exclusion. Should the SDT revise this inclusion accordingly? The SDT decided not to move away from the Phase 1 format and to keep this inclusion as an inclusion. The proposed wording change is in response to industry comments, clear cut, and simply semantic. Therefore, the SDT decided to retain the proposed wording change, i.e., from 'under Exclusion E1 or E3' to 'by application of Exclusion E1 or E3'.
- Inclusion I2 – There are two issues with I2. The first has to do with addressing an industry comment to clarify that this inclusion is an 'or' statement for individual units versus aggregate for sites. The SDT addressed this issue by splitting the inclusion into 'a' and 'b' parts with 'a' for individual units and 'b' for the site aggregates with an 'or' in between the two statements. The second issue had to do with the treatment of dispersed power producing resources. The Phase 1 definition had a specific inclusion (I4) for these resources. However, with the FERC Order directing generator interconnection facilities to be included in the BES, the question arose as to whether there was a need to retain two separate inclusions. The SDT decided that two separate inclusions were not necessary and that Inclusion I2 adequately handled both traditional and dispersed power producing resources. The FERC Order noted that the granularity provided by Inclusion I4 was a good thing for clarity in that it made clear what was included for dispersed resources. Therefore, the SDT added the 'dispersed power producing resources' phrase to Inclusion I2b. A rationale box explaining the reasoning for the dispersed power producing resources change was added to the definition. This box will be removed in the final filing.
- Inclusion I4 – This inclusion is no longer needed. In order to maintain continuity within the definition and to alleviate any problems with software tools that have been developed around the definition, the inclusion header and number will be retained but the text is now simply shown as 'omitted'.
- Inclusion I5 - The proposed wording change is in response to industry comments, clear cut, and simply semantic. Therefore, the SDT decided to retain the proposed wording change, i.e., adding the phrase 'unless excluded by application of Exclusion E4' to the end of the sentence.
- Exclusion E1 – The sub-100 kV loop analysis issue is not a Phase 2 item as it is FERC's interpretation of how to implement the Phase 1 definition. Therefore, no wording change is needed for Phase 2. The addition of Inclusion I2 in the Exclusion E1b and E1c language addresses one of the FERC directives. With this wording, does the 75 MVA language need to be deleted? No, this language should be retained to capture situations where there are multiple generation sites strung out along the radial system.

- Exclusion E2 - Since the explanation of 'non-retail' is in the revised Reference Document, the SDT decided that it was not needed in the formal definition.
- Exclusion E3 – The SDT made 4 changes to this exclusion: (1) deleted the phrase '... or above 100 kV but... ' to address the FERC directive; (2) add the wording for Inclusion I2 to address the FERC directive; (3) change 'retail customer Load' to 'retail customers' as suggested in industry comments; and (4) change '... a monitored Facility of a permanent Flowgate...' to '... any part of a permanent Flowgate...' as suggested in industry comments.
- Exclusion E4 – The BES definition is component-based and ownership is not an issue. Therefore, the SDT revised the exclusion language to eliminate the concept of ownership. The context of the exclusion is unchanged.

In addition, the SDT has added an 'explanation of changes' section at the bottom of the posted definition. This section will be removed from the filed definition.

15. Discuss Establishing Minimum Voltage Threshold for Looped Connections

As presently written, FERC Order 773/773-A states that sub-100 kV loop facilities between to radial systems would prevent those radial systems from being excluded from the BES under E1. The SDT thought that there should be a level below which a closed loop would have no impact on the reliability of the BES and that analysis of looped configurations below this point would be a waste of time and resources. FERC staff indicated that they were amenable to such an approach as long as technical justification for the approach and any suggested level were supplied and that impedance was not the sole determining factor. A voltage threshold could be considered reasonable and an equal and effective alternative approach to addressing the issue. The justification would need to be supplied as part of the filing documentation.

A sub-team of the SDT led by Jonathan Sykes worked on selecting a threshold value below which the analysis would not be needed. The initial selection of the sub-team was 30 kV. This would be a bright-line threshold with no regional variation. A Power Point presentation explained the rationale for the selection and will be posted as supporting documentation for the first posting. The full technical justification isn't needed at this time. The sub-team will work on drafting a formal white paper for the technical analysis and justification similar to what was done for the local network exclusion in Phase 1. The first draft of the white paper is due no later than Monday, June 24. The final draft is due July 23, 2013. NERC staff will assist in conducting the simulation studies required for the justification. One question that will need to be answered is whether embedded generation on a radial system below the threshold loop value should impact this exclusion.

Action Item – The sub-team working on the technical justification for sub-100 kV loop analysis will draft a white paper on the topic by June 24, 2013 and have a final version ready by July 23, 2013.

A note has been added to Exclusion E1 to show that a loop below 30 kV does not require analysis. A rationale text box has also been included for the posting.

A question arose as to whether a similar change needed to be made to Exclusion E3. The SDT decided that this was not the case. Regardless of underlying loops in a local network, the criteria for Exclusion E3 are based on other issues – Flowgate status, embedded generation levels, and power flow out of the local network. These criteria are not affected by underlying loops.

16. Develop Comment Form for First Posting of Phase 2

The comment form was created and members assigned to provide draft responses when the comments are available. The objective will be for these members to bring draft responses to the next meeting for full SDT review and approval.

Q1 – Rich Salgo

Q2 – Jason Snodgrass

Q3 – Jonathan Sykes

Q4 – Jennifer Dering & Brian Evans-Mongeon

Q5 – Phil Fedora

Q6 – Pete Heidrich

17. Discuss Phase 2 Implementation Plan

The plan was discussed and accepted. It is basically the same as for Phase 1. Since the 24 month period was justified and accepted in Phase 1, it was decided that such justification statements were not needed for Phase 2.

18. Discuss Changes Needed for the Phase 2 Reference Document

The changes needed are basically known at this time but it is too early to make the physical changes to the document due to the pending nature of Phase 2.

19. Phase 2 Schedule

The schedule was reviewed and after a slight change to the September 2013 dates to accommodate other meetings was accepted. This schedule is extremely aggressive and is designed to present Phase 2 to the Board of Trustees at its November 2013 meeting.

20. Next Steps

The next steps for this project are to get all of the documents required for posting submitted to NERC staff for quality review as quickly as possible.

21. Future Meetings

The next face-to-face meeting of the SDT will be in Tampa, FL at FRCC on July 30-31, 2013. Details will be distributed.

The SDT will organize a webinar on the first posting. The tentative date is June 26, 2013.

In addition, the SDT will pursue the need for a meeting with FERC staff during the first posting. Plans for a possible September 2013 meeting will be finalized in Tampa.

22. Action Item Review

The following action item was developed during the meeting:

- The sub-team working on the technical justification for sub-100 kV loop analysis will draft a white paper on the topic by June 24, 2013 and have a final version ready by July 23, 2013.

23. Adjourn

The chair thanked WECC for its hospitality and adjourned the meeting at 2:30 p.m. MT on Thursday, May 23, 2013.