

Meeting Notes

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

February 19, 2013

San Francisco, CA

Administration

1. Introductions

The chair brought the meeting to order at 1:00 p.m. PT at the PG&E offices in San Francisco, CA on Tuesday, February 19, 2013. Meeting participants were:

Members		
Jennifer Dering, NYPA	Brain Evans-Mongeon, Utility Services	Phil Fedora, NPCC
Ajay Garg, Hydro One	Pete Heidrich, FRCC, chair	John Hughes, ELCON
Jeff Mitchell, RFC	Rich Salgo, Sierra Pacific Power	Jason Snodgrass, GTC
Jennifer Sterling, Exelon	Jonathan Sykes, PG&E	Ed Dobrowolski, NERC
Observers		
Sean Cavote, NERC	Jeff Gindling, Duke	Bill Harm, PJM
Jonathan Hayes, SWPP	Bill Hughes, Redding	Ken Lotterhos, Navigant
Marcus Lotto, SCE	John Martinsen, Snohomish	Susan Morris, FERC
Alain Pageau, HQ	DeWayne Scott, TVA	Ken Shortt, Pacificorp
Tim Soles, Occidental	Phil Tatro, NERC	

2. Determination of Quorum

The rule for NERC Standard Drafting Teams (SDTs) states that a quorum requires two-thirds of the voting members of the SDT to be present. With 11 of the 12 of the current members present, a quorum was achieved.

3. NERC Antitrust Compliance Guidelines and Public Announcement

The NERC Antitrust Compliance Guidelines and public announcement were delivered.

4. Review Team Roster

There were no changes to the team roster.

5. Review Meeting Agenda and Objectives

The objective of the meeting was to complete the clarification items.

Agenda

1. Review of Previous Action Items

- a. Pete Heidrich will submit a letter to the Planning Committee (PC) expressing the dissatisfaction of the SDT with the draft Planning Committee report. This letter needs to be sent prior to the PC meeting in December 2012. This item is on hold pending receipt of final, approved report.
- b. Ed Dobrowolski will incorporate the roadmap changes made during the last conference call and distribute to the mail list. This item is complete.
- c. Mr. Heidrich to provide the Generator Threshold Sub-team report to the PC with a note explaining the problem and a proposed schedule to resolve the issue. This is due no later than close of business on January 25, 2013. This item is complete.
- d. Mr. Heidrich to set up a conference call between Definition of Bulk Electric System SDT and Reliability Assessment Subcommittee (RAS) during the week of February 18, 2013 during the respective group's meetings. At the request of the PC leadership this call will be with the Planning Committee Executive Committee. This item is complete.

2. Conference Call with Planning Committee and Reliability Assessment Subcommittee Leadership

Jeff Mitchell is chair of the PC and an SDT member and was physically present. Joining on the phone was: Ben Crisp, SERC, PC vice chair; Vince Ordax, FRCC, RAS chair; John Moura and Herb Schrayshuen, NERC.

A sub-team of the SDT looked at the Planning Committee draft report to see if there were different conclusions that could be derived from the wording in the draft report. The conclusion of the sub-team was that a single 75 MVA generation threshold could be supported from the draft wording.

Mr. Moura and Mr. Ordax put together a Power Point presentation that described what the RAS saw as potential problems with such a conclusion. In addition to deleting a large number of units and corresponding MWs (approximately 35,000 MW) from the Bulk Electric System (BES), the RAS is concerned about the ability to get modeling data for non-BES units.

The RAS believes that a true technical justification can't be provided and that there is no study that can be run that would provide such justification or a number that could be used. There are too many different variables to study and too many regional and interconnection differences to take into account.

RAS is concerned that raising the threshold will create a reliability gap.

Mr. Mitchell believes that the draft Planning Committee report will be finalized and approved at the March 2013 meeting of the PC.

The chair thanked RAS for calling in and for its effort in trying to resolve this issue.

3. Definition Clarification Items

- a. Finalize language changes to Inclusions I2 and I4.

FERC basically approved Inclusions I2 and I4 in its preliminary Order. This would make it difficult to make any changes in Phase 2 without a technical rationale. However, the SDT believes that the rationale shown in the box next to Inclusion I4 sufficiently presents the case for the change made and that this is the right decision for BES reliability. There was a concern about the effect of this change on registration as the Generator Owner/Generator Operator (GO/GOP) would not normally be responsible for the elements now incorporated into the BES by the revised Inclusion I4. However, the SDT believes that Section III.c.2 of the ERO Statement of Compliance Registry Criteria will assure that there is no significant change in registration.

The SDT did decide to split Inclusion I2 into two distinct parts for single units and aggregate units to provide greater clarity.

This item is considered complete and will be removed from future agendas.

- b. Finalize language changes for including the net capacity delivered to the BES from customer-owned generation in Exclusions E1 and E3 generation totals.

The revision to Exclusion E2 negates any need to make further changes in Exclusions E1 or E3. However, the non-retail description will be added to the Guidance Document sections for Exclusions E1 and E3 for completeness and clarity.

This item is considered complete and will be removed from future agendas.

- c. Discuss the need to include statements concerning the exclusion of customer-owned “transmission” equipment in Exclusion E2.

The SDT determined that customer-owned transmission equipment would be evaluated by application of the BES Definition and classified as BES or non-BES based on that determination. The SDT decided that no change to the language of Exclusion E2 was required for this item. However, the Guidance Document will be revised to show the application of the BES definition on customer-owned transmission equipment and will identify the classification as BES or non-BES as appropriate.

This item is considered complete and will be removed from future agendas.

- d. Discuss the need to consider generation on underlying elements for Exclusion E1b and E1c.

The SDT decided that no change was required. There is no need to specify underlying elements in Exclusion E1 such as there is in Exclusion E3 because there is no 100 kV floor in Exclusion E1. Therefore, any underlying elements are covered by the existing language. However, an example should be added to the Guidance Document showing that generation connected at less than 100 kV is not included.

This item is considered complete and will be removed from future agendas.

- e. Discuss possible changes to threshold values.
 - i. 100 kV bright-line

The SDT accepts the recommendation in the draft Planning Committee report to maintain the status quo.

This item is considered complete and will be removed from future agendas.

- ii. Generation

- 1. Unit limits in Inclusion I2 and I4.

The SDT split Inclusion I2 into two parts as described in item 8a above.

This item is considered complete and will be removed from future agendas.

- 2. Single threshold for generation

Following the call with the PC and RAS leadership, the SDT debated the issue of establishing a single threshold value for generation. The Generation Threshold Sub-team believes that it has a logical argument that could be presented to defend selecting a single generation threshold. However, the SDT was reminded that the explicit charge that was given to them requires a technical justification and not just a logical argument. Given the information provided by the PC and RAS leadership, it is clear that any studies that might be able to be performed to show a technical justification for any generation threshold value would not be consistent with the Phase 2 timeframe. Such studies would require a great deal of subject matter expertise and lengthy periods of time to complete. It would be an expensive undertaking and is not something currently within the scope of the SDT or the abilities of the PC.

The SDT decided to leave the generation thresholds as is, as was suggested in the Planning Committee draft report. However, the SDT is concerned that this result will not live up to the promises made to industry during Phase 1. Therefore, the SDT will forward a request to the Standards Committee (SC) for a formal, funded study to resolve the matter of generation thresholds. This information will be included in the first Phase 2 posting.

A sub-team was formed to develop the criteria for the proposed study on generation thresholds. The request should emphasize that both continent-wide and

interconnection-wide thresholds are viable solutions. The sub-team will be: Brain Evans-Mongeon (lead), Jennifer Dering, Bill Harm, Rich Salgo, Jeff Gindling, Jonathan Sykes, and Tim Soles. The sub-team will produce a framework for the request by the end of March.

Action Item – 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.

The current Generation Threshold Sub-team is on hold pending delivery of the PC report. If no changes are seen in the report in this area, then the sub-team will be dissolved. If there are language changes on this issue in the final Planning Committee report, then the sub-team will be asked to explore these changes as per its original charter.

This item is considered complete and will be removed from future agendas. It can be re-opened if the final Planning Committee report changes the recommendation for this item.

iii. Local network

1. Power flow

The System Analysis and Modeling Subcommittee (SAMS) is suggesting a relaxation of the constraint for N-2 conditions. It is also suggesting that this item be considered from a planning perspective.

The SDT decided not to change the current constraints in Exclusion E3 and no power flow out of a local network will be allowed for any condition. The SDT is also staying with the concept of historical SCADA data as proof of flow as it believes that there are too many variables to be considered if this is changed to a planning perspective and it would violate the bright-line concept. However, an addition will be made to the Guidance Document section describing the data requirements to cover how to handle new facilities. The response to comments from Phase 1 on this issue will be utilized for this new description.

This item is considered complete and will be removed from future agendas.

2. Size limitation

SAMS is suggesting a 300 MW limit. The SDT believes that any limit is sufficiently described by the 300 kV ceiling. Reports received by the SDT from major metropolitan utilities on how Exclusion E3 will pertain to their systems support this conclusion.

This item is considered complete and will be removed from future agendas.

iv. Reactive resources

The Planning Committee report is going to suggest that the status quo be maintained. Some in the SDT thought that there should be a carve out for devices covered in Exclusions E1 and E3. However, the majority of the SDT felt that this would be too difficult to measure and the decision was to accept the PC suggestion.

This item is considered complete and will be removed from future agendas.

- f. Discuss the need to change the sequence of Exclusions based on the hierarchical application of the definition which starts with Exclusion E2 and then goes through Exclusion E4 to Exclusion E3 and finishes with Exclusion E1.

The SDT accepted this concept and the changes will be shown in the next posting. The movement will not be shown in redline however as this would mask any other changes made to the text. An explanation will be provided in the background material for the next posting explaining this action.

This item is considered complete and will be removed from future agendas.

- g. Discuss any needed changes to the ERO Statement of Compliance Registry Criteria due to the revised BES definition.

The SDT needs to identify needed changes to the criteria due to the revised definition. It should strive to eliminate redundancies – things should only appear in one place to avoid confusion and maintenance problems. There should be a thorough review of the use of BPS vs. BES.

While performing this work, the SDT may find other changes that should be made for clarity but that are not directly linked to the revised definition. The SDT should identify these changes separately from the revised definition changes.

Areas identified for review should be marked with comment boxes explaining why something was changed (or not changed).

A sub-group of Mr. Heidrich (lead), Barry Lawson, Phil Fedora, Ken Lotterhos, and Mr. Dobrowolski will work on this item and present a draft to the SDT for review.

Action Item – A sub-group led by Mr. 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.

4. **Discuss any needed Standard Applicability Changes due to the Revised BES Definition**

The SDT will review applicability of all standards. Mandatory standards will be reviewed first and then to make certain that new revisions aren't missed, BOT approved standards will be reviewed followed by standards in development. Regional standards will also be explored. If the SDT finds any non-applicability problems, they will be reported separately to the SC for consideration.

The work will be divided into two parts – one for the GO/GOP and the other for Transmission Owner/Transmission Operator (TO/TOP). Pete Heidrich will create a spreadsheet for the presentation of the results. The sub-groups will report back to the SDT by the end of March 2013.

The TO/TOP sub-group is Ms. Dering (Lead), Ajay Garg, Alain Pageau, Marcus Lotto, Ken Shortt, and Mr. Salgo.

The GO/GOP sub-group is Mr. Heidrich (lead), Mr. Evans-Mongeon, Mr. Garg, John Hughes, and Tim Soles.

Action Item – Pete Heidrich will develop a spreadsheet for the presentation of the applicability sub-group research findings.

Action Item – The two applicability sub-groups will present their findings to the SDT no later than the end of March 2013.

5. **Discuss Ramifications from Order 733 (on hold pending receipt of final Order)**

(Possible issues shown below in 'a' through 'd' for informational purposes only at this time.)

- a. Paragraph 126 - Remove the 100 kV minimum operating threshold language from Exclusion E3.
- b. Paragraph 155 - Modify Exclusion E3 to remove the 100 kV minimum operating voltage in the local network definition.
- c. Paragraph 164 - Implement Exclusion E1 so that the exclusions for radial systems do not apply to tie-lines for bulk electric system generators identified in Inclusion I2.
- d. Paragraph 214 - Implement Exclusion E3 so that the exclusion for local networks does not apply to bulk electric system generator tie-lines operated at or above 100 kV.

6. **Discuss Changes Needed for the Phase 1 Guidance Document (on hold pending receipt of final Order)**

While final resolution of the revised Guidance Document can't be reached until after a final Order is issued, Mr. Heidrich has been working on the SDT-approved changes that were derived from the industry comments. This is because it is believed that the SDT needs to have a final Guidance Document ready to issue as soon as possible after FERC delivers the final order so that entities can

develop implementation plans. Mr. Heidrich has finished the individual diagrams and is now working on the system diagrams with the understanding that he may need to make further changes when the final Order is issued. There will be a separate conference call convened to review the changes in the Guidance Document when it is completed.

7. Phase 2 Schedule

The Phase 2 schedule is in serious jeopardy. The SDT can't post for Phase 2 until there is a final Phase 1. In addition, there can be no posting until the final PC report has been delivered. NERC management has been informed of this situation.

8. Next Steps

The next steps for this project are for the various sub-groups to complete their work and for the SDT to review this work on its next conference call. Any other actions are dependent on the receipt of the final Planning Committee report and the final FERC Order.

9. Future Meetings

- a. No face-to-face meetings are scheduled at this time due to the uncertainty in receiving the final Order from FERC.
- b. A conference call is scheduled from 1:00 p.m. to 5:00 p.m. on Friday, April 12, 2013 to discuss the sub-team reports.

10. Action Item Review

The following action items were developed during this meeting:

- a. 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.
- b. A sub-group led by Mr. 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.
- c. Mr. Heidrich will develop a spreadsheet for the presentation of the applicability sub-group research findings.
- d. The two applicability sub-groups will present their findings to the SDT no later than the end of March 2013.

11. Adjourn

The chair thanked PG&E for its hospitality and adjourned the meeting at 12:00 p.m. PT on Thursday, February 21, 2013.