

## Meeting Notes for Project 2006-02 Assess Transmission Future Needs SDT

December 10–11, 2008

### 1. Administrative Items

#### a. Introductions and Quorum

The meeting was held at the offices of Duke Energy in Charlotte, NC and was called to order by the Chair at 8 a.m. EST on Wednesday, December 10, 2008.

Meeting participants were:

Darrin Church	Bill Harm	Doug Hohlbaugh
Bob Jones	Brian Keel	Ron Mazur
Tom Mielnik	John Odom, Chair	Bernie Pasternack
Bob Pierce	Chifong Thomas	Dana Walters
Ray Kershaw, Observer	Chuck Lawrence, Observer	Charles Long, Observer
Hari Singh, Observer	Bob Snow, Observer	Curt Stepanek, Observer
Ya-Chi Lin, Siemens, Guest	Ed Dobrowolski, NERC	

#### b. NERC Antitrust Compliance Guidelines — Ed Dobrowolski

There were no questions raised on the NERC Antitrust Compliance Guidelines.

#### c. Agenda and Objectives — John Odom

Two items were added to the agenda: a response to Bob Snow's e-mail on load curtailment and a discussion on the SPCTF SAR. The main objectives of the meeting were to decide on the single vs. two table issue and to finalize the comment responses.

### 2. Response to E-mail on Load Curtailment

Bob Pierce had proposed a response in e-mail sent to the SDT via the mail server prior to the meeting. This was used as the basis for the discussion. After much discussion, the SDT reached a general agreement. The SDT decided to appoint a sub-team to finalize language to directly address the matter. Charles will lead the sub-team with Bob Pierce and Bill Harm as members. The sub-team will report back to the SDT with the goal to resolve the issue prior to the next posting. The sub-team will also look at the wording of footnote #9 in light of the concerns raised.

**Action Item** — Charles will lead a sub-team consisting of Bob Pierce and Bill Harm that will address the load curtailment issues. The sub-team will report back to the SDT so that this issue can be resolved prior to the next posting.

### 3. Discussion of SPCTF SAR

The SDT decided that the SAR itself was consistent with the discussions held with the SPCTF but that the proposed standard could cause confusion. R1 was considered duplicative of TPL and the SDT would like to see it removed. R2 was acceptable to the SDT.

These comments were forwarded to Maureen Long for consideration.

### 4. Review Re-Formatted Tables Proposal — Doug Hohlbaugh

Doug presented a straw man proposal for a single table. The SDT favored this approach by a 9 to 1 margin although some clean-up is required. A sub-team was formed to address these issues with Doug as the lead and Bob Jones, Hari Singh, and Dana Walters as team members.

**Action Item** — Doug will lead a sub-team consisting of Bob Jones and Dana Walters that will finalize the performance table.

The SDT had several general comments concerning the table:

- Footnotes are acceptable as long as they are strictly explanatory and don't contain any new requirements.
- Interruption of Firm Transmission Service is a viable column heading for Stability. Loss of Non-Consequential Load is also viable in Stability in certain conditions.
- Extreme Events should be looked at further for any additional commonality that would allow for more collapsing of the table.
- The need for a white paper or guidelines on TPL was discussed with general agreement that a document would be useful to the industry.
- The footnote for P1 with regard to Interruption of Firm Transmission Service needs clarification.
- Defined terms such as Normal Clearing don't need to be explained again.

In addition, the SDT had several specific comments on table content:

1. Front (or top) notes — 'a' and 'b' may be for steady state only.
2. Footnotes should probably appear in the Table in logical order, i.e., the first one you come to in reading the table should be #1, the second should be #2, etc.
3. The sub-team may want to consider splitting up the footnotes by heading: steady state and stability if there are enough notes that only apply to a single state.
4. Need to clarify P0 for steady state vs. stability (if necessary).

5. Need to provide a redline copy that has red only for content changes from last posting so that reviewers can see the changes in requirements, not just format.
6. Try to distinguish between different categories with heavier lines (or other mechanisms) if it fits on 1 page.
7. EHV and HV designations okay as long as note references the BES.
8. Remove SLG from events list, since it is covered in the “fault type” column.
9. Check the requirements references against the revised version of the roadmap.
10. Clean up Extreme Event language to be consistent with P5 language.
11. Look at splitting up footnote #1 into smaller more coherent pieces.
12. Removed defined terms from footnote #1.
13. In footnote #9, check for use of firm load vs. firm non-consequential load.
14. In footnote #10, is the 2<sup>nd</sup> sentence more of a measure?
15. May want to change No<sup>9</sup> to ‘see footnote #9’.
16. Consider putting the footnotes ahead of the Extreme Events since all notes only refer to Planning Events.
17. Change front note #4 to correct problem with Supplemental Load Loss — only allowed for Stability.
18. Develop new footnote defining system adjustments.
19. Develop new footnote describing the 3 phase vs. SLG fault analysis issue.

After much discussion and assigning the sub-team to address the issues raised above, the SDT decide that the next posting will contain a single condensed table and a question will be asked as to how the industry feels on the topic.

## **5. Review Summary Responses to Comments — Sub-Team Leaders**

The responses to the industry comments were discussed with each of the SDT members responsible for the response leading the discussion. As a general rule, responders need to be sensitive to the number of people commenting on a particular issue.

### **Q1 — Bernie Pasternack**

- R2.1 — delete ‘at a minimum’.
- R2.2 — delete ‘at a minimum’.
- R6 — change ‘the’ to ‘any’ and replace ‘simulation studies’ with ‘the analysis’.
- R2.7.1.2 — change ‘schemes’ to ‘systems’.

### **Q2 — Bob Jones**

- Leave the Implementation Plan at 24 months for R2.4.1.
- R3.2 and R5.2 — delete ‘including those’.

### **Q3 — Dana Walters**

- PC is defined here at the request of NERC staff to give it a home in the standards and tie back to the Functional Model.

- Definition of Non-Consequential Load Loss is incorrect. UVLS and UFLS should be removed. This should be pointed out in a question in the next posting.
- Examples should be removed from the definition of Non-Consequential Load Loss.
- Any questions on SPS in Non-Consequential Load Loss should be fixed by the removal of the examples.
- New wording for the response on Consequential Load Loss was supplied.
- There is no need to define Non-Interruptible Load Loss as Interruptible Load Loss is a defined term.
- BES will be spelled out in the first standard reference.
- Front note #4 needs to be clarified as Supplemental Load Loss is only for Stability.
- Year One definition will be left as is.

**Q4 — Jim Useldinger**

Jim was not at the meeting and did not provide a draft response. Bernie is the sub-team leader and he will pursue a resolution of this item.

**Action Item** — Bernie will pursue a resolution to the Q4 comments.

**Q5 — Darrin Church**

There were no major issues with Q5 although the summary response needs to be clarified.

**Q6 — Ray Kershaw**

- Changes were suggested to R2.8 and R4.1. Ray, Hari Singh, and Chifong Thomas formed a sub-team to address the issues and supplied a draft that was reviewed, changed slightly, and accepted by the SDT. As a result, R4 has been eliminated.

**Q7 — Doug Hohlbaugh**

Doug is waiting on the resolution of several issues raised in Q15 to ensure consistency in the responses.

**Q8 — Tom Mielnik**

The revised definition of bus-tie breaker is anticipated to solve the issues raised in Q8.

**Q9 — Tom Mielnik**

- About one-third of the respondents are against this position but the SDT believes that to gain consistency with the directive in FERC Order 693 this position will be retained.

- As for economic issues raised. This is a reliability standard. Cost estimates were requested in other questions and will be utilized by the SDT in their decisions.
- The technical rationale for the SDT judgment on 300 kV must be supplied if questioned. The response supplied in the first posting can be cut and pasted here. It should also be pointed out that this is only for single contingencies.
- The different requirements for DC lines has been removed.

**Q10 — Ron Mazur**

There were no major issues but some minor clean-up should be performed for clarity.

**Q11 — Chifong Thomas**

- Change the numbering to R3.4 and change to bullet order.
- Change to table front notes was not accepted as the SDT feels that they are clear as stated.
- The Exelon response needs to emphasize that breaker fault is a single event and thus covered in Order 693 directives.
- For BPA, it should be pointed out the P6 is a simple clarification of the old C3.

**Q12, Q13, and Q14 — Bob Millard**

These were survey questions on cost, manpower, and timing issues. A generic response will be supplied for all comments.

**Q15 — Darrin Church**

- Local load — Order 693 doesn't allow loss for n-1 condition.
- 300 kV — see technical rationale supplied for first posting.
- R2.4.1 — changed for dynamics.
- Sensitivity — Order 693 is driving this response.
- Year One — Leave definition as is.
- Shunt device — common usage, shouldn't be a problem.
- Base conditions — user essentially defines the base within R1.
- Extreme Event #3b — deleted.
- DC lines — differentiation removed.
- Commenter suggested that the SDT is watering down requirements — industry consensus has driven the changes proposed by the SDT.
- Firm Transmission Service — is a NERC defined term.
- P5 — Protection System is a defined term. The SPCTF is further addressing this issue.
- Three phase fault — will be footnoted.
- Right of Way — this really hasn't been changed since the old standards, just clarified.

- Ride-through — Just need to document how the generator reacts. NERC is developing a new standard on this and it is an Order 693 directive.
- Operating Guide — ‘How’ is not covered in reliability standards.
- Initiation date — This is left to the utility and carried over from the old R2.1.
- Consequential Load Loss — This is germane and the SDT deleted duration and clarified the magnitude component.
- Voltage class — Provide the 300 kV response from the first posting. BES is a defined term.
- Measures — Will be supplied in the third posting.

#### **6. Review VRF and Time Horizons**

VRF were copied from earlier efforts of the SDT. Time Horizon is Long-range planning for all requirements. The SDT did not review these in depth due to time constraints.

#### **7. Review Measures**

This item was not discussed due to time constraints.

#### **8. Review Data Retention**

This item was not discussed due to time constraints.

#### **9. Review VSL**

This item was not discussed due to time constraints.

#### **10. Review Implementation Plan — Bernie Pasternack**

This item was not discussed due to time constraints.

#### **11. Next Steps — John Odom**

The final question responses are to be returned to Ed Dobrowolski no later than Friday, December 18, 2008. He will aggregate them into the comment form and perform a consistency review.

**Action Items** — Final comment responses are due by Friday, December 18, 2008.

#### **12. Next Meetings**

There will be a conference call and WebEx on Monday, January 12, 2009 from 11 a.m.–1:30 p.m. EST.

There will be a conference call and WebEx on Thursday, January 29, 2009 from 11 a.m.–3 p.m. EST.

There will be a face to face meeting on Tuesday, February 10, 2009 from 8 a.m.–5 p.m. EST; Wednesday, February 11, 2009 from 8 a.m.–5 p.m. EST; and Thursday, February 12, 2009 from 8 a.m.–noon EST in Atlanta, GA (tentative location).

There will be a conference call and WebEx on Monday, March 9, 2009 from 11 a.m.–3 p.m. EST as needed to perform any final cleanup for the third posting.

Details for all meetings and conference calls will be supplied at a later date.

### **13. Action Items and Schedule — Ed Dobrowolski**

The following action items were developed during this meeting:

- Charles will lead a sub-team consisting of Bob Pierce and Bill Harm that will address the firm transmission service and load curtailment issues. The sub-team will report back to the SDT so that this issue can be resolved prior to the next posting
- Doug will lead a sub-team consisting of Bob Jones, Hari Singh, and Dana Walters that will finalize the performance table.
- Bernie will pursue a resolution to the Q4 comments.
- Final comment responses are due by Friday, December 18, 2008.

The project is behind schedule. The third posting was supposed to be in December 2008 but will now probably be no sooner than March 2009.

### **14. Adjourn**

The Chair thanked Duke Energy for their hospitality and adjourned the meeting at noon EST on Thursday, December 11, 2008.