

## Notes

# Assess Transmission Future Needs — Project 2006-02

June 29-30, 2010

### 1. Administrative Items

#### a. Introductions and Quorum

The Chair brought the meeting to order at 8:00 a.m. CDT on Tuesday, June 29, 2010 at the offices of Xcel Energy in Minneapolis, MN. Meeting participants were:

Darrin Church	Bill Harm	Bob Jones
Ron Mazur	John Odom, Chair	Bernie Pasternack
Bob Pierce	Chifong Thomas	Dana Walters
Ray Kershaw, Observer	Charles Long, Observer	Hari Singh, Observer
Eugene Blick, FERC Observer	Ruth Kloecker, ITC, Guest	Ed Dobrowolski, NERC

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

No questions were raised on the NERC Antitrust Compliance Guidelines.

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

Two new items were added to the agenda: an overview of the FERC Order on TPL-002 Footnote B issued on June 11<sup>th</sup> and a discussion on developing questions for a possible NERC technical conference on footnote 'b'. The original item 2 on developing a definition of local load was amended to continue work on the development of a revised footnote 'b' and to decide on how to proceed with the two projects.

The objective of the meeting was threefold: (1) to make a decision on how to proceed with the two different projects (2006-02 & 2010-11), (2) continue to refine the revised footnote 'b', and (3) to resolve the responses to industry comments on the initial ballot of Project 2006-02.

## 2. Overview of the June 11<sup>th</sup> Order – Eugene Blick

Eugene provided an overview of key aspects of the order for the SDT. The order denied the request for rehearing and stay, and granted partial clarification and an extension of time. Eugene explained that the basis of the original June 30<sup>th</sup> deadline was the published schedule for Project 2006-02 that was filed with FERC as part of the last Reliability Standards Development Workplan. The additional time that has been granted is to assure that there is sufficient time for NERC to develop modifications to the standard that are responsive to the directive and orders.

Eugene emphasized the contents of paragraphs 20 and 21 as being the main technical areas of emphasis for the SDT. Paragraph 20 allows the SDT to come up with an equally and effective alternative approach. It also includes the original wording from paragraph 1794 from Order 693 for reference. It also cites the NERC Preliminary Staff Assessment for Order 693 where NERC stated that it was not the intent to plan the system to use radial configurations as the preferred method to serve load nor was it intended to plan to shed load for a single contingency. It was pointed out by the SDT that those comments were developed by NERC TIS and that not all of the applicable content of their comment was included in the June 11<sup>th</sup> Order including discussion of possible exceptions.

In paragraph 21, FERC cited the NERC reference in the rehearing request for possible exceptions only on the fringes of the system. The paragraph also reiterates the Commission position that no least common denominator approach or compromise to system reliability will be allowed in the final solution. Commission suggested a possible solution to the problem could be through the regional difference process or in a case-by-case exception process adjudicated by the ERO.

Eugene stated that the path the SDT was following in Project 2006-02 indicated to staff that the SDT agreed with FERC's position of not allowing any non-consequential load loss for a single contingency. This statement was based on the first four postings of TPL-001-2. The SDT responded that this was not the case at all but simply a reflection of the SDT trying to "raise the bar" in response to the Order 693 directive. Throughout the multiple postings, numerous industry comments (including some SDT members) were very critical of the SDT for this position but the SDT tried to stay the course. However, the resounding ballot defeat and the volume of negative votes based on the non-consequential load loss issue turned things around and showed that the approach to this issue needed to be changed.

The SDT pointed out an inconsistency in paragraph 21 wording where a least common denominator approach would be acceptable if BES reliability wasn't compromised.

The SDT also questioned whether NERC had the authority to grant exceptions on a case-by-case basis as suggested in the order.

Eugene stated that the SDT must look at the order as a whole and not concentrate on pieces of sentences.

**3. Footnote ‘b’ Development — John Odom**

Should footnote ‘b’ continue to be pursued as a separate project (2010-11) or rolled back into the TPL-001-2 project (2006-02) now that a time extension has been granted?

	Separate Project	Combined Project
Pros	<ol style="list-style-type: none"> <li>1. Industry is clearly focused on the footnote ‘b’ issues.</li> <li>2. The initial vote was close to acceptance so a relatively small change could gain acceptance in a relatively short timeframe.</li> <li>3. There would be one less point of contention in Project 2006-02.</li> </ol>	<ol style="list-style-type: none"> <li>1. There would be a single set of debate and comments.</li> <li>2. Less complexity with a single project.</li> <li>3. Industry would focus on how the different components of the standard work together.</li> <li>4. Less work to run a single project.</li> </ol>
Cons	<ol style="list-style-type: none"> <li>1. More difficult to see the total picture.</li> </ol>	<ol style="list-style-type: none"> <li>1. Too many issues to resolve which could put the March schedule in jeopardy.</li> <li>2. Lack of resolution on the Pacificorp interpretation could place schedule in jeopardy.</li> </ol>

The SDT decided to pursue two separate projects.

The SDT continued to work on developing a revision to footnote ‘b’. This development needs to emphasize that any non-consequential load loss should be the exception and not the rule. The perception of several parties was that the last attempt at re-writing footnote ‘b’ did not constrain the situation sufficiently and would thus weaken the standard.

The SDT attempted to incorporate the concept of 'local network Demand' into the footnote 'b' revision and to set it up as an exception rather than a rule. The latest effort at revising footnote 'b' is as follows:

b) No interruption of projected customer Demand is allowed except:

- Interruption of Demand that is directly served by the elements that are removed from service as a result of the Contingency
- Interruptible Demand or Demand-Side Management
- Local network Demand when:

- Loss of that local network Demand does not impact overall BES reliability, and
- The local network Demand to be shed is limited to Demand within two physical busses of the Faulted element, and
- The local network Demand to be shed is at a voltage level no greater than the Faulted element, and
- TBD (when to open the toolbox)

The amount of local network Demand to be shed is constrained to:

- No more than 50 MW or 10% of the overloaded Facility's applicable rating, whichever is less, and
- Can only be applied to cases where the Demand is over 90% of the forecasted system peak

Curtailed firm transfers is allowed, when coupled with the appropriate re-dispatch of resources obligated to re-dispatch, where it can be demonstrated that Facilities remain within applicable Facility Ratings and the re-dispatch does not result in the shedding of any firm Demand. Where Facilities external to the Transmission Planner's planning region are relied upon, Facility Ratings in those regions would also be respected.

FERC staff asked several questions about the revised text:

- Does every contingency create a local load area? Local load area is not associated with a contingency. It exists pre-contingency.
- Is there a specific voltage level associated with local load? No.
- When would dropping local load ever negatively impact the reliability of the BES? No scenario immediately came to mind.
- How do you determine what constitutes a bus? This led to a prolonged discussion on the 2 bus wording that was not resolved. There are many variables in this equation.
- Why isn't there a voltage limit?

- Why isn't there a time duration constraint on this? The 90% factor is seen as imposing a time constraint.
- Would this be allowed for every contingency?
- This doesn't seem to sufficiently address the exception versus rule problem? The TBD bullet needs to be fleshed out to come to an acceptable conclusion for this issue. The other bullets constrain the solution but the SDT still needs to figure out when this planning tool can be used.
- This doesn't address the regional difference or case-by-case exception clarification? The goal of the SDT is to try to come up with an acceptable national standard and to exhaust all avenues in doing same. Other solutions such as regional differences or a case-by-case exception would be examined only if a national solution can't be worked out. The SDT does not believe that this is only an issue in certain regions. Comments received to date from the various postings have indicated that it is a continent wide issue. It is not clear to the SDT that the ERO has the authority to grant exceptions on a case-by-case basis. This type of solution would have to be checked with NERC Legal before proceeding any further.
- This doesn't seem to address the fringe area concept? It does not address fringe areas. NERC's comment (referenced by FERC) actually stated "This issue is likely to be of consequence at the fringes of the various systems", but it does not limit the issue to only fringe areas. The SDT doesn't see how restricting this to a fringe area, assuming such could be defined, would adequately address all of the concerns raised by the SDT and industry.

The two bus discussion led the SDT to try to think of ways other than geographic or topological measures to define the situation. The SDT discussed whether there are measures associated with how the system responds that could be utilized. One concept that has promise is to move away from a specific bus limit and go to a solution based on distribution factors. Actions could be limited to only those loads where an entity could show a specified effect on the distribution factor. This concept will require more work before it can be submitted as a possible solution.

NERC staff has indicated a desire to hold a technical conference on this matter. The SDT agrees that such a meeting would be of value and has suggested the week of August 9<sup>th</sup> for such a meeting.

#### 4. Develop Responses to Initial Ballot Comments

The SDT reviewed the draft responses submitted by the sub-team and made the following actions:

- Deleted P0 from Requirement R1 as superfluous. Normal system is the key element. This did not necessitate a change in the response itself.
- Deleted 'scheduled maintenance' from Requirement R2, part 2.1.3. The response was changed accordingly.

- Changed header note ‘a’ as well as ‘j’ in response to comments from Tri-State.
- Changed the response to GTC on voltage ride-through.
- All other draft responses were accepted as written.

FERC staff raised questions about the change made to P5 at a prior meeting:

- Why were CT’s and PT’s excluded? The SDT felt that including CT’s and PT’s placed too many variables in the equation and made any planning analysis unreasonable. NERC has another group that is addressing the redundancy issue and the results of that effort may necessitate changes to the planning standard. There is no existing body of evidence that loss of CT’s or PT’s cause instability or cascading. The proposed list limits things to what truly needs to be studied by a planner. As proposed, the P5 event is still a significant increase over what is currently required and represents a raising of the bar.
- Why are batteries excluded – this was required in V0? The SDT does not agree that V0 included batteries since the language specifically was an ‘or’ and thus batteries didn’t have to be studied. In general, batteries are monitored in real-time and problems are addressed as they are found. Therefore, planners don’t really need to study this in a planning horizon.

## **5. Develop Questions for Next Posting**

The SDT decided to go with just one question for the next posting to try to maintain a focus on just the changes that were made in response to ballot comments:

- The SDT has made numerous revisions to TPL-001-2 and the Implementation Plan based on industry comments to the initial ballot. If you do not support these changes, please specify which requirement and/or part that you disagree with and include specific alternative language to resolve your concern.

## **6. Develop Questions for Technical Conference**

The SDT was requested to work on possible questions for a technical conference on footnote ‘b’ to be held by NERC in the near future. The SDT felt that an initial straw man developed by NERC staff contained too many questions. Four questions were developed designed to focus the industry on the key issue of local network demand and the clarifications submitted in the June 11<sup>th</sup> Order:

- Under what circumstances do you believe the existing footnote ‘b’ allows an entity to plan to shed non-consequential firm load for a single contingency (Category B)? Please provide specific information to the extent possible.

- The June 11<sup>th</sup> order from FERC suggested that planning to shed non-consequential firm load for a single contingency (Category B) could be applied at the fringes of a system. Is this limitation appropriate and if so, please define it? What other specific criteria could be applied to limit the planned use of non-consequential firm load loss for a single contingency (Category B)?
- If footnote 'b' were re-stated such that there would be no planned loss of non-consequential firm load allowed for a single contingency event (Category B), what changes to your transmission plan would be required? Please quantify your response to the extent possible.
- The June 11<sup>th</sup> order from FERC suggested that planning to shed non-consequential firm load for a single contingency (Category B) could be handled on a case-by-case basis with affected entities asking for an exception from the ERO. Could you support such a process? If your response is no, then what process would you suggest? If your response is yes, then what technical criteria should be developed to identify and evaluate cases?

The questions were submitted to NERC staff for consideration.

## 7. Next Steps – John Odom

The SDT decided to post TPL-001-2 as quickly as possible in order to get feedback from industry on the changes made in response to industry comments. Footnote 12 on non-consequential load loss represents a problem in that it depends on the resolution of the footnote 'b' issue. The SDT decided to delete the text of footnote 12 and to replace it with a note stating that the issue of non-consequential load loss will be decided in the footnote 'b' project (2010-11) and that when that resolution is achieved, the wording will simply be cut and pasted into TPL-001-2.

The SDT is going to request that the posting of TPL-001-2 be for a 30 day informal comment period as allowed by the Standard Committee's rules for high-priority projects.

## 8. Next Meetings

The SDT will meet for 2 full days immediately following, and in the same location, as the technical conference on footnote 'b'. Details will follow.

Based on posting TPL-001-2 sometime in July, the SDT scheduled a face-to-face meeting for a ½ day on Wednesday, September 15<sup>th</sup> and a full day on Thursday, September 16<sup>th</sup> at Xcel Energy in Denver, CO. Details will follow.

**9. Action Items and Schedule – Ed Dobrowolski**

Ed will clean up the documents and submit them to NERC staff for posting.

The project is slightly ahead of schedule at this time but with footnote ‘b’ and the Pacificorp interpretation resolution still outstanding, there is significant risk to the schedule moving forward.

**10. Adjourn**

The Chair thanked Xcel Energy for their hospitality and adjourned the meeting at 1530 CDT on Wednesday, June 30, 2010.