

Notes Under-frequency Load Shedding SDT — Project 2007-01

Florida Municipal Power Agency (FMPA) 8553 Commodity Circle, Orlando, FL, 32819 407-355-7767 (main) www.fmpa.com In the Board Room

October 5, 2009 | 8:00 a.m. – 5:00 p.m. Eastern October 6, 2009 | 8:00 a.m. – 5:00 p.m. Eastern

Dial-in Number: (866) 740-1260 | Access Code: 6088084

Participants, click here to join the meeting: https://cc.readytalk.com/r/ctzhs2am1zjd

1. Administrative

Roll Call

Stephanie Monzon welcomed the members and guests of the Standard Drafting Team for Project 2007-01 Underfrequency Load Shedding (see Roster — **Attachment 1a**).

- Paul Attaway Georgia Transmission Corporation
- Brian Bartos Bandera Electric Cooperative
- Jonathan Glidewell Southern Company Transmission Co. (on phone Day 2)
- Gary Keenan Northwest Power Pool Corporation
- Robert W. Millard Reliability First Corporation
- Steven Myers Electric Reliability Council of Texas, Inc.
- Mak Nagle Southwest Power Pool
- Robert J. O'Keefe American Electric Power
- Brian Evans Mongeon Utility Services, LLC
- Tony Rodrigues PacifiCorp
- Si Truc Phan TransEnergie
- Scott Berry Indiana Municipal Power Agency (on phone Day 1 & 2)
- Frank Gaffney Florida Municipal Power Agency
- Stephanie Monzon NERC (on phone)
- Philip Tatro NERC (on phone Day 1)



Observers

- Anthony Jablonski ReliabilityFirst Corporation (on phone Day 1)
- Pete Heidrich FRCC
- Steve Wadas Nebraska Public Power District
- Carol Gerou Midwest Reliability Organization
- Eric Mortenson Commonwealth Edison
- Scott Sells FERC Staff
- Laura Zotter ERCOT (on phone Day 1 & 2)
- Jill Loewer Utility Services, LLC

NERC Antitrust Compliance Guidelines

Stephanie Monzon reviewed the NERC Antitrust Compliance Guidelines. It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition. It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

2. Steps to Next Posting / Action Plan

The team reviewed the following items that must be completed prior to posting:

- <u>Next draft of UFLS Standard</u> (will need to include redline that highlight changes from last posting) completed during the Oct. 5-6 meetings (with the exception of the curves which will be finalized during a conference call).
- Revised EOP-003 requirements Completed during a prior conference call.
- <u>Comment Form</u> Review of questions assigned during meeting **due Oct. 9**th (to be discussed Oct. 12th)
- <u>Mapping Document</u> Carol G. will review the document and update consistent with the revised standard **Due Oct. 9**th (to be discussed Oct. 12th)
- <u>Implementation Plan Reviewed Oct. 6 and will be finalized over email.</u>
- Response to Comments / Summary Considerations
 - The sub-teams were asked to review the responses to comments for their questions and fill in the parking lots item with responses now that the requirements have been finalized for the next posting. The subteams were also asked to write up a summary consideration for the question (s) they worked on.
 - Consideration of Comments Assignments due Oct. 20th to be discussed Oct. 23rd



3. FERC Staff Feedback

Scott Sells provided staff input regarding the standard. He indicated that staff thinks the applicable entities identified in the standard are appropriate for the tasks defined in the requirements. FERC staff recommended that the team consider adding the **Transmission Planner** in the standard.

FERC staff reviewed the volts/hz requirement and consider it an appropriate requirement for the standard.

4. Review of UFLS Standard – Finalize Changes

The team discussed the draft standard and will conduct a "final" pass at the requirements. This is intended to be the last review prior to the third posting. The team will reviewed the remaining issues:

- Applicability
 - O **Transmission Planner -** The team decided not include Transmission Planner in the applicability since many Transmission Planners are Planning Coordinators or many Transmission Planners already have a Planning Coordinator they coordinate with. The team felt that the responsibilities in the requirements are appropriately assigned.
- Regional Entity boundary vs. region
 - The team discussed this recommendation and decided not to include it in the standard because there is sufficient understanding that region means the traditional RRO (now regional entity) area.
- Installed capacity percentage (voltage level)
 - O The team discussed this issue at length. Frank G. asserted that the increase in accuracy by reducing the generation level to 20 MVA at 60 kV would not increase (or be achieved) since the models do not currently contain the level of detail required to simulate generators at this level. The models currently do not contain detailed excitator modeling and the MOD standards do not require generators at 20 MVA at 60kV to provide model information. Without this modeling data the intent of requirement will not be achieved.
 - O Rob reminded the group that the intent on "lowering" the threshold to 20 MVA at 60kV is in part to coordinate with the Generator Verification standard (currently written at 20 MVA at 60 kV) and in part to capture more installed capacity based as concluded from the RFC assessment performed for the other drafting team effort.
 - Rob clarified that the team was not debating whether to keep the requirement (because that it was decided to keep a volts/hz requirement and this decision is supported by industry according to the second posting).
 - The team postponed resolving this issue via vote until Oct. 6 because of team member participation.



- On Oct. 6th the team conducted a team vote to determine if the standard should use BES or 20 MVA at 60kV in requirement R4 and R5.
- o The team voted 6 in favor of BES and 4 in favor of 20MVA/60kV.
- The standard was modified accordingly.
- Proposed language changes to include the curves proposed by Phil Tatro
 - o The team adopted Phil's language; however, they modified the title of the curves and modified the .xls files accordingly.
- Hydro Variance
 - o Si Truc to provide curve by Oct. 9th
 - o The team reviewed the proposal to modify requirement R4 part 4.1. the team recommended that Si Truc modify the curve to meet the HQ variance needs this curve will become Attachment 1A to the standard. This variance will be included in the third posting.
 - O WECC indicated that they need a variance for the time period less than .1 seconds Gary took an action item to go back to WECC and better understand if in fact a variance is needed or if the requirements can be met (and possibly modifying the current WECC UFLS criteria).
 - o MRO indicated that they need a variance to the existing UF curve because it does not go beyond 30 seconds. Carol G. proposed a modified curve for team consideration. The team did not oppose the curve but some indicated a concern that by extending the curve out to 60 seconds it implies that the simulations must be run to 60 seconds. Some thought that if the auditors were educated to understand that simulations should be run only the length of time it takes to stabilize frequency that they should not expect the simulation to necessarily run out to 60 seconds (but rather only the time it takes to stabilize frequency). The team will ask Phil Tatro to review the curve and weigh in on the issue.
- Revised language Requirement R7 "specify the content, format and schedule to"
 - o The team decided to delete the wording above. They decided that creation of a database (and annually maintaining) is the desired outcome and the other actions described above are implicit in the creation of a database. Adding these words is confusing and will lead to difficulties in generating compliance elements.
- Revised language Requirement R9 "tripping of load, and switching of reactive power devices and transmission lines"
- WECC Variance
 - o Gary will be advising the team if WECC needs a variance to the UFLS standard by **Oct. 9**th

5. Review and Agree to Compliance Elements

The team reviewed the VRFs and the Time Horizons and agreed to them for each requirement. The team postponed review of the VSLs and other elements for a subsequent conference call.



The team asked Tony J. to review to VSLs and reconcile them with the revised requirements. Tony agreed to review the VSLs and make any necessary conforming changes.

6. Comment Form

The team collected initial thoughts on questions for the next posting. Stephanie assigned individuals to look over specific questions to refine them. These action items are due Oct. 9th as the comment form will be finalized during the Oct. 12th conference call.

7. Action Items

Stephanie Monzon reviewed the actions that were open at the end of the meeting.

Action Items:	Status:	Assigned To:
Stephanie to follow-up with Compliance and Standards to determine if the draft standard can require that the group of PC's use their regional standards development processes to develop the UFLS program. The standard cannot require "how" the program is established only what is required of	Created 2/11 By 2/20 conference call Closed	Stephanie
the program.		
Stephanie will follow up with Gerry regarding the FERC direction to include the PRC-009 requirements into the draft standard. FERC did not support the team's argument that they could be covered under the NERC ROP data request.	Created 6/11/09	Stephanie
Barry's Comments:	Closed	Team
The team will review Barry's comments and will review Stephanie's list of major issues (for Barry's comments) and will email additions to the list by COB June 22 , 2009.		
The sub-teams will begin writing formal responses to the comments based on the discussion of issues at the June 10 th meeting.		
Question 1 and 2: Bob/Carol Bob and Carol will finalize the responses by June 19 — the team will review and discuss by exception on the July 7 th meeting — Complete		
Question 3: Rob The team will discuss response to comments (not done at the June in person meeting). Jonathan will lead the discussion and identify		



Action Items:	Status:	Assigned To:
the major issues for discussion. — Complete		
Question 4: Jonathan The team will discuss on the August 6 th call – Complete (on the July 20 call)		
Barry Francis: Rob The team will discuss on the August 6 th call – Complete		
Question 5: Gary, Tony, Si Truc The team will discuss on the August 24 th - Complete		
Question 6: Gary, Tony, Si Truc August 24 th call – the team did not discuss Question 6 responses. The team will discuss on conference calls after the meeting in Montreal. Completed on the 9/8/09 call		
Question 7: Brian By exception – completed on the 9/11/09 call		
Question 8: August 24 th call – the team did not discuss Question 6 responses. The team will discuss on conference calls after the meeting in Montreal. – completed on 9/25 call.		

8. Next Steps

Date	Location	Comments
August 6, 2009 from 9:30 a.mnoon EST	Conference Call and WebEx	Barry Francis
August 24, 2009 from 1–3:30 p.m. EST	Conference Call and WebEx	Question 5, 6, 7 and 8
September 1–2, 2009 from 8 a.m.–5 p.m. (both days)	In person meeting — Montreal	Confirmed
September 8, 2009 9:00 am – 12:00 pm Eastern	Conference Call and WebEx	Question 6
September 9, 2009 1:00 pm – 3:00 pm Eastern	Conference Call	FERC Staff review of standard
September 11, 2009 12:30 pm – 2:30 pm Eastern	Conference Call and WebEx	Question 7 by exception and Question 8



September 14, 2009 1:30 pm – 4:00 pm Eastern	Conference Call and WebEx	Question 8
September 22, 2009 11am – 1pm Eastern	Conference Call and WebEx	Question 8
September 24, 2009 10:00 am – 12:00 pm Eastern	Conference Call and WebEx	Question 8 - overflow Compliance Elements
September 25, 2009 9:00 am – 11:00 am Eastern	Conference Call and WebEx	EOP-003 Review Question 8 overflow
October 5, 2009 October 6, 2009 Two full days (8-5 pm)	In person meeting FMPA Orlando, FL	Implementation Plan, Standard Final Pass Compliance Elements Comment Form, Mapping Document, Remaining issues
October 12, 2009 1-3 pm eastern	Conference Call/Webex	Comment Form Hydro curve Mapping Document Implementation Plan
October 23, 2009 2-4 pm eastern	Conference Call/Webex	Second/Final Pass responses to comments Review of Attachment 1A – Phil
October 29, 2009 2-4 pm eastern	Conference Call/Webex	Review of VSLs and other compliance elements by exception
January 12-13, 2010 8-5 pm both days	FMPA	Go-no decision to ballot standard

9. Adjourn

The meeting adjourned at 3:00 pm eastern on Oct. 6th