

## Conference Call Agenda Underfrequency Load Shedding SDT — Project 2007-01

**April 2, 2009 | 1–2:30 p.m. EDT**

Dial-in Number: (281) 540-4943 | Conference Code: 6762229123

WebEx Information:

Topic: UFLS SDT

Meeting Password: standards

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### 1. Administrative

#### a) Roll Call

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

- Philip Tatro — National Grid (Chair)
- Paul Attaway — Georgia Transmission Corporation
- Brian Bartos — Bandera Electric Cooperative
- Jonathan Glidewell — Southern Company Transmission Co.
- Gerald Keenan — Northwest Power Pool Corporation
- Robert W. Millard — ReliabilityFirst Corporation
- Steven Myers — Electric Reliability Council of Texas, Inc.
- Mak Nagle — Southwest Power Pool
- Robert J. O'Keefe — American Electric Power
- Robert Williams — Florida Municipal Power Agency
- Brian Evans Mongeon — Utility Services, LLC
- Tony Rodrigues — Pacificorp
- Stephanie Monzon — NERC

#### Observers

- Anthony Jablonski — ReliabilityFirst Corporation
- Scott Sells — FERC Staff
- Scott Berry — Indiana Municipal Power Agency

#### b) NERC Antitrust Compliance Guidelines

Stephanie Monzon will review the NERC Antitrust Compliance Guidelines provided in **Attachment 1b**. 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. Discussion with PRC-024 Generator Verification Team — Impact to Draft Standard**

The team met via conference call with the Generator Verification Standard Drafting Team (GVSDT) to discuss the frequency settings in their respective standards. The GVSDT provided the team feedback. The team will review the feedback and will discuss impact to the standard.

### **Notes Based on Phil T's e-mail to the team (March 24, 2009):**

*Apparent Miscoordination between the PRC-024 Curve and UFLS Requirement R6.2*  
We discussed the apparent miscoordination between the generator underfrequency tripping requirement proposed in PRC-024 and the UFLS performance characteristics proposed in our Regional Reliability Standard Characteristics and our draft continent-wide standard. We asked the GVSDT team members whether they would consider a request to modify their proposed curve to coordinate with our standard. I have attached an Excel file (UFLS PRC-024 Comparison with Alternates.xls) that shows the proposed PRC-024 curve (salmon) and our proposed performance characteristic (red). I also have indicated the modification to the PRC-024 curve that we requested (olive). Rick Terrill of the GVSDT indicated he thought this request could be accommodated without jeopardizing coordination with turbine limitations, but he would like his team to review the request, in particular with emphasis on the ability to set protective relays to coordinate with both the revised curve and the turbine limitations. Rick will be getting back to us with how long the review may take, but we should have an answer before our call next Thursday. GVSDT members requested that we also consider whether we could modify our performance characteristics in the event our request cannot be accommodated, or if the GVSDT is able to meet us part way between the existing and requested curves. I have added in the Excel spreadsheet two (of potentially many) ways we could revise our characteristic. The first alternate curve (blue) adds another point in Requirement R6.2 while the second alternate (green) specifies a curve that parallels the PRC-024 curve maintaining 0.2 Hz margin to ~800 s.

I have attached two additional Excel spreadsheets. The first (Generator PRC-024 Comparison with Alternates.xls) illustrates the impact on coordination with turbine limitations resulting from our requested modification to the PRC-024 generator underfrequency tripping requirement. The file shows relation between the PRC-024 proposed curve (salmon), the alternate proposal (olive), and the turbine capabilities

used by the GVSDT in developing their standard. The second (Regions PRC-024 Comparison with Alternates.xls) illustrates the relation between the PRC-024 proposed curve (salmon), the alternate proposal (olive), and the existing regional requirements.

On our conference call we will discuss the GVSDT response, any concerns our UFLSDT members may have with our alternate proposal for the PRC-024 curve, and alternatives we may pursue, if necessary, to modify our performance characteristic.

#### *Proposed Modification to Our Frequency Overshoot Limit in UFLS Requirement R6.3*

We also discussed the change we considered on our last call to raise the frequency overshoot limit in Requirement 6.3 to 62.0 Hz. The GVSDT did not have any concern with this change.

On our conference call we will discuss any concerns our UFLSDT members may have with this change and agree on a final value to be included in our continent-wide standard: the original value of 61.5 Hz, the revised value of 62.0 Hz, or some value in between.

### **3. Review Feedback on Draft Standard**

The draft standard and associated documents were provided to Maureen Long for review prior to posting. Maureen provided feedback on the draft standard. The team will review and discuss the feedback and determine impact on the draft standard. Based on the comments it is suggested that the team discuss the comments related to the following:

- Responsible entity issues (R1-R9)
- Lack of reliability-based purpose (R3, R10-R12)
- Unclear performance requirements (R2-R7, R12)

### **4. Mapping Document, Comment Form, and Response to Comments**

Based on the changes and edits to the draft standard the team will discuss the changes and edits to the associated documents and will set a timeline for completion of these changes.

### **5. Project Schedule**

Stephanie Monzon will review the project schedule during the call if time permits.

### **6. Action Items**

Stephanie Monzon will review the actions that were open at the end of the meeting Mar. 13, 2009.

Action Items:	Status:	Assigned To:
The remaining questions for the comment report: Question 6: Phil T. and Jonathan Question 7: Gary K. Question 8: Larry B. and Bob M. Question 9: Rob O.	<b>Completed</b>	See first column
Stephanie will compile the draft responses and send out to the SDT prior to the next meeting (October 22–23).	<b>Completed</b>	Stephanie
Stephanie will draft the first draft of Option 3 and distribute to a sub group for review. Stephanie will use the description of Option 3 to facilitate her initial discussion with Gerry Adamski and Dave Cook. Stephanie will be expecting Dana, Rob, Phil, and Bob to weigh in on the draft description.	<b>Completed</b>	
Stephanie will follow up with the team via email regarding her initial discussion with NERC Management on the feasibility of Option 3.	<b>Completed</b>	
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.	<b>Created 2/11</b> <b>By 2/20 conference call</b>	Stephanie
Standard: The team needs to finalize the language in Requirement R6.4 — generator level	<b>Completed</b>	All
Response to Comments: Question 6: Phil and Jonathan have a draft for the <b>2/20</b> conference call (by 2/19) Completed Question 7: Rob and Brian M. to have a draft for the <b>2/20 call</b> (by 2/19) Completed Question 8: Brian Bartos to have a draft <b>for 2/27</b> conference call (by 2/24) – Phil provided a first pass to Question 8 - completed Question 9: Rob to have a draft for <b>the 2/27</b> conference call (by 2/24) Completed	<b>Completed</b>	Rob, Brian B., Phil, Brian M.
General Response to Comments (Find/Replace) – Jonathan at the final pass of the comment report (March 4 <sup>th</sup> ) Jonathan emailed out a version of the comment report for review on the 3/4/09 call.	<b>Completed</b>	Jonathan
General Response to Comments – Summary of Comments – Stephanie and Phil to have a draft <b>2/27 (by 2/24)</b>	<b>Completed</b>	Stephanie, Phil

Action Items:	Status:	Assigned To:
Mapping Document (characteristics to the draft standard) – Phil to create first draft by 2/24/09 (to be reviewed on the <b>2/27 call</b> ) - Completed	<b>Completed</b>	Phil
Comment Form – Stephanie to have a draft for the <b>3/4 conference call</b>	<b>Completed</b>	Stephanie

## 7. Next Steps

Stephanie will discuss the next meeting.

Date	Location	Comments
January 30, 2009 from 1–3 p.m. EST	Conference Call	Complete 1/13/09 agenda
February 11, 2009 from noon–5 p.m. with Lunch February 12, 2009 from 8 a.m.–5 p.m. with Lunch February 13, 2009 from 8 a.m.–noon	Austin, TX ERCOT Offices	ERCOT to host — confirmed with Steve
February 20, 2009 from 1–3 p.m. EST	Conference Call and WebEx	To discuss Question 6 and Question 7 (response to comments) and to discuss Requirement R6.4
February 27, 2009 from 1–3 p.m. EST	Conference Call and WebEx	To discuss Question 8 and Question 9, General Response to Comments (summary) and the Mapping Document.
March 2, 2009 from 2–5 p.m. EST	Conference Call and WebEx	To complete Question 9, Review Summary Responses to Comments and the Mapping document.
March 4, 2009 from 1–3 p.m. EST	Conference Call and WebEx	To discuss the Comment Form and one final review of the response to comments.
March 13, 2009 from 1–3:30 p.m. EST	Conference call and WebEx	To discuss the comment form, a final pass (by exception) of the mapping document and the response to comments and a review of the draft standard.
<b>Canceled</b> April 29–30, 2009 from 8 a.m.–5 p.m. both days	Atlanta	Jonathan confirmed Southern Co.'s availability

## 8. Adjourn

## Antitrust Compliance Guidelines

### I. General

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.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

### II. Prohibited Activities

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.

- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.
- Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

### **III. Activities That Are Permitted**

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation, Bylaws, and Rules of Procedure are followed in conducting NERC business.

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of the mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.
- Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.