NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Notes
Disturbance Monitoring SDT — Project 2007-11

November 3, 2009 | 8:00 a.m. – 5:00 p.m.
November 4, 2009 | 8:00 a.m. – 5:00 p.m.
ITC Holdings Corporation
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Main Phone 248-946-3000

Dial-in Number: 866.740.1260 | Access Code: 6088084

Tuesday's Webinar:
https://cc.readytalk.com/r/9rjqjv4eye3u

Wednesday's Webinar
https://cc.readytalk.com/r/4ulz3ubounpo

1. **Administrative**

   1.1. Roll Call
   Stephanie Monzon conducted roll call. Those present are listed below:

   - **Navin B. Bhatt — American Electric Power (Chair)**
   - James R. Detweiler — FirstEnergy Corp. (Phone Day -1,2)
   - Barry G. Goodpaster — Exelon Business Services Company (Phone Day -1,2)
   - Steven Myers — Electric Reliability Council of Texas, Inc.
   - Jeffrey M. Pond — National Grid
   - Jack Soehren — ITC Holdings
   - Stephanie Monzon — North American Electric Reliability Corporation
   - Alan D. Baker — Florida Power & Light Company (Phone Day -1, 2)
   - Daniel J. Hansen — RRI Energy, Inc.
   - Charles Jensen – JEA (Phone Day -1,2)
   - Tracy M. Lynd — Consumers Energy Co.
   - Susan McGill — PJM
   - Larry E. Smith — Alabama Power Company
   - Felix Amarh — Georgia Transmission Corporation
   - Robert (Bob) Millard — ReliabilityFirst Corporation

- o Willy Haffecke — Springfield Missouri City Utilities
- o Richard Ferner — WAPA

Observers:

- o Anthony Jablonski – ReliabilityFirst Corporation (Phone Day -1, 2)
- o Sherry Goiffon – Oncor
- o Greg Bradley – APP Engineering
- o Kevin Howard - WAPA
- o Bob Cummings – North American Electric Reliability Corporation
- o Bruce Pickett – FPL
- o Charlie Childs — Ametek Power Instruments
- o Ron Losh - SPP
- o Danny Johnson – FERC
- o Cynthia Pointer – FERC
- o Kal Ayoub – FERC
- o Laura Zotter – ERCOT

Stephanie conducted roll call. Navin welcomed everyone and conducted some announcements including retirements. Bob Millard will be retiring in mid November. Also, Richard Ferner will be retiring in December. Navin indicated that we will be looking for a replacement for Richard – representing the WECC area.

Navin also announced that Tracy Lynd has been nominated as the Vice Chair of the DM SDT. The SC will be considering Tracy's nomination and Stephanie will announce when they have approved Tracy's nomination.

The team discussed the communications policy. Navin endorsed in person participation in face to face meetings. Stephanie reviewed the genesis of this policy.

2. **NERC Antitrust Compliance Guidelines**
   Stephanie Monzon reviewed the NERC Antitrust Compliance Guidelines with the group.

3. **Review Status of Action Plan**
   The team conducted a brief review of where we are in the process related to developing responses to comments, revisions to the standard, and MVA task team efforts.

   3.1. Response to Comments
      3.1.1. <u>First Pass</u>
         - Team has conference calls through January 2010 to address remaining questions
      3.1.2. <u>Second Pass</u>

   3.2. MVA Task Team

3.2.1. <u>Industry Webinar –</u> it was decided that the data request would not be mandatory but rather voluntary. As a result the team will not be conducting a webinar on the data request.

3.2.2. <u>Template</u>
- Chuck will lead /coordinate - completed
- By September 1 – final version - completed

3.2.3. <u>Regulatory Review</u>
- Stephanie will coordinate
- Scheduled for September 9th between 10-noon eastern - completed

3.2.4. <u>Preamble</u>
- Chuck will lead
- By September 1 – final version - completed

3.3. Develop Standard Version 2 / Parking Lot

3.3.1. November 3 8-5 PM, November 4 8-5 PM LOCATION ITC – Detroit, Michigan - completed
- **Action Item:** Version 2 of Draft Standard (Navin, Dan and Laura will present proposal to the drafting team prior to the Nov. in person meeting)
- Maintenance and Testing - completed
- Other parking lot items – completed

3.3.2. February 2-3, 2010 – Location FPL Juno, FL

3.4. Supporting Documentation

3.4.1. Mapping

3.4.2. Implementation Plan

3.4.3. Other / Technical Reference Document

DM Standard Review

4. **Review of Meeting with FERC Staff – Feedback on DME Regional Standards**

Stephanie reviewed the intent of the meeting last week to review the regional standards related to DME. The meeting focused on the NPCC and RFC regional DME standards. Stephanie shared some of her observations that are relevant to the NERC DME standard activities. In particular, the comment made by a FERC staff participant in the meeting that the team should strive to coordinate with the regional drafting activities. How does the MVA analysis incorporate the regional drafting activities? Is there an opportunity for closer coordination?

Navin indicated that there is no connect direct tie between the PMU activities and the DME activities aside from that PMU's can be used (along with data storage) as a DDR device. There is nothing in the draft DME standard that impedes the use of PMUs as DDRs.

5. **Review of Standard**

The team will review the list of issues queued up during the call the week of Oct. 26, 2009.

5.1. Definitions for the FAQ document proposed by Alan including Time Sequenced vs. Time Stamp (complete)
- o The team completed this action item (see notes below)

5.2. Applicability – adding the RC to the standard for DDR related requirements (complete)
- o The team discussed what is being proposed by NPCC and determined that adopting the RC requirement to determine the DDR requirements is another form of fill in the blank and probably would not work for a continent wide standard. The team determined that the MVA task team will be developing criteria for FR and DDR that will eventually provide data to develop DDR requirements.
- o The team discussed the need for DDRs particularly what the need is to install DDRs or what the methodology is (aside from engineering experience) for selecting locations for DDRs. The team feels that if they understood the methodology and the use for the DDR data they could potentially write requirements for DDRs.
- o The team suggested that Phil T. from NERC may be able to answer the questions related to what the DDR data is used for and perhaps the methodology for installing DDRs.

5.3. Discuss "Process to Derive" – proposal to replace with "determine" (complete)
- o The team reviewed the embedded comment in the standard to review the issue. During previous discussions on the issue the team determined that while they were agreeable to adopting "determine" the team would have to review each instance in the standard where "process to derive" is used and determine if the replacement makes sense.
- o The team began by discussing the first instance of the use of "process to derive" in Requirement R1. A team member stated that if this term is removed several organizations would have concerns because they have existing contracts or agreements to have the TO's record data for equipment.
- o Several team members; however, pointed out that for DDR's there is no way to derive data. For, FR's there is a way to derive data (if you know two phases and the residual you can come up with the other); however for DDR's it is not understood how derivation of data would be implemented.
- o Taking a step back the team asked Danny to restate what the issue is with the term. He stated that the concern is how do you validate this process? Stephanie added that not only is validation an issue but the requirement states that you either record the data or have a process to derive the data and does not think that having the process is the intent of the requirement but is what it says. She verified with the team that the intent is that you have the DDR data either recorded or not but you have to have the data. Having said this having a process to derive does not mean that you have the data making this term problematic.
- o Regarding the issue brought up by a few team members that this clause is in the requirement because many entities have contracts with third parties to get the data Steve M. pointed out that this is a "how" arrangement to

meet the requirements not the "what". As a result, this term is not needed and does not mean that these agreements cannot continue exist.

- o The team decided to delete process to derive in the first requirement but also decided to remove the quarter cycle requirement (consider replacing with resolved to the millisecond).
- o The team reviewed Requirement R2 and deleted "process to derive" for the same reasons above. In discussing SOE's the team clarified that SCADA can be used as SOE and you will most likely have an SOE where there is an FR; however, SCADA can be used as an SOE only if you locally timestamp.
- o In reviewing Requirement R3 the several team members advocated deleting this requirement altogether on the basis that this requirement is specific to the use of relays as DME devices. Since the standard is not supposed to be equipment focused but rather function focused this is one of the reasons for deleting the requirement. While many team members agreed with this argument, a few team members were reluctant to delete the requirement because the team has had lengthy debates on the issue of quarter cycle vs. 4 milliseconds. Since a solution was not evident through discussion the team conducted an informal vote on whether to delete or keep the requirement. The results:
  - - 7 in favor of deleting the requirement
  - - 3 in favor of keeping the requirement
- o **ACTION ITEM:** Since Navin was not at the meeting during this team vote he was assigned an action item to review the argument and the team proposal and weigh in on the matter.
- o The team reviewed Requirement R5, R9 and R10 and replaced the words "process to derive" with shall record "electrical quantities in order to determine"

5.4. GSU monitoring – discuss revising requirement that they should be monitored separately to monitored at the point of interconnection (as a result of a comment in Question 9 submitted by Progress Energy) – the team did not address this issue since by the time this issue came up on the agenda there was not majority team representation.

5.5. Adding a requirement for Triggering methodology – (complete)
The team reviewed the NPCC standard for ideas on how to incorporate triggering requirements into the standard. In general the team decided that the triggering requirement would be a combination of establishing a requirement to have and use a methodology and to include specifics on what events should trigger for DDR records. As a result, requirement R13 was merged into the new triggering requirement R7 and the requirement for the length of record in Requirement R13 was preserved as the only remaining requirement in R13. This requirement applies to FRs and DDRs where continuous recording is not used for DDRs.

5.6. Adding maintenance and testing requirements (complete)

6. **Maintenance and Testing Requirements**

The team will discuss how and what to incorporate Maintenance and Testing requirements into the next version of the standard.

The team reviewed Richard's proposal provided in May, 2009 for maintenance and testing requirements. The team also reviewed the existing maintenance and testing requirement in PRC-018. The team made modifying changes to Richard's proposal but adopted the concept of the table (converted into words for the requirements). This new requirement is Requirement R14. The team reached agreement on the maintenance and testing requirements during the meeting.

The team also made one other change to the requirements by moving requirement R12 (the synchronization requirement) to the beginning of the standard – now Requirement R1.

7. **Review the NPCC DME Standard**

The team will review Jeff's notes on the NPCC DME standard. The goal of this review will be to refine the continent wide standard with any items from the regional standard that may address open items for the continent wide standard.

Jeff reviewed his notes on the NPCC standard distributed to the team earlier in October. He noted several important differences between the continent wide standard and the NPCC regional standard. The NPCC standard does not have a time synchronization requirement but rather requires that it be resolved to the quarter millisecond. In addition, the standard is proposing a term for current zero time.

8. **Discuss and Document Understood Definitions for Terms used in the Standard (DDR and FR Events)**

The team discussed Alan's proposal for defining Transient Fault Record. The team agreed to the definition with modifications including dropping the "transient" and defining Fault Record in addition to Sequence of Events Record, and Dynamic Disturbance Record. The team also reviewed the NERC Glossary of terms and determined that the team does not agree with the definition for Disturbance Monitoring Equipment. In particular, the team noticed that definitions for SOE, DDR and FR is embedded in the definition of the term DME. As a result, the team is proposing modifying the defined term for DME by removing the bullet items within the definition (they define SOE, DDR and FR) and promoting these definitions as stand alone definitions for Fault Record, Sequence of Events Record, and Dynamic Disturbance Record.

The team did not discuss defining or redefining event, fault or disturbance.

9. **Action Items**

Action Items	Status:	Assigned To:
The group must resolve how to develop requirements for maintenance and testing of disturbance monitoring equipment (DME). Possible options include, adding maintenance and testing requirements to the draft PRC-002 standard, asking the Standards Committee to transfer the maintenance and testing requirements to the standard drafting team (SDT) for Project 2007-17 Protection System Maintenance and Testing, or some other solution. Ultimately, the maintenance and testing requirements for DME should "look and feel" like the maintenance and testing requirements developed by the SDT for Project 2007-17 **Protection System Maintenance and Testing.**	**In Progress** **This issue will be addressed in the comment form to solicit industry feedback on how to proceed.** **Discussed at the 12/08/08 call:** **The team reviewed the status of the issue clarifying that the team was going to post the standard and solicit industry feedback on omitting these requirements. The team would use this feedback to propose an alternate to the SC or NERC staff – possibly create a supplemental to SAR to the Maintenance project.** **5/6/09 –** **Bob Cummings will take a proposal to the June SC meeting that the requirements for maintenance and testing be removed from Project 2007-11 and be included elsewhere (PRC-005). The team has reviewed an initial proposal of requirements for maintenance and testing that can be used once the team has direction regarding where to include these requirements.**	All
The team reviewed the suggestion made by WECC to move R6 from PRC-018-1 into the proposed standard. The team decided that this was a feasible approach to addressing the maintenance and testing requirements. Richard suggested that we should reword Requirement R6. Richard volunteered to reword for review by the team.	**Created 4/1** **5/6/09-** **Richard proposed requirements (5/3 e-mail to the team) that the team reviewed on 5/6/09. See action item above regarding maintenance and testing requirements.**	Richard F.

10. **Next Steps**

11. **2009 Schedule**

Date and Time	Location	Comments
February 18, 2009	Conference Call	To discuss the technical paper
March 2, 2009	Conference Call	Webinar presenters and NERC

		staff required on this call to prep for the webinar
March 12, 2009 11 a.m.–12:30 p.m. EST	Industry Webinar	Need to confirm date with team and speakers
March 30, 2009 — 1–5 p.m. EST March 31, 2009 — 8 a.m.–5 p.m. EST April 1, 2009 — 8 a.m.–5 p.m. EST	FRCC Offices Tampa, FL	Confirmed by Chuck.
April 27, 2009	Conference Call	To identify the comments that require discussion with the entire team during our May 5-6 meeting.
May 5, 2009 – 8-5 PM May 6, 2009 – 8-5 PM	FPL Juno Beach	Confirmed
June 3, 2009 – 1-4 PM EST	Conference Call	The team decided to conduct a conference call on June 3 1-4 PM EST
July 13, 2009 – 9 -11:30 PM EST	Conference Call	
August 18-20 2009	Two and a half day meetings	WAPA EPTC
August 26, 2009 2-4pm eastern	Conference Call and WebEx	Questions 4-5
August 28, 2009 10 am- Noon eastern	Conference Call and WebEx	Question 5
September 9, 2009 10 am- Noon eastern	Conference Call and WebEx	FERC Conference Call and WebEx
September 24, 2009 1-3 pm eastern	Conference Call and WebEx	Questions 7-8 (still need to schedule a call to address 7-8) Question 9
September 29, 2009 1-4pm eastern	Conference Call and WebEx	Question 9 overflow
October 7, 2009 1-3 pm eastern	Conference Call and WebEx	Question 9 overflow – completed first pass Questions 7 (SOE) – completed through BPA

October 14, 2009 1-3 pm eastern	Conference Call and WebEx	Questions 7 (SOE) - overflow

October 20, 2009
    1-3 pm eastern
	Conference Call and WebEx	Question 8 – NYISO (Number of cycles to create record)
		Questions 10, 13, 18
		Agenda for November Meeting
		    - Maintenance and Testing
		Questions 11-12
		Questions 16-17

November 3-4, 2009
    8-5 pm (both days)
	In Person Meeting	ITC – Detroit, Michigan
		    - Maintenance and testing
		    - NPCC DME standard

November 19, 2009 2-4 pm eastern	web-conference	- review triggering requirement (R7) specifically review Sherry's overlap proposal - Question 8
December 1, 2009 2-4 pm eastern	web-conference	
December 17, 2009 2-4 pm eastern	web-conference	
January 11, 2010 2-4 pm eastern	web-conference	
February 2 -3, 2009 8-5 pm (both days)	In Person Meeting	Juno, FL / FRCC Tampa (Alan will check on locations)

12. **Other**

13. **Adjourn**

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.