NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Conference Call and WebEx Notes

Disturbance Monitoring SDT — Project 2007-11

Monday, December 08, 2008 | 2–4 p.m. EST

1. Administrative

Roll Call

Stephanie Monzon conducted roll call:

- **Navin B. Bhatt — American Electric Power (Chair)**
- **Felix Amarh — Georgia Transmission Corporation**
- **Terry L. Conrad – Concurrent Technologies Corp.**
- **James R. Detweiler — FirstEnergy Corp.**
- **Barry G. Goodpaster — Exelon Business Services Company**
- **Robert (Bob) Millard — ReliabilityFirst Corporation**
- **Steven Myers — Electric Reliability Council of Texas, Inc.**
- **Jeffrey M. Pond — National Grid**
- **Jack Soehren — ITC Holdings**
- **Stephanie Monzon — NERC**
- **Alan D. Baker — Florida Power & Light Company**
- **Bharat Bhargava — Southern California Edison Co.**
- **Daniel J. Hansen — Reliant Energy, Inc.**
- **Charles Jensen — JEA**
- **Tracy M. Lynd — Consumers Energy Co.**
- **Charlie Childs — Ametek Power Instruments**
- **Richard Dernbach — Los Angeles Department of Water & Power**
- **Susan McGill — PJM Interconnection**
- **Larry E. Smith — Alabama Power Company**
- **Willy Haffecke — Springfield Missouri City Utilities**
- **Larry Brusseau — Midwest Reliability Organization**

Those on the drafting team not in attendance (in gray).

Observers:

- **Richard Ferner — WAPA**

2. NERC Antitrust Compliance Guidelines

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

3. Discuss Outline for the Technical Paper (1 hour)

The team discussed the overall approach for the technical paper. Stephanie prepared an outline of the paper and is posted on the Web site. The team made sub-group assignments to begin creating the content of the technical paper.

Felix suggested adding out of step relays to the technical paper because this may be a cause of system instability if criteria are not defined. Felix will work on this section of the paper and send out language to the group for their review.

Top 100 buses — add this to the technical paper. Chuck and Felix suggested that we need similar analysis for the regions but will propose language based on the FRCC top 100 buses. It may be helpful for the other members of the drafting team look into the top 100 for their regions.

Include event analysis experience and any conclusions that may be drawn from historical events (the August 14 blackout, etc.). Navin Bhatt and Tracy will work on proposed language and may reach out to Bob Cummings.

Include the impact of under voltage load shedding and special protection system on DME thresholds. Richard will do some research on this to determine if it is in fact impactful. Larry Smith will also do some research.

Include critical clearing time (on bus level very short) — recognized locations where we need to reduce back up clearing. Chuck will do some research this and try to collect information.

4. Discuss Revisions to the Draft Standard and Comment Form

The group reviewed the proposed changes to the comment form (submitted by Willy H.) and the standard (sections R5.1 and R5.2) proposed by Chuck, Alan, and Jim. The mapping document will be reviewed by Jim (to be completed by the end of the week December 12).

Conforming changes were made to the comment form based on the proposed changes submitted by Willy H. Stephanie will send out a revised version to the team for their review.

The team discussed the changes to R5 and R8 and agreed to make some conforming changes, to create **version 5.2.7** of the standard. Stephanie will be sending the redline and clean version of the standard to the team.

5. 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.**	All
Navin to lead a small group in drafting the **measures** for the requirements. Jack Soehren, Felix Amarh, and Barry Goodpaster volunteered to assist Navin.	**Open (remains open until we post)**	Navin Bhatt, Jack Soehren, Felix Amarh, and Barry Goodpaster
Steve Myers, Larry Brusseau, and Bob Millard to draft the **VRFs and VSLs.**	**Open (remains open until we post)**	Steve Myers, Larry Brusseau, and Bob Millard
Chuck, Jim and Alan will be proposing language for R5.1 and R5.2.	**Completed**	Chuck, Alan and Jim.
Willy will review the comment form to ensure that references to the standard are still correct.	**Completed**	Willy H.
Jim will look over the mapping form to ensure that references to the standard are still correct.	**New — due by December 12.**	Jim D.

6. Next Steps

- In person meeting
  - February 18–19 at the FRCC offices (two full days)
- Stephanie scheduled a call in January to continue discussing the technical paper and the posting of the standard
  - The team will meet over WebEx on January 22, 2009 from 2–4 p.m. EST.

7. Adjourn

The team adjourned at approximately 4:30 p.m. EST.

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Comment Form for 1st Draft of PRC-002-2 — Project 2007-11: Disturbance Monitoring and Reporting Requirements

Please use this form to submit comments on the proposed 1st draft of PRC-002-2 standard. Comments must be submitted by [Due Date in bold]. You may submit the completed form by e-mail to sarcomm@nerc.net with the words "DM Standard" in the subject line. If you have questions please contact Stephanie Monzon at stephanie.monzon@nerc.net or by telephone at 609-452-8060.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region (check all Regions in which your company operates)		**Registered Ballot Body Segment (check all industry segments in which your company is registered)**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
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	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, please list all that apply. Regional acronyms and segment numbers are shown on prior page.

Background Information

The purpose of this standard is to establish requirements for recording and reporting sequence of events (SOE) data, fault recording (FR) data, and dynamic disturbance recording (DDR) data to facilitate analysis of Disturbances. This standard will replace PRC-002-1 and PRC-018-1.

The purpose of revising the above standards is to:

1. Ensure each of the standards is complete and the requirements are set at an appropriate level to ensure reliability.
2. Ensure they are enforceable as mandatory reliability standards with financial penalties; the applicability to bulk power system owners, operators, and users, and as appropriate particular classes of facilities is clearly defined; the purpose, requirements, and measures are results-focused and unambiguous; the consequences of violating the requirements are clear.
3. Incorporate other general improvements described in NERC's Reliability Standards Development Plan: 2007-2009 (summarized and outlined in the Reliability Standard Review Guidelines attached as Appendix A).
4. Consider the items mentioned in the Standard Review Forms (excerpted from NERC's Reliability Standards Development Plan: 2007-2009) attached as Appendix B, prepared by the NERC staff, which attempt to capture comments from the:
    - FERC NOPR (Docket # RM06-16-00 dated October 20, 2006) ,
    - FERC staff report dated May 11, 2006 concerning NERC standards submitted with ERO application,
    - Version 0 standards development (see note 1), and
    - Regional Reliability Standards Working Group (RRSWG – a NERC working group involved with regional standards development).

The standard drafting team (SDT) also considered the following additional issues that were not completely captured but were stated or referenced in the above materials.

1. Modify PRC-002-1 to remove RRO in the applicability and eliminate the reference to RRO in PRC-018-1.
2. Create continent wide requirements applicable to Transmission Owners and Generation Owners.
3. The new standard (PRC-002-2) is being proposed based on the requirements of the existing PRC-002-1 and PRC-018-1 standards and a recommendation for replacing both of these existing standards is being proposed. The requirements in PRC-018-1 are being incorporated into PRC-002-2 with the exception of the maintenance and testing requirements in PRC-018-1.
4. Satisfy the standards procedure requirement for five-year review of the standards.

Key Issues Deliberated by the SDT:

In drafting the first version of this standard, the SDT considered the following issues:

1. The SDT decided to develop requirements for functionality for Disturbance data recording, rather than developing equipment requirements. The team focused on the "what" instead of the "how" i.e. not prescriptive.
2. The Disturbance data requirements are focused upon
    a. Sequence of events
    b. Faults
    c. Dynamic disturbances

    The requirements can be met by a variety of equipment.
3. In developing the Disturbance data requirements the SDT decided to focus on transmission voltage levels of 200 kV and above generators 500 MVA and above and generating stations 1500 MVA and above based on expected impact to the interconnected system. It is the team's strong belief that application of requirements below these values will require significant additional resources, while adding little value. The team recommends that requirements, if any, below these thresholds should be based on local needs to be identified by Regional Entities, while working with respective Transmission Owners and Generator Owners.
4. For each type of data (sequence of events, faults, dynamic disturbances) the requirements are arranged as follows:
    a. Locations for recording or having a process to derive: 1) sequence of events; 2) faults; and 3) dynamic disturbance recording data;
    b. Equipment to be monitored at above locations;
    c. Specific quantities to be monitored for above equipment; and
    d. Technical parameters to ensure adequate data to analyze a Disturbance
5. The SDT recommends that the maintenance and testing requirements for disturbance monitoring equipment will be more appropriately addressed in Project 2007-17 Protection System Maintenance and Testing. The reasons are: 1) often, the equipment used for protection application also provides Disturbance recording functionality; 2) often, the expertise called upon to install/maintain/test Disturbance recording equipment resides with those expert on protection equipment; and 3) four of the standards PRC-005-1, PRC-008-0, PRC-011-0, PRC-017-0 related to maintenance and testing are currently being merged into one (PRC-005).
6. The SDT decided to post the first version of this standard without compliance elements (VRFs, VSLs, etc.) to focus attention on the requirements alone.
7. The criterion used by SDT in selecting locations for monitoring/recording Disturbance data is based on minimum number of elements (lines, transformers, etc.) or minimum amount of generation at the location. This approach facilitates the measurement of compliance to the requirements.
8. The SDT used the following IEEE definition to be used in this standard: Substation - As defined by the IEEE C2-2002, (National Electric Safety Code) "An enclosed assemblage of equipment , e.g. switches, circuit breakers, buses and transformers, under control of qualified persons , through which electric energy is passed for the purpose of switching or modifying its characteristics." As an example, if at a given location, there are three (3) 500 kV lines and four (4) 230 kV lines along with a 500-230 kV transformer, this is one substation with 7 lines above 200 kV.

The comment form includes questions to help in finalizing the development of the standard prior to balloting. **For questions where you agree with the SDT, please state that you agree and if available, please provide supporting documentation. If you disagree with the SDT, please explain why you disagree and provide data to support your position.** To improve the standard, the SDT would encourage responses to as many of these questions as you can answer.

The Disturbance Monitoring Standard Drafting Team would like to receive industry comments on this group of standards. Accordingly, we request that you include your comments on this form and e-mail to sarcomm@nerc.net with the subject "DM Standard" by **[Due Date in bold]**.

You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

Requirements to be Included in the Revised Standard

1. The SDT has considered the "fill in the blank" items that are specified in the NERC Board approved Standard PRC-002-1 that the Regional Reliability Organizations were required to develop "procedures and requirements" for the entities to meet. The SDT also considered all the requirements specified in FERC approved PRC-018-1. The SDT is proposing to change the "fill in the blank" characteristics into entity specific requirements and merge them with the PRC-018-1 requirements. The new proposed Standard PRC-002-2 will contain all requirements related to disturbance monitoring with the exception of maintenance and testing (see Question #3 below). Do you agree with the SDT's proposal to develop and merge all disturbance monitoring requirements into a new PRC-002-2?

   ☐ Yes

   ☐ No

   Comments:

2. The SDT has developed a mapping document showing the requirements in PRC-002-1 and PRC-018-1 and where in proposed PRC-002-2 those requirements are reflected (except maintenance and testing – see Question #3 below). Do you agree that the SDT has reflected all the appropriate requirements of PRC-002-1 and PRC-018-1 in the proposed PRC-002-2?

   ☐ Yes

   ☐ No

   Comments:

3. The SDT recommends that the maintenance and testing requirements for disturbance monitoring equipment will be more appropriately addressed in Project 2007-17 Protection System Maintenance and Testing since 1) often, the equipment used for protection application also provides Disturbance recording functionality; 2) often, the

expertise called upon to install/maintain/test Disturbance recording equipment resides with those expert on protection equipment; and 3) four of the standards PRC-005-1, PRC-008-0, PRC-011-0, PRC-017-0 related to maintenance and testing are currently being merged into one (PRC-005). A representative from the DMSDT would work with the Project 2007-17 Protection System Maintenance and Testing SDT to assist in the development of maintenance and testing requirements for equipment with DM functionality. The SDT proposes to write a SAR to transfer the maintenance and testing requirements in PRC-018-1 to Project 2007-17 Protection System Maintenance and Testing. Do you agree with the SDT proposal to initiate the transfer of the maintenance and testing requirements for DM equipment, stand alone or otherwise, to Project 2007-17 Protection System Maintenance and Testing is appropriate?

☐ Yes

☐ No

Comments:

4. The criteria used by SDT in selecting locations for monitoring/recording Disturbance data is based on minimum number of elements (lines, transformers, etc.) or minimum amount of generation at the location. This approach facilitates the measurement of compliance to the requirements. Do you agree with the SDT's approach? Please provide specific comments, examples or recommendations.

   ☐ Yes

   ☐ No

   Comments:

5. In developing the Disturbance data requirements the SDT decided to focus on transmission voltage levels of 200 kV and above generators 500 MVA and above and generating stations 1500 MVA and above based on expected impact to the interconnected system. It is the team's strong belief that application of requirements below these values to include the entire BES will require significant additional resources, while adding little value.

   5.1. The status of GSU circuit breakers for generating plants connected at 200 kV and above shall be monitored on each generator with a nameplate capacity of 500 MVA or higher or an aggregate plant total of 1500 MVA or higher. Do you agree with these nameplate values? Please provide supporting documentation for these values. If not, please propose alternate values and their technical basis.

   ☐ Yes

   ☐ No

   Comments:

   5.2. In part, Requirement R5 states that Fault Recording data shall be recorded at generating plants connected at 200 kV and above when a generator has a nameplate capacity of 500 MVA or higher or when there is an aggregate plant total of 1500 MVA or higher. Do you agree with these values? Please provide supporting documentation for these values. If not, please propose alternate values and their technical basis.

   ☐ Yes

☐ No

Comments:

5.3. Requirement R7 states that DDR data shall be recorded or derivable for all substations having a total of 7 or more transmission lines connected at 200 kV or above. Do you agree with these values? Please provide supporting documentation for these values. If not, please propose alternate values and their technical basis.

☐ Yes

☐ No

Comments:

Requirements related to Sequence of Events

6. Requirement R3 states that Transmission Owners and Generator Owners shall record the time stamp or have a process in place to derive the time stamp to within 4 milliseconds of input received for the change in circuit breaker position (open/close) Do you agree with this value? If no, propose an alternate value and please provide technical basis.

☐ Yes

☐ No

Comments:

7. Do you agree with the other Sequence of Events requirements under R1 through R3 of the proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

☐ Yes

☐ No

Comments:

Requirements related to Fault Recording

8. Requirement R6 states that Fault Recording data shall include a pre trigger record length of at least two cycles and: a post trigger length of at least 50 cycles, or the first three cycles and the final cycle of an event. Do you agree with the requirement? If not, please propose alternate values or requirements and provide rationale.

☐ Yes

☐ No

Comments:

9. Do you agree with the other Fault Recording requirements in R4 through R6 of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

   ☐ Yes

   ☐ No

   Comments:

Requirements related to Dynamic Disturbance Recording

10. Requirement R7 also states that a DDR which is required at a substation meeting the location requirement (see question 11) shall be considered optional if a DDR meeting all of the requirements of R7 and R9 is found to be located one or two substations away. Do you agree with this option found in Requirement R7? If no, provide rationale.

    ☐ Yes

    ☐ No

    Comments:

11. Requirement R8 states that Generator Owners shall record or have a process in place to derive DDR data for generating plants with an aggregate of 1500 MVA nameplate rating or higher. Do you agree with these values? Please provide supporting documentation for these values or (if you disagree with the values) alternate values and their technical basis.

    ☐ Yes

    ☐ No

    Comments:

12. Do you agree with the other Dynamic Disturbance Recorder requirements in R7 through R9 of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

    ☐ Yes

    ☐ No

    Comments:

General Questions

13. Do you agree with the Other Disturbance Monitoring Requirements 10 and 11 of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

    ☐ Yes

☐ No

Comments:

14. Are you aware of any regional variances that would be required as a result of the proposed standard?

☐ Yes

☐ No

Comments:

15. Are you aware of any conflicts between the proposed standard and any regulatory function, rule, order, tariff, rate schedule, legislative requirement, or agreement?

☐ Yes

☐ No

Comments:

16. Do you have any other questions or concerns with the proposed standard that have not been addressed? If yes, please explain.

☐ Yes

☐ No

Comments:

17. Do you agree with the implementation plan as proposed by the SDT? If no, provide a plan that would be acceptable to you and provide rationale.

☐ Yes

☐ No

Comments:

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Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region (check all Regions in which your company operates)		**Registered Ballot Body Segment (check all industry segments in which your company is registered)**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
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   ☐ Yes

   ☐ No

   Comments:

2. The SDT has developed a mapping document showing the requirements in PRC-002-1 and PRC-018-1 and where in proposed PRC-002-2 those requirements are reflected (except maintenance and testing – see Question #3 below). Do you agree that the SDT has reflected all the appropriate requirements of PRC-002-1 and PRC-018-1 in the proposed PRC-002-2?

   ☐ Yes

   ☐ No

   Comments:

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Comments:

4. The criteria used by SDT in selecting locations for monitoring/recording Disturbance data is based on minimum number of elements (lines, transformers, etc.) or minimum amount of generation at the location. This approach facilitates the measurement of compliance to the requirements. Do you agree with the SDT's approach? Please provide specific comments, examples or recommendations.

☐ Yes

☐ No

Comments:

5. In developing the Disturbance data requirements the SDT decided to focus on transmission voltage levels of 200 kV and above generators 500 MVA and above and generating stations 1500 MVA and above based on expected impact to the interconnected system. It is the team's strong belief that application of requirements below these values to include the entire BES will require significant additional resources, while adding little value.

   5.1. The status of GSU circuit breakers for generating plants connected at 200 kV and above shall be monitored on each generator with a nameplate capacity of 500 MVA or higher or an aggregate plant total of 1500 MVA or higher. Do you agree with these nameplate values? Please provide supporting documentation for these values. If not, please propose alternate values and their technical basis.

   ☐ Yes

   ☐ No

   Comments:

   5.2. In part, Requirement R5 states that Fault Recording data shall be recorded at generating plants connected at 200 kV and above when a generator has a nameplate capacity of 500 MVA or higher or when there is an aggregate plant total of 1500 MVA or higher. Do you agree with these values? Please provide supporting documentation for these values. If not, please propose alternate values and their technical basis.

   ☐ Yes

☐ No

Comments:

5.3. Requirement R7 states that DDR data shall be recorded or derivable for all substations having a total of 7 or more transmission lines connected at 200 kV or above. Do you agree with these values? Please provide supporting documentation for these values. If not, please propose alternate values and their technical basis.

☐ Yes

☐ No

Comments:

Requirements related to Sequence of Events

~~5.~~6. Requirement R3 states that Transmission Owners and Generator Owners shall record the time stamp or have a process in place to derive the time stamp to within 4 milliseconds of input received for the change in circuit breaker position (open/close) Do you agree with this value? If no, propose an alternate value and please provide technical basis.

☐ Yes

☐ No

Comments:

~~6. The status of GSU circuit breakers for generating plants connected at 200 kV and above shall be monitored on each generator with a nameplate capacity of 500 MVA or higher or an aggregate plant total of 1500 MVA or higher. Do you agree with these nameplate values? If no, propose alternate values and please provide technical basis.~~

~~☐ Yes~~

~~☐ No~~

~~Comments:~~

7. Do you agree with the other Sequence of Events requirements under R1 through R3 of the proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

☐ Yes

☐ No

Comments:

Requirements related to Fault Recording

8. Requirement R6 states that Fault Recording data shall include a pre trigger record length of at least two cycles and: a post trigger length of at least 50 cycles, or the first three cycles and the final cycle of an event. Do you agree with the requirement? If not, please propose alternate values or requirements and provide rationale.

   ☐ Yes

   ☐ No

   Comments:

~~9. In part, Requirement R5 states that Fault Recording data shall be recorded at generating plants connected at 200 kV and above when a generator has a nameplate capacity of 500 MVA or higher or when there is an aggregate plant total of 1500 MVA or higher. Do you agree with these values? If not, please propose alternate values and rationale.~~

~~☐ Yes~~

~~☐ No~~

~~Comments:~~

~~10.~~9. Do you agree with the other Fault Recording requirements in R4 through R6 of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

☐ Yes

☐ No

Comments:

Requirements related to Dynamic Disturbance Recording

~~**11.** Requirement R7 states that DDR data shall be recorded or derivable for all substations having a total of 7 or more transmission lines connected at 200 kV or above. Do you agree with these values? If no, propose alternate values and rationale.~~

~~☐ Yes~~

~~☐ No~~

~~Comments:~~

~~12.~~10. Requirement R7 also states that a DDR which is required at a substation meeting the location requirement (see question 11) shall be considered optional if a DDR meeting all of the requirements of R7 and R9 is found to be located one or two substations away. Do you agree with this option found in Requirement R7? If no, provide rationale.

☐ Yes

☐ No

Comments:

~~13.~~11. Requirement R8 states that Generator Owners shall record or have a process in place to derive DDR data for generating plants with an aggregate of 1500 MVA nameplate rating or higher. Do you agree with these values? Please provide supporting documentation for these values or (if you disagree with the values) alternate values and their technical basis.~~If not, please propose alternate values and rationale.~~

☐ Yes

☐ No

Comments:

~~14.~~12. Do you agree with the other Dynamic Disturbance Recorder requirements in R7 through R9 of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

☐ Yes

☐ No

Comments:

General Questions

~~15.~~13. Do you agree with the Other Disturbance Monitoring Requirements 10 ~~through~~ and 11 of this proposed standard? If no, provide specific suggestions that would make the requirements acceptable to you.

☐ Yes

☐ No

Comments:

~~16.~~14. Are you aware of any regional variances that would be required as a result of the proposed standard?

☐ Yes

☐ No

Comments:

~~17.~~15. Are you aware of any conflicts between the proposed standard and any regulatory function, rule, order, tariff, rate schedule, legislative requirement, or agreement?

☐ Yes

☐ No

Comments:

~~18.~~16. Do you have any other questions or concerns with the proposed standard that have not been addressed? If yes, please explain.

☐ Yes

☐ No

Comments:

~~19.~~17. Do you agree with the implementation plan as proposed by the SDT? If no, provide a plan that would be acceptable to you and provide rationale.

☐ Yes

☐ No

Comments:

~~Do you agree with the SDT that in developing the Disturbance data requirements focusing on transmission voltage levels of 200 kV and above generators 500 MVA and above and generating stations 1500 MVA is appropriate? If no, please provide alternate values and technical rationale.~~

~~☐ Yes~~

~~☐ No~~

~~Comments:~~