Implementation Plan for PRC-002-NPCC-1

Disturbance Monitoring

Background

In developing the Implementation Plan for PRC-002-NPCC-1 the Standard Drafting Team considered the following:

1. The requirements listed in this Regional Standard are intended to cover all aspects of the utilization of Disturbance Monitoring equipment. The intent of the Standard is to be more stringent than the continent wide Standard under development at NERC. After the approved NERC continent wide Standard is issued, PRC-002-NPCC-1 will be revisited to eliminate any redundancies.

2. The refueling outage schedules of nuclear plants will be considered when determining their compliance.

3. Any implementation plan will be impacted by the resource availability and approval processes of the Reliability Coordinators, Transmission Owners, and Generator Owners.

4. It is assumed the Reliability Coordinators have already established their DDR needs. If not, "time zero" will be after the Reliability Coordinator issues the locations and needs for additional DDR equipment.

Effective Dates

1. Within two (2) years of FERC and Canadian entities' approvals, entities shall be 50 percent compliant at facilities required to have DME capabilities by:

   a. Installing Sequence of Events (SOE) capability at 50 percent of the facilities that previously had no SOE capability (percent complete will be based on the number of facilities completed)

   b. Installing additional SOE capability to facilities with existing SOEs such that 50 percent of the total required capability is complete (percent complete will be based on the number of SOE points required)

   c. Installing Fault Recording capability at 50 percent of the facilities that previously had no Fault Recording capability (percent complete will be

based on the number of facilities completed)

d. Installing additional Fault Recording capability to facilities with existing Fault Recording capability such that 50 percent of the required capability is complete (percent complete will be based on the number of traces required)

e. Installing Dynamic Disturbance Recording (DDR) capability at 50 percent of the facilities that previously had no DDR capability (percent complete will be based on the number of facilities completed versus those required by the Reliability Coordinator)

f. Installing additional DDR capability to facilities with existing DDR capability such that 50 percent of the required capability is complete (percent complete will be based on the number of elements as required by the Reliability Coordinator)

2. Within three (3) years of FERC and Canadian entities' approvals, entities shall be 75 percent compliant at facilities required to have DME capabilities by:

a. Installing SOE capability at 75 percent of the facilities that previously had no SOE capability (percent complete will be based on the number of facilities completed)

b. Installing additional SOE capability to facilities with existing SOEs such that 75 percent of the total required capability is complete (percent complete will be based on the number of SOE points required)

c. Installing Fault Recording capability at 75 percent of the facilities that previously had no Fault Recording capability (percent complete will be based on the number of facilities completed)

d. Installing additional Fault Recording capability to facilities with existing Fault Recording capability such that 75 percent of the required capability is complete (percent complete will be based on the number of traces required)

e. Installing DDR capability at 75 percent of the facilities that previously had no DDR capability (percent complete will be based on the number of facilities completed versus those required by the Reliability Coordinator)

f. Installing additional DDR capability to facilities with existing DDR capability such that 75 percent of the required capability is complete (percent complete will be based on the number of elements as required by the Reliability Coordinator)

3. Within four (4) years of FERC and Canadian entities' approvals, all (100 percent) SOE, Fault Recording, and DDR capability shall be installed to satisfy the requirements of this Standard.

Reference

NPCC Criteria:

A-5 Bulk Power System Protection Criteria

A-7 NPCC Glossary of Terms

A-10 Classification of Bulk Power System Elements

A-15 Disturbance Monitoring Equipment Criteria

NPCC Guides:

B-26 Guide for Application of Disturbance Recording Equipment

B-28 Draft Guideline for Generator Sequence of Event Monitoring

SP-6 Synchronized Event Data Reporting

A NPCC Directory will be developed for Disturbance Monitoring. It will contain supporting information and details from the Criteria and Guides that are not incorporated in the Standard.

Version History

Version	Date	Action	Change Tracking
1	January 6, 2010	Approved by NPCC Membership	
1	February 9, 2010	Approved by NPCC Board of Directors	
1	November 4, 2010	Approved by NERC Board of Trustees	
1	October 20, 2011	FERC Order issued approving PRC-002-NPCC-1 and its Implementation Plan	