



**MEETING MINUTES
MIDWEST RELIABILITY ORGANIZATION
Protective Relay Subcommittee**

Holiday Inn Select – Bloomington, MN
August 25, 2010 – 12:00 pm to 5:00 pm
August 26, 2010 – 8:00 am to 12:00 pm

1. Call to Order

Protective Relay Subcommittee (PRS) Vice Chair Lin called the meeting to order at 1:00 pm.

2. Welcome

Vice Chair Lin welcomed all those in attendance. Mr. Jesberg determined that a quorum was present. The following members and MRO staff were present during the meeting:

PRS Members Present

Ding Lin, MH, Vice Chair
Ken Birt, MEC
Ron McIvor, OPPD
Robert Frank, MDU
Abiodun Olayiwola, MISO
Richard Quest, XEL

Steve Mittelsteadt, BEPC
Mike Gates, ITC
Len Yee, SPC
David Bisel, MP (2nd day only)
Keith Orsted, ATC
Terry Hopkins, DPC

PRS Members Absent

Mark Peterson, GRE

Deven Bhan, WAPA, Chair

Staff Present

Dan Jesberg, MRO Secretary,

John Seidel, MRO, Alt. Secretary

Guests

Dan Schoenecker, MRO

3. Standards of Conduct and Anti-Trust Guidelines

Pursuant to Policy and Procedure 4, Mr. Jesberg reviewed the Standards of Conduct and Anti-Trust Guidelines.

4. Consent Agenda

a. Approve Agenda

Mr. Lin reviewed the meeting agenda and solicited the subcommittee for comments, additions, or changes.

b. Approve Minutes of June 7 & 8, 2010 Meeting

Mr. Jesberg called for discussion on the meeting minutes of the June 7 & 8 2010 meeting.

Upon motion duly made by Mr. Quest and seconded by Mr. Yee, the Protective Relay Subcommittee unanimously approved the minutes of

the June 7 & 8, 2010 Protective Relay Subcommittee meeting as submitted.

5. Chairman's Report

Chair Bhan had, prior to the start of the meeting, delegated the Chair responsibilities to Vice Chair Lin for the duration of the August meeting. Vice Chair Lin had nothing to report.

6. NERC Activities

a. SPCS Report

The SPCS has recently completed a transmission & generation protection coordination technical paper. Mr. Quest will send this paper to the PRS as soon as possible. The SPCS had also recently completed its system protection chapter for the NERC Reliability Handbook.

The NERC standards development process has targeted PRC-001, PRC-005, and PRC-023 as the top priority PRC standards for completion in the next 12 months. Additionally, NERC has plans to begin working on a new standard that shall address protective relay performance during recoverable power swings.

7. PRS Activities

a. Update on SPS Review Team activities

Mr. Jesberg presented the SPS Review Team log and gave a brief update on the group's recent activities.

b. Update on relay misoperations data collections.

Mr. Jesberg gave a brief presentation of the statistics pertaining to the collected misoperations data for 2010.

8. Review Draft MRO Misoperations "Cause" Category Description

Mr. Jesberg presented the draft list of protection system misoperation cause categories. This list was developed by MRO staff based on a list developed by Reliability First Corporation.

The PRS went through each cause category line by line and refined the descriptions to better capture and better explain the most common and most plausible causes of misoperations. New categories were added as needed.

Discussion on how the categories would be used involved a debate on what input should be acceptable from the data submitter and what would be acceptable from the peer reviewer. The PRS decided that the submitters should have the ability to choose their own cause category, and that it is up to them to best justify their selection. The peer reviewers reserve the right to challenge the data submitter based on the description of the misoperation that is provided.

Action Item:

Mr. Jesberg will ensure that the new cause categories are incorporated into the next quarter protection system misoperations request.

9. MRO "Asset Replacement Plan" Discussion Questions

Mr. Jesberg, Mr. Seidel, and Mr. Schoenecker presented the MRO "Asset Replacement Plan" concept to the group. Additionally, some draft discussion questions were used as basis for developing data requests and refining existing data requests – in particular those for PRC-003 – such that proper information could be collected to better justify certain assets for replacement.

Action Item:

As it pertains to the Asset Replacement Program, MRO staff will develop new data requests and refine the quarterly misoperations request based on input from the PRS.

The group discussed developing a look-back data request using the 2009 misoperations data collection. It was decided that the data would be sorted by the Misoperations Review Team for follow-up questions pertaining to equipment inadequacy related events – specifically, electromechanical and solid state relays will be targeted for scrutiny. In order to determine the performance of relay types with respect to misoperations, the group also determined that the existing population of relays must be catalogued according to relay type. This will be collected as a data request to all transmission owners.

Action Item:

Mr. Jesberg will work with the Misoperations Review Team to review the 2009 misoperations data and develop a data request to capture better documentation and data on equipment inadequacy related protection system failures.

10. Discuss the Latest Draft of the MRO SPS Guideline

Mr. Seidel presented the latest draft documents pertaining to the "MRO SPS Guideline." The PRS provided some basic comments on their current stage of development. These documents are to continue their review during the next MRO Planning Committee meeting.

11. White Paper: OOS Protection Practices in the MRO Region

This item was tabled.

12. Other White Paper Developments

This item was tabled.

13. Other Business

a. OPPD June 15th Event.

Mr. McIvor gave a brief presentation of the June 15th, 2010 event that occurred at OPPD's Nebraska City area. The PRS discussed the event, its impacts, and ideas on corrective action.

14. Next Meetings

The next meeting is tentatively scheduled for November 15 and 16, 2010, from 12:00pm to 5:00pm and 8:00am to 12:00pm respectively. The meeting is to be held at the Holiday Inn Select in Bloomington, Minnesota.

15. Adjourn

The meeting was adjourned at 12:00pm on August 26th, 2010.

Prepared by:
Dan Jesberg, Secretary, Midwest Reliability Organization