



**MEETING MINUTES  
MIDWEST RELIABILITY ORGANIZATION**

**Protective Relay Subcommittee**

Holiday Inn Select – Bloomington, MN

January 20, 2009 – 12:00pm – 5:00pm

January 21, 2009 – 8:00am – 12:00pm

**1. Call to Order**

Protective Relay Subcommittee (PRS) Chair Bhan called the meeting to order at 1:02pm.

**2. Welcome**

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

**PRS Members Present**

Deven Bhan, WAPA, Chair  
Keith Orsted, ATC  
Ken Birt, MEC  
Len Yee, SPC  
Richard Quest, XEL  
Ding Lin, MH

Don Raveling, MDU, Vice Chair  
David Bisel, MP (phone)  
Ron McIvor, OPPD  
Dede Subakti, MISO (phone)  
Steve Mittelsteadt, BEPC  
Russ Miller, ALT (phone)

**PRS Members Absent**

Mark Peterson, GRE  
Steve Wadas, NPPD

Terry Hopkins, DPC

**Staff Present**

Dan Jesberg, MRO, Secretary

John Seidel, MRO, Alt. Secretary

**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**

Chair Bhan reviewed the meeting agenda and solicited the subcommittee for comments, additions, or changes.

**Items 10c and 10d were added to the agenda.**

*a. Approve Minutes of November 18, 2008 Meeting*

Mr. Jesberg called for discussion on the meeting minutes of the November 18, 2008 meeting.

***Upon motion duly made by Mr. Birt and seconded by Mr. McIvor, the Protective Relay Subcommittee unanimously approved the minutes of the November 18, 2008 Protective Relay Subcommittee meeting as amended.***

*b. Approve minutes of joint PRS-TAS meeting 10/17/08*

Mr. Jesberg called for discussion on the meeting minutes of the joint PRS/TAS meeting held on October 17, 2008.

***Upon motion duly made by Mr. McIvor and seconded by Mr. Mittelsteadt, the Protective Relay Subcommittee unanimously approved the minutes of the October, 2008 joint PRS/TAS meeting as amended.***

**5. Chairman's Report**

Chair Bhan had no news to report.

**6. MRO Draft Procedure for NERC EOP-004**

Chair Bhan presented the latest draft of the MRO procedure for NERC EOP-004. Mr. Raveling led the discussion of the paper.

**Action Item:**

Mr. Birt will redraft appendix A of the procedure and email it to the group for review during the March PRS meeting. Mr. Jesberg will make some minor requested modifications to the document and release to the group for commenting. The commenting period will last until the March PRS meeting.

**7. Technical Reference Papers**

*a. Recommended Auto-Reclosing*

Mr. Yee presented the latest draft of the white paper concerning the auto-reclosing practices in the MRO.

***The PRS approved of the final draft as it was amended during the meeting. MRO administrative staff will properly format the document and distribute the final version to the PRS. The paper will be brought before the MRO RAC for final approval at their March 4, 2009 meeting.***

The PRS suggested that Mr. Yee present the document at the MN Power Systems Conference and the Western Protective Relay Conference. This may be discussed further during a future meeting and after the paper has been approved by the RAC.

*b. Thermal ratings of CTs and scaling factors*

Mr. Mittelsteadt presented the latest draft of the white paper titled "Considerations for Adequate Metering & Telemetry during Short-Term Overloads of Transmission Lines." The PRS held a discussion on the draft. Mr. Mittelsteadt will continue to work on the white paper.

**8. NERC Activities**

*a. Relay Maintenance Standards drafting*

This item was not discussed.

*b. SPCS*

Chair Bhan did not have any news to report. Significant progress is expected to be accomplished by the SPCS during the first quarter of 2009. Chair Bhan plans to have more information to report during the PRS's next meeting.

**9. PRS Activities**

*a. Update on SPS Review Team Activities*

Mr. Jesberg presented the SPS Review Team log to the PRS. Along with its normal duties, the SPS Review Team will begin the "5-year reviews" of SPS as required by MRO Procedure for NERC PRC-014 beginning in April. Since the last PRS meeting, the MRO has released the latest MRO Procedures for PRC-012 and PR-014. Mr. Jesberg will begin to contact individual SPS owners regarding the MRO SPS review schedule by the end of January.

Mr. Subakti updated the PRS on the status of the review of the Story Wind Generation SPS. Florida Power and Light withdrew its application for review and informed the MRO that the SPS will not enter service. The SPS Review Team considers the matter closed.

*b. Relay Misoperations Review Status*

Mr. Jesberg informed the PRS that the collection of relay misoperations data is continuing and the full data set should be available by the beginning of February.

**Action Item:**

The Misoperations Review Team is to draft a summary report on the 2008 misoperations data. This report will serve as a prelim for a "lessons learned" report that the Misoperations Review Team is to develop later on. The initial summary report will be due by the March meeting. The "lessons learned" report will be due by the next meeting thereafter.

**10. Other Business**

*a. PRC-023—Planning Coordinator-Critical lines 100-200kV*

There was discussion on identifying the "Planning Coordinators" in the MRO region. The PRS concluded that only the Planning Coordinators can explicitly identify which lines in the region are considered critical to the reliability of the bulk electric system.

*b. Lessons learnt-past relay operations*

This item was not discussed.

*c. MRO investigations into the retirement of the Big Stone Runback SPS*

MRO staff is seeking clarification from Otter Tail Power (OTP) on whether there is one SPS associated with Big Stone generator or two SPSs. Additional clarification is also needed as to whether the SPS misoperated on 2-20-08.

***MRO staff will forward the correspondences they have had thus far with OTP regarding the Big Stone SPS and its potential mis-operation. The PRS will decide if a formal request should be made to obtain all SPS documentation as per PRC-015 R.3. The PRS will also determine if the review of the Big Stone SPS (per PRC-014) should be performed in 2009.***

*d. Modifications to the MRO Procedure for PRC-002*

Mr. Bisel expressed concern for a potential misinterpretation in regards to some wording in the MRO Procedure for PRC-002. This applied to several

sections of document that pertained to listing out the required locations of disturbance monitoring devices. Mr. Bisel's concern was that a misinterpretation could significantly change the original intent of the required locations.

***The PRS ordered MRO staff to reword the document so as to better reflect the original intent of the location criteria.***

*e. UFLS SPS Definition*

Mr. Seidel described a proposed system that monitors load shedding that occurs during a UFLS event and trips feeds in response. Mr. Seidel's question was whether or not this system would fall under the category of an SPS. Individual members shared their opinions on whether the described system would qualify as an SPS.

**11. Next Meetings**

*a. Establish 2009 Meeting Schedule*

March 3 and 4, 12:00pm – 5:00pm and 8:00am – 12:00pm

June 4 and 5, 12:00pm – 5:00pm and 8:00am – 12:00pm

**12. Adjourn**

Having no further business, Chair Bhan adjourned the meeting at 12:12pm.

Prepared by:

Dan Jesberg, Secretary, Midwest Reliability Organization