



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

Crowne Plaza Hotel & Suites – Bloomington, MN  
August 22, 2011 – 12:00 pm to 5:00 pm  
August 23 2011 – 8:00 am to 12:00 pm

**1. Call to Order**

Protective Relay Subcommittee (PRS) Chair Bhan called the meeting to order at 1:01 pm.

**2. Welcome**

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

**PRS Members Present**

Deven Bhan, WAPA, Chair  
Len Yee, SPC  
Richard Quest, XEL  
Steve Mittelsteadt, BEPC  
Ron McIvor, OPPD  
Mark Peterson, GRE  
Abiodun Olayiwola, MISO

Ding Lin, MH, Vice Chair  
Russ Miller, ITC  
Greg Hill, NPPD  
David Bisel, MP  
Keith Orsted, ATC  
Terry Hopkins, DPC  
Ken Birt, MEC

**PRS Members Absent**

Robert Frank, MDU

**Guests**

Tim Nissen (1<sup>st</sup> day), OPPD

Calvin Singleton, WAPA

**Staff Present**

Dan Jesberg, MRO, Secretary

John Seidel, MRO, Alt. Secretary (1<sup>st</sup> day)

**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 August 22 and 23 Meeting Agenda*

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

*b. Approve Minutes of May 16 and 17, 2011 Meeting*

Chair Bhan called for discussion on the meeting minutes of the May 16 and 17, 2011 meeting.

***Upon a motion duly made by Mr. Hopkins and seconded by Mr. Quest, the Protective Relay Subcommittee unanimously approved the minutes of the May 16 and 17, 2011 Protective Relay Subcommittee meeting as amended.***

*c. Approve Minutes of June 23, 2011 Meeting*

Chair Bhan called for discussion on the meeting minutes of the June 23, 2011 meeting.

*Upon a motion duly made by Mr. Birt and seconded by Mr. Miller, the Protective Relay Subcommittee unanimously approved the minutes of the June 23, 2011 Protective Relay Subcommittee meeting as amended.*

*c. Approve Minutes of July 28, 2011 Meeting*

Chair Bhan called for discussion on the meeting minutes of the July 28, 2011 meeting.

*Upon a motion duly made by Mr. Miller and seconded by Mr. McIvor, the Protective Relay Subcommittee unanimously approved the minutes of the July 28, 2011 Protective Relay Subcommittee meeting as amended.*

**5. Chairman's Report**

*a. Welcome – Notes and Remarks*

Chair Bhan welcomed all those in attendance. Chair Bhan gave a brief lecture on his understanding of how the procedures produced by the PRS fit in with the MRO's compliance monitoring functions.

Chair Bhan also called for volunteers and nominations for a new 2012 Chair and Vice Chair for the PRS.

**6. NERC Activities**

*a. SPCS Report*

Mr. Quest gave a brief report on the latest activities and discussions held by the NERC SPCS. This group is continuing its ongoing efforts to develop technical papers on protective relay performance during power swings and remote backup protection. During its last meeting, the SPCS also discussed development of a continent wide definition of an SPS and the continuation of its assessment of the PRC standards concerning SPS.

*b. PRC-005-2 Status*

Mr. Peterson gave a brief update on the status of the draft standard PRC-005-2. The latest industry input suggests that the current draft is too prescriptive on the issues of UVLS and UFLS. The draft standard was recently modified to address UVLS and UFLS maintenance and testing concerns and is currently out for industry comment.

*c. PRC-004-3 Status*

Mr. Jesberg gave a brief update on the status of the drafting of PRC-004-3. At this time, the drafting team has only just begun to process the first round of industry comments concerning the pilot draft.

**7. MRO 2011 Draft Procedures for PRC-003**

Chair Bhan led the discussion on furthering the development of the MRO's procedure for PRC-003.

As part of its development of the MRO's procedure for PRC-003, the PRS elected to adopt or reject the following:

- The PRS elected to reject the use of the NERC registration criteria as part of the overall criteria for identifying reportable generator protection system misoperations. They instead elected to revert to the 250 MW limit used in the existing version of the procedure.
- The PRS elected to remove parts of the registration criteria for which were not currently being applied to the MRO region.
- The PRS adopted an expanded list of protected transmission system elements.

*Upon a motion duly made by Mr. Birt and seconded by Mr. Quest, the Protective Relay Subcommittee unanimously approved the draft MRO Procedure for PRC-003-1.*

**Action Items:**

Chair Bhan will present the approved draft MRO Procedure for PRC-003-1 to the MRO OC for further discussion and approval.

**8. MRO 2011 Draft Procedures for PRC-012**

Mr. Jesberg held a discussion on the newly drafted documents addressing the MRO's procedure for PRC-012. The PRS decided that it would be better to defer to the judgment of the MRO SPSRT on developing an expanding data collection checklist for the procedure.

**Action Items:**

MRO staff will coordinate with the SPSRT to develop an expanded SPS Review Information Package checklist.

**9. 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. Mr. Hopkins has elected to step down from the SPS Review Team. Mr. Mittelsteadt was elected to take Mr. Hopkins' position on the group.

*b. Update on relay misoperations data collections.*

Mr. Jesberg gave a brief overview on the current status of the H1 2011 Misoperations data collection efforts.

*c. Develop New PRS Charter*

Mr. Jesberg led the group through development of the PRS's new charter. The PRS elected to develop the membership requirements around geography. The philosophy was to prescribe that there would be at least eight members representing eight geographic regions (Minnesota, Wisconsin, North Dakota, South Dakota, Iowa, Nebraska, Saskatchewan, and Manitoba). In addition, there would be at least one member who would represent a Reliability Coordinator residing within the MRO footprint. Lastly, the MRO representative sitting on the NERC SPCS would serve in the PRS membership.

*The draft PRS Charter will move onto the MRO OC for review and approval.*

*d. Discuss Misoperations Database Development*

Mr. Jesberg gave a brief update and the development status of the MRO's Misoperations data collection and handling database.

**10. GMD Protection & Control Issues Discussion**

Mr. Hill led a discussion on how different entities within the region were working to prepare for GMD events.

**11. Facility Ratings Methodology**

Mr. Mittelsteadt requested that PRS members provide comments on rating methodologies used by their companies.

**Action Items:**

Mr. Mittelsteadt will develop and release to the PRS, a questionnaire related to rating methodologies used in the MRO region.

**12. Other Business**

No other business was discussed.

**13. Next Meetings**

The next face to face meeting of the PRS will be held on November 7 and 8, 2011, from 12:00 pm to 5:00 pm and 8:00 am to 12:00 pm respectively. The location of this meeting will be established at a later time.

**14. Adjourn**

The meeting was adjourned at 11:57 am on August 23<sup>rd</sup>, 2011.

Prepared by:

Dan Jesberg, Secretary, Midwest Reliability Organization