

MEETING MINUTES
MIDWEST RELIABILITY ORGANIZATION
Reliability Assessment Committee
Holiday Inn Select – Bloomington, MN
November 2, 2007 – 9:00am

1. Call to Order

Chairman Nguyen called the meeting of the Reliability Assessment Committee to order at 9:00am. The following Members, Guests, and Staff were present:

Members Present

Hoa Nguyen, MDU, Chairman
Randy Lindstrom, NPPD, Vice Chairman
John Seidel, MRO, Secretary
Dale Burmester, ATC (via phone)
Dennis Florom, LES
John Krajewski, MEAN (via phone)
Ron Mazur, MH
Dan Dahlgren, OPPD
Ed Weber, WAPA (via phone)
Chris Plante, WPS (via phone)

Guests Present

Wenchun Zhu, ATC (MRO TAS Chairman) (via phone)
Dave Rudolph, BEPC (MRO RAS Chairman) (via phone)
Alan Burbach, LES (MRO MBS Chairman) (via phone)
Robert Coish, MH (Liaison from MRO Compliance Committee) (via phone)
Carol Gerou, MP (via phone)
Dave Duebner, MISO (via phone)
Tim Owens, NPPD (MRO RAS Vice Chairman) (via phone)
Devan Bhan, WAPA (MRO PRTF Chair) (via phone)

Staff Present

Salva Andiappan
Adam Flink
Sandy Humenansky

2. Determination of Quorum

Secretary Seidel determined that a quorum was present.

3. Standards of Conduct and Anti-Trust Guidelines

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

4. Consent Agenda

a. Approve Meeting Minutes of September 5, 2007 Meeting

Chairman Nguyen called for discussion on the minutes of the September 5, 2007 Reliability Assessment Committee meeting.

Upon motion duly made by Vice Chairman Lindstrom and seconded by Mr. Mazur, the Reliability Assessment Committee unanimously approved the minutes of the September 5, 2007 meeting as amended.

- b. *Approve Meeting Minutes of September 14, 2007 Conference Call*
Chairman Nguyen called for discussion on the minutes of the September 14, 2007 Reliability Assessment Committee conference call.

Upon motion duly made by Mr. Krajewski and seconded by Mr. Mazur, the Reliability Assessment Committee unanimously approved the minutes of the September 14, 2007 conference call meeting as amended.

- d. *Approve 2008 Meeting Dates*
Chairman Nguyen referred the Committee to Tab 4 which contained the proposed 2008 meeting dates.

Upon motion duly made by Mr. Florum and seconded by Vice Chairman Lindstrom, the Reliability Assessment Committee unanimously approved the 2008 meeting dates.

- c. *Approve the Protection Relay Subcommittee Charter*
Chairman Nguyen referred the Committee to Tab 4 which contained the draft charter for the new Protective Relay Subcommittee (PRS), which had been approved to be converted from the Task Force status. With the discussion led by Messrs. Mazur and Bhan, the Committee modified the charter to refine the language for scope and functions of the PRS.

Upon motion duly made by Mr. Mazur and seconded by Mr. Burmester, the Reliability Assessment Committee unanimously approved the charter for the new Protective Relay Subcommittee as amended.

The Reliability Assessment Committee recessed at 11:00am.
The Reliability Assessment Committee reconvened at 11:10am.

5. Chairman's Report

Chairman Nguyen referred the Committee to Tab 5 which contained the highlights of the September 27, 2007 Board of Directors meeting.

6. RAC Membership and Officers

a. 2008 RAC Membership

Chairman Nguyen reported that the following seats are up for election:

Canadian Utility Sector
Cooperative Utility Sector
Federal Power Marketing Agency Sector
Municipal Utility Sector

Chairman Nguyen reported that all incumbents are willing to seek re-election to continue serving their new terms starting January 1, 2008.

b. 2008 Chair and Vice Chair

Due to his heavy work load and numerous responsibilities, Vice Chairman Lindstrom declined to accept the ascension to the chairmanship of the Reliability Assessment Committee in 2008, as outlined in the Committee

Guidelines on Administrative Procedures recommended by Mr. Dan Skaar (Tab 16). He would, however, be amenable to assuming the vice-chairmanship for an additional two years.

After Committee discussion, the consensus was that the Committee would hold the election of both chairman and vice chairman at its next meeting in March 2008. Prior to that meeting, Chairman Nguyen will send an email to the Committee members, reminding them of the upcoming election so that interested members can clear their candidacy with their management. The Vice Chairman candidates will go into the process knowing that he will assume the chairmanship upon the completion of the chairman's two-year term.

c. Election Process

See the discussion described in 6.b above.

7. MRO Load and Capability Report

At its last meeting in September 2007 the Committee had decided that, instead of publishing the MRO ten-year assessment, MRO staff would provide the MRO Load and Capability (L&C) report and post it on its website. The posted report must include data for the entire MRO membership, without using the 15-percent reserve capacity obligation methodology used by the MAPP Generation Reserve Sharing Pool (GRSP). The 2007 L&C report, which reflects what has been completed and submitted to NERC for the 2007 LTRA and EIA-411, should be posted before the next Board of Directors meeting.

Mr. Seidel reported that the collect process for L&C data (including the EIA-411 and transmission mileage data) that had been conducted by MAPP for the MAPP GRSP was being transferred to the MRO. Chairman Nguyen asked the Resource Assessment Subcommittee to consider the ownership of this new data collection process. In the mean time, Mr. Rudolph and Mr. Owens will work with MRO staff to draft the initial data collection procedure. The upcoming data request will be used for long-term reliability assessment and summer and winter seasonal assessments.

The Committee recessed at 11:47am.

The Committee reconvened at 12:40pm.

8. UFLS Implementation Plan

Mr. Brusseau reported that the NERC UFLS group met via conference call on November 1, 2007. The group is still in the process of determining what will be interconnection-wide requirements and what will be requirements determined by the regions. Once the common attributes have been identified, staff will initiate an MRO regional standard through the current MRO standards process.

Upon motion duly made by Mr. Florom and seconded by Mr. Mazur ~~the~~, the Reliability Assessment Committee directed staff to provide NERC's response as to the status of the MRO's compliance with the current UFLS standard based on the mitigation plan submitted to NERC on March 30, 2007. There were two (2) nays.

9. 2009 MBS Contract with MISO

Secretary Seidel reported that the 2008 Model series will be done under the MISO MOD contract for the second year in a row. The RAC may consider if the same method or other options will be used for 2009.

10. September 18 Event Analysis Update

Secretary Seidel reported that the Event Analysis Team met at the MRO office October 31, 2007. Doug Chapman, TransGrid Solutions, is leading the team; three sub teams have been formed: (1) Sequence of Events Team, (2) Operational Analysis Team, and (3) System Modeling Team. Two sets of recommendations, industry specific and company specific will be developed. A final report is due April 2008.

If a RAC member wishes to participate in any of the three teams, he should contact Shel Berg (sl.berg@midwestreliability.org 651.855.1709).

11. NERC Data Request for Utility and RTO/ISO Criteria (exceeds TPL-001-004)

Secretary Seidel reported that NERC is asking for planning criteria above and beyond TPL-001-004 and is asking the MRO to coordinate with members.

12. RAC Interpretation of EOP-007 R.1.2.

Secretary Seidel indicated that EOP-007 R.1.2 requires that RROs have a blackstart capability plan (BCP). This plan has been owned and maintained by the MISO Power System Restoration Working Group since 2001, when MISO obtained the RTO status through FERC. The MRO will refer to the MISO plan as well as SaskPower's BCP plan when necessary.

13. NERC Resource Issue Subcommittee (RIS) Survey

Secretary Seidel reported that the survey in question was still in the draft form and was given to Bill Head, MAPPCOR, as he is the MRO representative on the NERC RIS. Mr. Head in turn sent the draft survey to Mr. Seidel and asked for comments. The Resource Assessment Subcommittee does not need to review and comment at this time.

14. Subcommittee and Task Force Reports

a. Resource Assessment Subcommittee

Mr. Rudolph referred the Committee to Tab 14 which contained the Resource Assessment Subcommittee report.

b. Model Building Subcommittee

Mr. Burbach referred the Committee to Tab 14 which contained the Model Building Subcommittee report.

i. Wind Generator Modeling Task Force

Mr. Burbach referred the Committee to Tab 14 which contained the Wind Generator Modeling Task Force report.

c. Transmission Assessment Subcommittee

Ms. Zhu referred the Committee to the handout package which contained the Transmission Assessment Subcommittee report (Attachment 1).

Upon motion duly made by Mr. Mazur and seconded by Mr. Dahlgren, the Reliability Assessment Committee unanimously

moved to waive the 10-day waiting period and add the appointment of Mr. Jason Weiers, OTP, to the Transmission Assessment Subcommittee to the meeting agenda.

Upon motion duly made by Vice Chairman Lindstrom and seconded by Mr. Dahlgren, the Reliability Assessment Committee appointed Jason Weiers, OTP, to be a Dakota Areas representative on the Transmission Assessment Subcommittee.

- d. *Generator Testing Review Task Force*
No report.
- e. *Protective Relay Task Force*
Mr. Bhan referred the Committee to the handout package which contained the Protective Relay Task Force report (Attachment 2).
 - i. *Special Protection Systems Review Team*
No report.

15. Eastern Interconnection Reliability Assessment Group Report

- a. *Multiregional Modeling Working Group*
No report.

16. NERC Reports

- a. *Data Coordination Working Group*
No report.
- b. *Disturbance Analysis Working Group*
No report.
- c. *Load Forecasting Working Group*
No report.
- d. *Operating Committee*
As a Transmission Dependent Utility representative on the NERC Operating Committee, Mr. Florum elaborated on the Operating Committee report in Tab 16.
- e. *Operations Review Subcommittee*
No report.
- f. *Planning Committee*
No report.
- g. *Reliability Assessment Subcommittee*
Mr. Nguyen referred the Committee to Tab 16 which contained the Reliability Assessment Subcommittee report.
 - i. *RAS Data Advisory Task Force*
Mr. Nguyen referred the Committee to Tab 16 which contained the RAS Data Advisory Task Force report.
- h. *Special Protection and Control Task Force*

Mr. Bhan referred the Committee to the handout package which contained the Special Protection and Control Task Force report (Attachment 3)

i. Transmission Issues Subcommittee

Mr. Burmester referred the Committee to Tab 16 which contained the Transmission Issues Subcommittee report.

j. Adequacy Assessment Task Force

No report.

17. Other Business

a. RAC/CC Liaisons

Chairman Nguyen reported that he had talked with John Stolley, Compliance Committee Chairman, and both agree that sending a liaison member to attend each other committee's meetings would be worthwhile and helpful to both committees' work. Mr. Coish was attending this meeting as a liaison from the Compliance Committee. Chairman Nguyen asked for a RAC volunteer who will attend in person or via phone conference the Compliance Committee meetings in 2008. Any member who is interested in this one-year assignment is to contact him.

b. NERC Request Transmission Availability Data System (TADS)

Secretary Seidel reported that the NERC TADS is functioning and that NERC will be asking for data. NERC will define what it is looking for and what the data is for. Salva Andiappan, MRO staff, will coordinate the data request.

18. Adjourn

Having no further business, Chairman Nguyen adjourned the meeting of the Reliability Assessment Committee at 3:39pm.

Prepared by:

Sandy Humenansky, Administrative Assistant
Midwest Reliability Organization

Reviewed and Submitted by:

John Seidel, Secretary
Reliability Assessment Committee

Transmission Assessment Subcommittee (TAS) Report

Report to MRO
Reliability Assessment Committee

November 2, 2007



TAS Report to RAC 11-2-07

- The TAS last met on Oct 18, 2007.
- Highlights:
 - Jason Weiers (OTP) has accepted a position on the TAS.
 - ✓ Action items: 1) RAC approval; 2) Sandy H to add Jason to the TAS exploder.
 - SPS review discussions
 - ✓ Nobles SPS review - The SPS owner (Xcel) staff and two SPS review team members from PRS/PRTF called in the TAS meeting for discussions regarding what additional studies are needed. TAS recommendation: N-2 stability analysis in the local area. Since the TAS meeting, Xcel has completed the stability analysis.
 - ✓ Workload discussion for reviewing new and existing SPS.



TAS Report to RAC 11-2-07

- MRO procedure for NERC Standards
 - ✓ Implementation of MRO UFLS report recommendations – question what should be the next step and the timeline.
 - ✓ Request MRO representative on the NERC UFLS standard development team to provide an update to TAS and RAC on the progress of the NERC standard.
- ERAG 2007/08 winter assessment update
 - ✓ Draft assessment report was presented and discussed.



Protective Relay Task Force [PRTF]-MRO

Report to MRO
Reliability Assessment Committee

November 2, 2007



PRTF : status of activities

- The PRTF met on Sept 24-25 at Minneapolis, MN
- The PRTF reviewed its existing charter at the request of MRO-RAC and made some changes to adapt it for use as charter for the proposed permanent PRS [Protective Relay Subcommittee]. Essentially the existing charter was retained with minor editorial type changes.
- The revised draft charter was provided to MRO-RAC for consideration in their Nov 2 meeting.



PRTF : status of activities

- NERC Beyond Zone 3 Compliance : The PRTF deliberated and accepted a request from Manitoba Hydro for exception from compliance of 3 lines because of technical reasons. PRTF will recommend Manitoba's request to SPCTF-NERC for approval
- The PRTF approved the MRO guideline of NERC Standard PRC-012 [This standard relates SPS Review Procedure].



PRTF : status of activities

- The second quarter 2007 relay mis-operation review was concluded by PRTF. The PRTF also reviewed the follow up by some utilities for mitigating actions. The mitigating actions are monitored by MRO staff.
- The PRTF discussed the overview of relay operations on September 18, 2007 for information of members.



PRTF : status of activities

- The status of the joint TAS/PRTF SPS review team [SPSRT] activities is provided as follows:
 - SPSRT review of a new SPS—"Weston 4" [ATC] is in progress
 - SPSRT & PRTF concluded review and approval of a SPS modification—"Trimont" [Xcel]. This is now waiting for TAS approval.
 - SPSRT received a new SPS—Tatanka from MDU and it will be reviewed in due course
- MRO staff completed the SPS data base. The data base will be populated after PRTF approval of the base spread sheet.
- The next meeting of PRTF is scheduled on November 27-28 at Minneapolis. Among other agenda items, MRO procedure for PRC 014 [this standard deals with SPS assessment] is expected to finalized by PRTF.



Questions ?

- Please email or call
Deven Bhan,
Chair, PRTF-MRO

bhan@wapa.gov
- 605-353-2620 or 303 981 1336



Special Protection and Control Task Force [SPCTF]-NERC

Report to MRO
Reliability Assessment Committee

November 2, 2007



SPCTF : status of activities

- The SPCTF met on Sept 20-21 at Charlotte, NC
- The SPCTF reviewed and updated documents pertaining to SAR for Protection System Redundancy in light of comments received from NERC Planning Committee. The documents include a white paper and written responses to NERC Planning committee members. These documents will be finalized in the November meeting of SPCTF and submitted to NERC Planning Committee for approval at their December meeting.



SPCTF : status of activities

- The work in progress by IEEE/PSRC workgroup for a report on frequency response of Distance relays was discussed. This workgroup has been formed at the request of SPCTF to establish under/over frequency design limits of operation for distance relays. The SPCTF and IEEE/PSRC are collaborating on this project.
- The next meeting of SPCTF is scheduled on November 6-7 at Denver.



SPCTF : status of activities

- Other work in pipeline for SPCTF:
 - Prepare standards assessment reports on following standards:
 - PRC-003 – Regional Procedure for Analysis of Misoperation of Transmission and Generation Protection Systems
 - PRC-004 – Analysis and Mitigation of Transmission and Generation Protection System Misoperations
 - PRC-016 – Special Protection System Misoperations
 - PRC-012 – Special Protection System Review Procedure
 - PRC-014 – Special Protection System Assessment



Questions ?

- Please email or call
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