

MEETING MINUTES
MIDWEST RELIABILITY ORGANIZATION
Model Building Subcommittee
Crown Plaza Hotel & Suites, Bloomington, MN
September 13th, 2011 – 8:00 AM – 4:00 PM

1. Call to Order

Chairman Burbach called the meeting to order at 8:02am.

2. Determination of Quorum

The following members and guests were in attendance:

Alan Burbach, LES, Chair
Glenn Evans, MH
Holli Krizek, WAPA
Jason Espeseth, XEL
Justin Jorgensen, ITC
Kristian Samoila, SPC (phone)
Dan Rathe, MEC
Steve Porter, DPC
Wayne Haidle, BEPC, Vice Chair
Wayne Roelofs, GRE
Adam Flink, MRO, Secretary
Laura Couillard, MRO, Alt. Secretary
Mark Heron, MH (guest)
Patrick Quinn, GRE (guest)
Denise Keys, OTP (guest)
Matt Waldron, MAPPCOR (guest)
Loren Mayer, MISO (guest, morning)
Marc Even, MISO (guest, morning)
Durgesh Manjure, MISO (guest, morning)
John Weber, MRES (guest)
Austin Hoekman, MRES (guest)
Jeremy Voll, OTP (guest, phone)

3. Standards of Conduct and Anti-Trust Guidelines

Chairman Burbach reviewed the Standards of Conduct and Anti-Trust Guidelines

4. Consent Agenda

a. Changes to the Agenda

No changes were made to the agenda.

b. Approve Meeting Minutes from June 22, 2011

The group made a minor change to the minutes and approved them upon motion by Glenn Evans, seconded by Wayne Roelofs.

5. Chairman's Report

Chairman Burbach reported the following:

Dan Rathe (MEC) approved as MBS member by PC, pending Board approval.

6. Review of Past Action Items

MRO staff reviewed the list of past action items. Several items had been completed by MRO staff and/or MBS members.

A discussion of the MMWG and MRO manuals was deferred to later in the meeting (agenda 10).

MEETING MINUTES
MIDWEST RELIABILITY ORGANIZATION
Model Building Subcommittee
Crown Plaza Hotel & Suites, Bloomington, MN
September 13th, 2011 – 8:00 AM – 4:00 PM

7. MOD update

Loren Mayer (MISO) provided some information about an issue with project status used in case create in MOD.

MRO – MISO document:

MRO and MISO staff will review this document and provide to the MBS for review.

Durgesh Manjure (MISO) gave an update on the newly reorganized modeling group at MISO including Loren Mayer, Cody Doll and Lisa Sullivan.

8. 2011 Series Development

a. Power Flow Update

Action item: MRO staff will post updates to the 2011 power flow models to improve the solution of the external so that a Full Newton solution can be used.

Action item: MRO staff will bring up the issue of MMWG models not solving with a Full Newton solution at the November MMWG meeting.

Review of 2011 series power flow process:

- Workbook changes were good.
- Compliance checks were greatly improved in the last few passes by removing documented exceptions and non-BES equipment.
- Workbook check against model was helpful. It was suggested that a more detailed comparison could be provided. An example of this is the workbooks compiled by Wayne Haidle (BEPC) for area 652 workbook, using pivot tables to summarize raw model data.

b. Dynamics Update

1. Fault Files

MRO staff is still working on developing the MRO 2011 series dynamics.

- Issues with Vestas wind models.
- Data is due to MMWG October 14th.

9. 2012 Series Development

a. Documentation Form

MRO staff provided power flow documentation form for comments from the MBS. The MBS refined the criteria for the inclusion of projects in the documentation. The updated form will be distributed with the 2012 series data request.

b. Data Checking in MOD

Marc Even (MISO) gave a presentation on data checking that could be done in MOD.

Using python scripts, MISO staff can generate CSV formatted reports of generation and load totals for each submitting company. These reports are based on the profile data uploaded to MOD by the data reps.

This data can be compared directly against the Company Workbook data early in the MRO model building process which would help to fix balancing issues before producing power flow cases from MOD data.

MEETING MINUTES
MIDWEST RELIABILITY ORGANIZATION
Model Building Subcommittee
Crown Plaza Hotel & Suites, Bloomington, MN
September 13th, 2011 – 8:00 AM – 4:00 PM

MISO staff expects that this tool will be available in time to be used for the 2012 series. The tool would need to be implemented in mid-February, 2012.

MISO staff will also check on the possibility of breaking down the generation and load totals by control area. This would be beneficial as it would follow the area breakdown in the Company Workbooks but would not be absolutely necessary for the tool to be useful.

c. MOD Data Submitter Document

Glenn Evans and Kerry Marinan have been working on the Data Submitter Document and plan to continue further development after the MOD training on September 14-15.

Glenn asked the MBS to clarify how ratings should be entered in MOD. The result of the discussion will be included in the document.

d. Benchmarking Power Flow

MRO staff will be performing the power flow benchmarking starting with the 2011 series.

The group decided that power flow benchmarking should be performed for Summer and Winter cases from 2-year models.

Action item: MRO staff will locate the benchmarking list that was refined by the MBS at their June meeting and send it to the MBS. MRO staff will then perform the benchmarking on the 2011 series and the MBS will review the results at their November meeting.

e. Wind Generator Data

The group had a lengthy discussion regarding the submission of wind generation data. Jason Espeseth indicated that Xcel may have legal issues with the practice of submitting wind generator data on behalf of Generator Owners who do not participate directly in the MRO model building process. Other companies may have similar concerns.

MRO staff suggested that, if Transmission Owners refuse to submit GO data, MRO could create a simplified data request package for GOs which would allow them to submit only generator data through a spreadsheet, rather than through MOD. This would greatly reduce the training requirements for GO data reps. The group thought of the following potential issues with this approach:

- Dispatch of wind generation by the GO may not be appropriate for the model but dispatch by the TO would still constitute a delegation of compliance responsibilities. The group discussed the idea of implementing a standard dispatch for all wind generation to avoid this issue.
- Troubleshooting of modeling issues, both power flow and dynamics, would be more difficult as there would be significantly more data reps to coordinate and small GOs often do not have the necessary modeling expertise.
- GOs would most likely submit user-written dynamic models from wind turbine manufacturers which often have compatibility issues.

The MBS decided to table this discussion as it is not an immediate concern. The discussion will be picked up again if the data submitting companies become more concerned about the legal issues.

f. Metering of losses for serving remote loads

MEETING MINUTES
MIDWEST RELIABILITY ORGANIZATION
Model Building Subcommittee
Crown Plaza Hotel & Suites, Bloomington, MN
September 13th, 2011 – 8:00 AM – 4:00 PM

OTP brought up a concern that their control area losses were excessively high due to the use of the OTP transmission system to serve loads in outside areas on the OTP system. Other data submitters suggested the use of transactions to cover losses which was an acceptable solution for OTP.

- g. *Possible use of owner numbers for tracking*
MRO staff suggested that it would be helpful to make better use of owner numbers in the Company Workbooks, NERC Compliance Checks and possibly some other processes as well. In order for this to be feasible, some of the MRO data submitting companies would have to clean up some of their owner numbers. The MBS was not certain whether this effort would be helpful or not. It was decided that more detail would be needed on the proposed use of owner numbers:

Action item: MRO will generate a more specific proposal and send it to the MBS for future discussion.

10. Reports

- a. *ERAG MMWG – Kerry Marinan*
Kerry was not present so no MMWG report was given.

11. MRO Model Building Manual

- a. *Remove MMWG specifications and reference MMWG manual*
Action item: Adam Flink will determine what changes to the MMWG manual are likely to be approved in their fall meeting and then make updates to the MBS manual accordingly.

12. New Business

- a. *MBS Charter*
1. Review & Approve
The MBS reviewed the charter. The group made one change and approved the modified charter upon motion by Glenn Evans, seconded by Jason Espeseth.
- b. *TPL Standard – Short Circuit Model*
Xcel has considered submitting short circuit data to MOD but is not currently doing so. The MBS does not wish to begin collecting short circuit at this point because the new TPL standard is not yet FERC approved.
- c. *Frequency Response Study Representative*
1. Review & Approve
Dan Belk (WAPA) was previously nominated for the position. No further nominations were provided and the group approved Dan Belk as the Frequency Response Study Representative upon motion by Holli Krizek, seconded by Glenn Evans.
- d. *Workbook Training Power Point*
The Workbook Training Power Point assembled by Wayne Haidle was shown to the group. This presentation will be included in the 2012 series data request package.
- e. *EOP 005-2 R6 – Restoration Plan Study*

MEETING MINUTES
MIDWEST RELIABILITY ORGANIZATION
Model Building Subcommittee
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September 13th, 2011 – 8:00 AM – 4:00 PM

The group discussed EOP 005-2, R6 which requires TOPs to perform steady-state and dynamic studies of their restoration plans. It is unclear whether enhancements to the MRO series models would need to be made in order to carry out such a study.

f. MOD Standards – Generator Testing

13. Next Meetings

- a. MBS: November 15, 2011*
- b. Operating Committee: November 8, 2011*
- c. Compliance Committee: November 15, 2011*
- d. Planning Committee: November 16, 2011*
- e. Standards Committee: November 17, 2011*

14. Adjourn

The meeting was adjourned at 3:00pm upon motion by Steve Porter, seconded by Jason Espeseth.