

**MEETING MINUTES  
MIDWEST RELIABILITY ORGANIZATION  
Model Building Subcommittee**

Holiday Inn Select, Bloomington, MN  
May 21<sup>st</sup>, 2009 – 9:00 AM – 4:00 PM

**1. Call to Order**

Chairman Burbach called the meeting to order at 9:00am.

**2. Determination of Quorum**

The following members and guests were in attendance:

Alan Burbach, LES (chair)  
Adam Flink, MRO (secretary)  
Salva Andiappan, MRO (alt. secretary)  
Gerry Lane, MH  
Wayne Haidle, BEPC  
Justin Jorgensen, ITC  
Kerry Marinan, ATC  
Srinivas Vemuri, XEL  
Loren Mayer, MISO (guest)  
Godfrey Chibulunje, WPS  
Garrick Nelson, Transerv (guest)  
Matt Waldron, MAPPCOR (guest)  
Kristian Samoila, SPC  
Wayne Roelofs, GRE  
Laura Elsenpeter, MRO (Alt. Secretary)  
Luke Erichsen, MEC (phone)

**3. Standards of Conduct and Anti-Trust Guidelines**

**4. Consent Agenda**

a. *Approve Meeting Minutes from March 17<sup>th</sup>, 2009*

The minutes were approved, as amended, upon motion by Gerry Lane, seconded by Srinivas Vemuri.

**5. Chairman's Report**

a. *The MBS needs a volunteer for Vice Chairman as a result of the resignation of Mr. Custer.*  
Wayne Haidle has agreed to take on the position of Vice Chair. Chairman of the RAC, Hoa Nguyen, will appoint Wayne as the Vice Chairman of the MBS

It is still uncertain whether NPPD and OPPD will be remaining in the MRO or SPP RE. For now, they are in the MRO RE and will continue to participate in MRO model building until they are no longer in the MRO RE.

SPP is working with the Nebraska companies to deal with the transition from MRO models to SPP models. Alan Burbach has suggested to SPP that they build the same set of models as the MRO in order to simplify the transition process, especially since NPPD and OPPD are building models with both MRO and SPP for now. As of now, there has been no response on this issue from SPP.

## 6. 2008 Series Update

Zero impedance branches:

**Action item:** Those who have idevs to fix zero-impedance branches will send those idevs to Adam Flink to be posted and run on the 08 series. Adam Flink will review the responses to the original request to verify zero impedance branches.

**Action item:** Srinivas Vemuri to provide idevs correcting their 500 kV line impedances and ratings.

**Action item:** MRO staff to apply all post-final idevs to the 08 series cases, solve the cases, and post them along with the post-final idevs next Tuesday, May 26.

### a. *Wrap-up of:*

#### 1. *Dynamics*

Salva Andiappan gave an update on the status of the 2008 series dynamics.

##### a. *Large DSTATES for Sidney DC Tie*

No updates have been received from WAPA for this issue.

##### b. *Status of channels for plots*

MRO staff has updated the channel files and plot files for the 2008 series and has posted the updated files on the MRO FTP site.

**Action item:** MRO staff to send dynamics fixes performed by Powertech to the data reps.

## 7. 2009 Series Development

### a. *Comments on Pass 1 models (initial data errors, solution, and reviews)?*

### b. *Comments on Pass 2 models.*

#### 1. *Inclusion of NPPD and OPPD data into the model series – Adam*

Adam Flink (MRO staff) gave a brief update on the insertion of NPPD and OPPD areas into the MRO pass 2 models. The process went smoothly and there are no known issues with the Nebraska data.

#### 2. *Issues with DNI calculations and incorporation into models.*

DNI values based on transactions in company workbooks were applied to the pass 2 cases and a solution using interchange control with lines and loads was attempted. Most of the cases had slack machines out of limits and 5 of the 15 cases would not solve with interchange enabled.

Alan Burbach has investigated some of these issues and had the following comments:

- MBS needs to review how data is reviewed. Should the MBS members have a responsibility to review their own areas for balancing issues?
- Should owner numbers match loads?

The MBS discussed how to fix remaining balancing issues in the 09 series.

**Action item:** Adam Flink and Alan Burbach to contact data reps and MBS members corresponding to the areas that seem to have the largest imbalances.

#### 3. *How does the MBS follow-up with corrections to MOD and MOD base case?*

### c. *Dynamics Tasks and Modified Schedule*

- *April 24 - MISO staff posts dyr for review*
- *May 8 – Data rep’s review complete*
- *May 22 – MISO staff posts dyr for review*

- *May 29 – Data rep’s review complete*
  - *June 6 – MISO staff starts Steady State runs*
  - *June 26 – MISO staff starts Benchmarking*
  - *July 3 – MISO staff posts final Dynamics Package*
- d. *Review model building schedule (see attachment 7d).*  
 The MBS reviewed the schedule and incorporated a number of changes relating to the powerflow and dynamics process.  
 MAPPCOR staff has offered to perform an additional review of dynamics data that would be coincident with MISO staff starting the steady state runs (moved to June 15).

## 8. 2010 Series Development

- a. *MBS approval of list of models for series (see attachment 8a).*  
 The MBS added a 2016 Spring Light Load model to the 15 existing models, due to the same model that was tentatively added to the MMWG 2010 series case list.  
 The MBS approved the updated case list upon motion by Kerry Marinan, seconded by Gerry Lane.
- b. *MBS approval of PSS/E version.*  
 The MBS has not yet decided on a PSSE version for the 2010 series since the MMWG has not yet decided on PSSE version. The MMWG are expected to make a decision at their August meeting.
- c. *Feedback from SPP on coordination of model series development*  
 See agenda item 5.
- d. *Review Scope of Work*  
 The MBS briefly looked through the Scope of Work that was prepared by Salva Andiappan (MRO staff) and sent to MISO.  
**Action item:** Salva Andiappan to send the Scope of Work to the MBS for review. Alan Burbach will send a reminder to the MBS to review the document by mid-June.
- e. *Identify future changes to the power flow manual*  
**Action item:** Alan Burbach and Adam Flink to work on a draft data request package for the next MBS meeting.
- f. *Review current approaches to updating committed loads. Any future changes?*
- g. *MOD Enhancements*
1. *Allow line reactors to be switched in profile*
  2. *Allow branch status to be changed in profile*
  3. *Update on status of MOD scheduled transactions and reports through MOD*  
 Loren Mayer: These items have been forwarded to MISO staff responsible for MOD changes.

## 9. Other Business

- a. *User models – Owners to provide documentation for MRO User Models if missing.*
- b. *Review the MRO list of desired enhancements to MOD. Is the list still valid, or should it be deactivated or replaced with an update version?*

## 10. Reports

- a. *MRO Modeling Contractor Report – Loren Mayer*

1. *General review of MOD case create and process (reference process flow charts)*
  - a. *Two passes seem to be enough*
2. *Brief discussion on model solutions (contractor's perspective). Nothing to report but bus 180526.*

Loren Mayer would like the MBS to decide how to handle bus 180526 that is toggling in the solution.

**Action item:** Kerry Marinan to send an MMWG update to Loren. Loren will try using the update to fix the cases where this bus is an issue.

3. *General review of recommended MOD changes sent to Carmel staff for vendor*
  - a. *Trying to reduce the need for additional project files where the change could be made in a profile file (as requested by submitters in the 2009 series)*

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4. *Brief outline of a report in MOD as recommended by Loren for development by the vendor or possibly Midwest ISO staff*
5. *The transactions tables in the new 6.1 MOD version will be tested over the summer months by Loren and Adam*
6. *PSSE power flow issues*

Loren has found a number of issues with PSSE. He would like to go through all of these issues with a few MBS members to come up with a list of concerns to be brought to PTI. Loren will set up a meeting for September 2, the day after the next MBS meeting, to discuss these issues.

*b. ERAG MMWG – Kerry Marinan*

- The MMWG approved adding a 2016 Spring Light Load case, pending MC approval.
- Powertech would like notification of units that will change control areas
- PTI offered to update DC user-written models
- New case naming convention
- Conference call in August to discuss PSSE version. MMWG is considering skipping from version 30.3 to version 32, depending on dynamic model issues.
- Kerry sent an email to MBS requesting DC user models for PTI to update
- Kerry forwarded email from FERC staff regarding MMWG 2009 Summer Peak case

Gerry Lane (MH) was advised by PTI at last week's NMORWG meeting that PTI's offer to update DC user-written models did not include DC supplementary control models. However, in subsequent discussion with PTI (Chi Lin and Jay Senthil) he was informed that the MMWG would make the decision of what user-written models they would forward to PTI for free update to version 31. Some key information includes:

- Any models referring to a DC line by number will be impacted since they will be referenced by name starting with PSS/E version 31.
- A new compiler (Intel Visual Fortran) is required with version 31. It was optional for version 30.3 since you could still use the Compac Visual Fortran compiler as used with earlier versions.
- The models to be forwarded to PTI for update are at the MMWG's discretion.

Gerry suggested that:

- The MMWG should request that PTI update all DC supplementary control user-written models since they are integral to having working DC models.
- The MMWG should further request that PTI update all user-written models, rather than just the DC user-written models. Gerry had sent an email to that affect on 5/13, to Kerry Marinan; the MBS and other interested parties were copied on the email.

- Kerry should confirm whether the non-DC associated models will be impacted with conversion to version 31 (due to the compiler change). There was speculation that these models may not need to be updated for version 31 and the new compiler. Kerry Marinan will bring this issue to the MMWG and report to the MBS.

**11. Next meeting**

- a. *MBS – September 1<sup>st</sup>. Future meetings include October 27<sup>th</sup>.*
- b. *RAC – September 2<sup>nd</sup>*

**12. Adjourn**

The MBS was adjourned at 2:52pm upon motion by Gerry Lane, seconded by Wayne Haidle.