



**Southwest Power Pool
MODEL DEVELOPMENT WORKING GROUP**

March 1, 2010

1:00 p.m. – 5:00 p.m.

SPP Chenal Office, Little Rock, AR

• M I N U T E S •

Agenda Item 1 - Administrative

The meeting was called to order at 1:00 p.m. The following Model Development Working Group (MDWG) members were in attendance:

Scott Rainbolt, Chair – American Electric Power (AEP)
Joe Fultz, Vice Chair – Grand River Dam Authority (GRDA)
Reené Miranda – Southwestern Public Service (SPS)
Dustin Betz – Nebraska Public Power District (NPPD)
Mo Awad – Westar Energy (WR)
Brian Wilson – Kansas City Power & Light (KCPL)
Mike Clifton – Oklahoma Gas & Electric (OGE)
Scott Schichtl – Arkansas Electric Cooperative (AECC)
John Boshears – City Utilities of Springfield (CUS)
Jason Shook – GDS Associates (GDS)

SPP Staff in attendance included Anthony Cook (Secretary) Doug Bowman, Scott Jordan, Greg Sorenson (RE), and Kelsey Allen.

The following guests were also in attendance:

Ryan Einer – Oklahoma Gas & Electric (OGE)
Al Tamimi – Sunflower Electric Power Corporation (SEPC)
Nate Morris – Empire District Electric (EDE)
Mark Loveless – Oklahoma Municipal Power Authority (OMPA)
Doug Millner – Western Farmers Electric Cooperative (WFEC)
Jason Bentz – American Electric Power (AEP)
Erick Kasalika – Westar Energy (WR)
David Sargent – Southwestern Power Administration (SWPA)
Dave Dieterich – Omaha Public Power District (OPPD)
John Mayhan – Omaha Public Power District (OPPD)
John Shipman

(Attachment 1 – Attendance List 1.pdf)

(Attachment 2 – Attendance List 2.pdf)

Meeting Agenda

The agenda was reviewed by the group. Scott Schichtl motioned to approve the agenda as is; Joe Fultz seconded the motion. The agenda was approved unopposed (**Attachment 3 - MDWG Agenda 20100301.doc**).

Meeting Minutes

Mo Awad motioned to approve the previous meeting minutes; Joe Fultz seconded the motion. The January 7th (**Attachment 4 - MDWG Minutes 20100107.doc**) and January 25th (**Attachment 5 - MDWG Minutes 20100125.doc**) minutes were approved unopposed.

Agenda Item 2 – Review of Past Action Items

Kelsey Allen reviewed action items from the January 25th meeting. All items from that meeting are complete. Scott Rainbolt asked staff for an update on Action Item #30. This item is still in progress and will be looked into.

Agenda Item 3 – 2010 Series Model Update:

Powerflow

Staff discussed the proposed changes to the MDWG model building schedule due to the powerflow model delays. Staff suggested sliding the completion date forward in the amount of the Build 1 delays. This will not affect any processes since the next deadline following the Build 2 completion is the data submittal to MMWG on July 15th. The group requested that staff update the schedule to reflect the proposed changes

Action Item: Update the MDWG 2010 Series Build 2 powerflow schedule to reflect the delays of the Build 1 models and the new proposed completion date. (SPP Staff)

Dynamics

Scott Jordan informed the group of his plans to adjust the dynamics schedule to reflect the powerflow modeling delays. The data submission schedule will not be cut; staff will compress its working time to meet scheduled deadlines. Dynamics data submission due date will be a month after the final powerflow models are posted. Scott will revise the dynamics schedule to reflect these changes.

Agenda Item 4 – Short Circuit Task Force:

Task Force Future

Doug Bowman posed the question regarding the future of the Short Circuit Task Force (SCTF) to the group. Discussion ensued on whether to keep the group intact, disband the group, or create a Short Circuit Working Group. The SCTF had discussed internally about at least staying intact until the first set of Short Circuit models are developed. Scott Rainbolt suggested leaving the task force together through one cycle of recommendations (put forth in the SCTF Whitepaper). Joe Fultz agreed. John

Boshears suggested creating a working group, as planners do not typically deal with short circuit data. Discussion continued on data formats and the deadline for creating a short circuit model. Anthony Cook posed that keeping the task force will be sufficient and suggested re-evaluating the need for a working group in the future.

Modeling of Region Ties

Doug Bowman will be heading the effort to develop a short circuit model and touched on the modeling of region ties. He has been in contact with SERC, who will be providing equivalenced short circuit data to SPP. He informed the group that he will be asking affected members for verification of this data.

Agenda Item 5 – Data Submission Issues:

Doug Bowman discussed the issues staff has been having with the Build 1 powerflow models in relation to generation dispatch and urged that members begin submitting profiles in MOD from now on. Kelsey Allen stated that the MDWG had originally decided to move towards this goal with the 2010 Series Build 2 models but that with the new profile information included in MOD version 7 this may not be completely feasible. Since MOD 7 will not be set up on the production server before SPP needs any updated data to begin building the 2010 Series STEP models, the data submission for the MDWG Build 2 models may need to be a mix and match of idev submissions and profile data submitted directly to MOD. A folder on TrueShare needs to be set up for data submissions.

Joe Fultz brought up an issue concerning regional ties, stating that the data swap SPP performed with AECI last year changed some of his modeling data. Anthony Cook suggested that SPP's implementation of the MMWG Master Tile Line file and procedure should take care of any regional tie issues. Kelsey Allen also mentioned the external case feature in MOD version 7 and supposed that it would also help alleviate any errors for future case builds.

Action Item: Create a new folder on TrueShare for 2010 Series Build 2 powerflow model profile and transaction data. (SPP Staff)

Agenda Item 6 – MMWG Docucheck and Powerflow Database:

Staff included this item to spark discussion on their decision to use the MMWG developed Docucheck and Powerflow Database programs for data error reporting and implementing the Master Tie Line file for regional tie modeling. Anthony Cook explained that for SPP, the data included in the Docucheck output may not be actual modeling errors but a report regarding model cleanliness, but stressed that the MMWG will expect that these "errors" be cleaned up when SPP submits data to that group in July. Staff asked the members for feedback regarding these programs. Reené Miranda and Ryan Einer both said the reports have been helpful. Reené did note some minor errors in the reporting such as flagging Vhi = Vlo as an error for switched shunts even when they are fixed.

Kelsey Allen continued discussion and touched on the possible changes to these current processes due to MOD version 7. He stated that the use of multiple sources of data to develop a powerflow model leaves much room for error. He stressed that the more members and staff can utilize the MOD database, the more robustness we will have in our models. He also urged members to comment on the programs we use and don't hesitate to suggest new features, as PTI is open to working with us to develop the tools the way we need them to be. He also re-iterated what Scott Rainbolt had mentioned in a previous meeting regarding SPP members to attend the PTI Users group meeting to help voice opinions. This year's meeting will be held the first week in San Antonio, TX.

PSS/E improvement: Create another generator status denoting maintenance outages.

Agenda Item 7 – MDWG Membership:

Staff briefly updated the entire group on the status of MDWG membership regarding the two spots currently open and urged those non-members present to consider submitting an application for voting membership.

Agenda Item 8 – MITF Update:

Kelsey Allen provided an update on the history of the MITF for those new to MDWG discussion, and the current progress of that task force. The MITF, consisting of MDWG and TWG members, was created to identify improvement and develop process guidelines in order to create a common base model set within SPP planning. The task force is currently working through and discussing the items put forth by staff in a straw man document.

Agenda Item 9 – 2010 STEP Model Data:

Kelsey Allen provided an update on the 2010 STEP model build staff is preparing to undertake and alerted the group of a coming request for dispatch order updates for that model set. Staff has prepared a request for dispatch orders and will ask the MITF to vet it on their call Monday, March 8. These will then be sent out to each modeling contact next week. He also informed the group that the deadline for STEP data submission will not be moved with the other deadlines for the MDWG Build 2 models in order to meet the proposed goal of STEP model completion in April.

Other:

Reené Miranda asked staff about the process of updating the new approved owner and zone ranges. Kelsey Allen described the process SPP IT will implement in making those changes for the members. Kelsey has requested that all modeling contacts submit a simple one-for-one translation table for staff to compile and provide to SPP IT. IT staff will create scripts to run on the MOD oracle database to search through all database

tables for those zones and owners to be changed within certain data types. This process will be applicable to both the MOD network data and MOD projects.

Greg Sorensen informed the group of FERC's approval of new modeling standards to be implemented in 2011. These are revisions to existing standards MOD 001-1, MOD 004-1, MOD 008-1, MOD 028-1, MOD 029-1, and MOD 030-2 that will take effect April 1, 2011.

Action Item: Review the new MOD standards approved by FERC and how they will apply to the MDWG and SPP planning modeling. (SPP Staff)

Agenda Item 10 - Closing Administrative Duties:

Next Meeting:

To be determined until more issues arise. Topics: MOD Standards.

Upcoming Meetings/Topics:

August face meeting in conjunction with the TWG.

December Modeling meeting.

Summary of New Action Items

1. Update the MDWG 2010 Series Build 2 powerflow schedule to reflect the delays of the Build 1 models and the new proposed completion date. (SPP Staff)
2. Create a new folder on TrueShare for 2010 Series Build 2 powerflow model profile and transaction data. (SPP Staff)
3. Review the new MOD standards approved by FERC and how they will apply to the MDWG and SPP planning modeling. (SPP Staff)

(Attachment 6 - SPP MDWG Action Items 20100301.xls)

Adjourn Meeting

Reené Miranda motioned to adjourn the meeting; Scott Schichtl seconded the motion. With no further business to discuss, the MDWG meeting was adjourned at 2:38 p.m.

Respectfully submitted,
Kelsey Allen
SPP Staff



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March 1, 2010
Chenal Office, Little Rock, AR

• ATTENDANCE LIST •

Name	System
MIKE CLIFTON	OKGE
RYAN EINER	OKGE
AL Tamimi	SEPC & MKEC
GREG SORENSON	SPP RE
Scott Schichtl	AECC
NATE MORRIS	EDE
Mark Lovelless	OMPA
Joe Fultz	GRDA
Scott Rainbolt	AEP
Doug MILLER	WFEC
Jason Bentz	AEP
Mo Anad	Westar Energy
Reene Miranda	SPS
Doug Berman	SPP



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• ATTENDANCE LIST •

Name	System
Scott Jordan	SPP
John Boshears	CU
Brian Wilson	KCPL
Dustin Betz	NPPD
Eric Kasalica	WR
DAVID SARGENT	SWPA



**Southwest Power Pool
MODEL DEVELOPMENT WORKING GROUP
March 1, 2010
Little Rock, AR
1:00 P.M. – 5:00 P.M.**

• A G E N D A •

- 1. AdministrativeScott Rainbolt
 - a. Call to order
 - b. Proxies
 - c. Approve agenda
 - d. Approve minutes of previous meetings
 - i. January 7, 2010
 - ii. January 25, 2010
- 2. Review of Past Action Items Kelsey Allen
- 3. 2010 Series Model Update SPP Staff
 - a. Powerflow (Anthony Cook)
 - b. Dynamics (Scott Jordan)
 - i. Schedule
 - ii. Data Submission
- 4. Short Circuit Task Force Doug Bowman
 - a. Task Force Future
 - b. Modeling of Region Ties
- 5. Data Submission Issues SPP Staff
- 6. MMWG Docucheck and Powerflow Database Anthony Cook
- 7. MDWG Membership Anthony Cook
- 8. MITF Update Kelsey Allen
- 9. 2010 STEP Model Data Kelsey Allen
- 10. Closing Administrative DutiesScott Rainbolt
 - a. Next meeting
 - b. Upcoming meetings/Topics
 - c. Summary of action items
 - d. Adjourn meeting



**Southwest Power Pool
MODEL DEVELOPMENT WORKING GROUP**

January 7, 2010

9:00 a.m. – 12:00 p.m.

Net Conference

• M I N U T E S •

Agenda Item 1 - Administrative Items

The meeting was called to order at 9:03 a.m. The following Model Development Working Group (MDWG) members were in attendance:

Scott Rainbolt, Chair – American Electric Power (AEP)
Reené Miranda – Southwestern Public Service (SPS)
Dustin Betz – Nebraska Public Power District (NPPD)
Mo Awad – Westar Energy (WR)
Brian Wilson – Kansas City Power & Light (KCPL)
Mike Clifton – Oklahoma Gas & Electric (OGE)
Scott Schichtl – Arkansas Electric Cooperative (AECC)
John Boshears – City Utilities of Springfield (CUS)
Jason Shook – GDS Associates (GDS)

SPP Staff in attendance included Anthony Cook (Secretary), Doug Bowman, Scott Jordan, Bob Lux, Kevin Goolsby, Rachel Hulett, and Kelsey Allen.

The following guests were also in attendance:

Don Taylor – Westar Energy (WR)
Erick Kasalika – Westar Energy (WR)
Nate Morris – Empire District Electric (EDE)
Nathan McNeil – Midwest Energy (MIDW)
Ronda Redden – Westar Energy (WR)
Alan Burbach – Lincoln Electric System (LES)
John Mayhan – Omaha Public Power District (OPPD)
Doug Millner – Western Farmers Electric Cooperative (WFEC)
Racheal Ren – Kansas City Power & Light (KCPL)

Meeting Agenda

Jason Shook motioned to approve the agenda; Mo Awad seconded the motion. The motion passed with no opposition. (**Attachment 1 - MDWG Agenda 20100107.doc**)

Previous Meeting Minutes

Minutes from the November 17 and November 23 Net Conferences and the December 1-3, 2009 modeling meeting were brought forth for review. Mike Clifton motioned to approve the minutes from the previous meetings; Scott Schichtl seconded the motion. The motion passed with no opposition. (**Attachment 2 - MDWG Minutes**)

20091117.doc, Attachment 3 - MDWG Minutes 20091123.doc, Attachment 4 - MDWG Minutes 20091201.doc)

Agenda Item 2 – Organizational Group Survey Report

Anthony Cook started discussion on the 2009 Organizational Group Survey Report regarding the MDWG. He outlined the current scores and discussed the decline in overall effectiveness of the group over the last few years. Brian Wilson made note that although the overall effectiveness was low, the individual ratings were much higher, sparking comment by Don Taylor for the chair to query the group responsible for creating the report as to the reason for the differences. Doug Bowman volunteered to take this on as an action item.

Action Item: Staff will investigate the methods used to calculate the overall effectiveness of a working group as posted in the 2009 Organizational Group Survey Report. (Doug Bowman)

Anthony Cook continued discussion on the report citing specific comments made in the survey relating to posting of meeting materials and the start of meeting webinars. Staff has already begun to improve on these concerns and will make every effort to continue improvement. Kelsey Allen noted that SPP bylaws state meeting materials need be posted 7 days prior to a meeting, not 10 as mentioned in survey comments. Don Taylor suggested that 10 calendar days be adhered to simply as a courtesy to members.

Scott Rainbolt noted that members may voice additional concerns to him if desired.

Agenda Item 3 – MDWG 2010 Schedule:

Staff presented a new proposed schedule spanning through a 2011 series build 2 model set. The group discussed the schedule and the new format and decided more time was needed to review it in detail. Reené Miranda requested that staff add milestones and detail to the schedule outlining when and what member data is due during each pass. Don Taylor commented on the timing of scheduled updates and that an updated load forecast for Westar will not be submitted until the second build of models. Dustin Betz made note that not every company gets forecasts ready at the same time and thus we will never have a schedule that fits perfectly for all companies.

Agenda Item 4 – SPP Modeling Assignments:

Staff requested that the SPP Modeling Assignments proposal as provided in the background materials be approved by the group. Mo Awad motioned to approve the proposal, Reené Miranda seconded the motion. Dustin Betz requested corrections to the NPPD data, as did John Mayhan for OPPD. Staff corrected the proposal which was approved with no opposition. Because the assigned modeling ranges are dictated by the MMWG, the Nebraska Utilities will remain under the MRO assigned ranges until their

integration into the SPP Regional Entity. (**Attachment 5 - SPP Modeling Assignments_20100107.xls**)

The group then discussed a timeline for implementing the proposed changes to SPP modeling assignments. Due to the volume of changes being made, consensus was to implement changes to the zone and owner assignments during the 2010 Series Build 2 and changes to load ID's during the 2011 Series Build 1. Reené Miranda motioned to approve the timeline, Brian Wilson Seconded the motion. The motion passed with no opposition

Agenda Item 5 – MOD Training Discussion:

Staff informed the group that MOD version 7 would not be ready in time to hold training on the new software February 4 in Little Rock after the TWG meeting. Staff continued discussion on options and possible locations to hold training in the future. Mo Awad and Reené Miranda suggested Dallas as a possible location; John Boshears continuing with training in Little Rock. After discussion on different options in moving forward with both MOD 7 training and the use of the profile feature in MOD, it was decided to wait to make any arrangements until staff could gather more information on a proposal to have Siemens PTI provide training to both members and staff.

Action Item: Staff will contact Siemens PTI regarding details on in-house MOD training.

Agenda Item 6 – SPP Databank Update (Modeling Meeting): Lessons Learned:

Doug Bowman requested feedback from the group on the effectiveness of the December modeling meeting in Little Rock, looking for ways to improve the 2010 meeting. The general consensus was that the meeting went very well. Reené Miranda requested that staff post Pass 2 models a week before the meeting to give members enough time to review the set prior to coming to Little Rock. Dustin Betz requested that staff post models as soon as possible after the meeting for member review. This is related to the merging of the SPP data with MMWG data. Staff explained that this should be mitigated in the next series of models as the merging of data is scheduled to be complete prior to the modeling meeting.

Action Item: Staff will revise the proposed 2011 Series Model Building Schedule to reflect the request to allow more time for model review prior to the model building meeting in Little Rock. (SPP Staff)

Agenda Item 7 – SPP Modeling Improvements:

Proposal Update

Staff informed the group that it is still working on the Modeling Improvements proposal and that it will be presenting it to the Model Improvement Task Force. Scott Schichtl expressed concern that the MDWG was not going to be involved in changes to the modeling process. Staff explained that the proposal will be taken to the task force in

order for that group to work out what it deems important and then take the necessary issues to the correct working groups.

Task Force Update

Staff informed the group that the Model Improvement Task Force currently has five members made up of representatives from the TWG and MDWG and that a kick-off meeting will be scheduled for sometime around the first week of February. Staff made note of the fact that with the five member volunteers, only three companies are being represented. The chair made one last request for additional volunteers from the MDWG to participate in the task force. Dustin Betz said that he would be interested but must first talk internally within his company before making a decision.

Agenda Item 8 – SPP ITP:

Trending for 20-Year Load Forecasting

Doug Bowman presented the load trends for 20-year load forecasting to the group. Scott Schichtl noted that AECC was not shown on the list. The forecasting was done by modeling area rather than company and his load is modeled within other areas. In preparing the data, staff looked at different options to forecasting the 20-year load projections and found that a linear approach fit best. Don Taylor suggested preparing different projections taking the nth root of the load over the planning horizon. John Mayhan suggested adding different projections in this type of approach and looking at only the far-term models. Dustin Betz requested more member involvement in coming up with the 20-year projections noting the different growth of certain load pockets which may not be captured in the current approaches. Don Taylor suggested that staff share the data with the ESWG once the group has verified the data.

Action Item: Staff will re-calculate the 20-year load projections for the ITP based on the different suggested methods and send out for member review. (Doug Bowman)

Action Item: Members verify the 20-year load projections for the ITP and respond by the end of January. (Modeling Contacts)

Action Item: Staff will share the 20-year load projections for the ITP with the ESWG chair. (Doug Bowman)

MDWG/Member Involvement

The group is still unsure about its involvement in the ITP process.

Action Item: Staff will talk to the ESWG secretary for more information about MDWG involvement in the ITP process. (SPP Staff)

Agenda Item 9 – 2010 Series Models:

Powerflow

Anthony Cook gave the group an update on the status of the powerflow models. Staff is currently working on completing the Pass 4 models and will post the set on Friday,

