

MDAG MINUTES
November 17, 2022

Southwest Power Pool
MODEL DEVELOPMENT ADVISORY GROUP MEETING

November 17, 2022 9:00 am – 12:00 pm (CST)

Conference Call

MINUTES

AGENDA ITEM 1 – ADMINISTRATIVE ITEMS

AGENDA ITEM 1A & 1B – CALL TO ORDER AND ANTITRUST STATEMENT

Proxy SPP MDAG Chair, Brianna Haug, called the meeting to order at 9:05 a.m. (CST) with Quorum. SPP Staff Secretary, Lottie Jones, read the anti-trust statement to the group.

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AGENDA ITEM 1C & 1D – ATTENDANCE AND PROXIES

The following members attended or were represented by proxy:

MDAG Member	Present	Proxy	Present	Company
Tyler Baxter	Yes			Corn Belt Power Cooperative
Jerry Bradshaw	Yes			City Utilities of Springfield
Dustin Betz	Yes			Nebraska Public Power District
Preston Blinsky	Yes			Basin Electric Power Cooperative
Joe Fultz	Yes			Grand River Dam Authority
Brianna Haug	Yes			Western Area Power Administration
Steve Hohman	Yes			Omaha Public Power District
Reené Miranda	No	Mae Cruz	Yes	Southwestern Public Service
Alex Mucha	Yes			Oklahoma Municipal Power Authority
Scott Rainbolt	No	David Zhong	Yes	American Electric Power
Scott Schichtl	No	Josh Hesselbein	Yes	Arkansas Electric Cooperative Corporation
Jason Shook	Yes			GDS Associates
Liam Stringham	Yes			Sunflower Electric Power Corporation
John Turner	Yes			Western Farmers Electric Power
Lottie Jones	Yes			Southwest Power Pool, Inc., MDAG Secretary
John Vara	Yes			Golden Spread Electric
Ryan Baysinger	Yes			Evergy

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AGENDA ITEM 1E – AGENDA REVIEW (APPROVAL ITEM)

Brianna Haug asked the group if they had a chance to review the agenda and if the group had any modifications to the agenda.

Lottie asked to remove agenda item 3 (MDAG membership) and replace it with the SPP 2023 Roadmap Discussion.

Mae Cruz requested adding agenda item 6 (Modification to 2023 MDAG Schedule).

Motion: Jason Shook motioned to approve the presented agenda as modified. Alex Mucha seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.

Material: NOV17_Attach1- 1e. MDAG Meeting Agenda

AGENDA ITEM 1F – PREVIOUS OCTOBER 20, 2022 MEETING MINUTES (APPROVAL ITEM)

Lottie Jones asked the group if they had any proposed changes for the previous October 20, 2022, meeting minutes.

The group reviewed the meeting minutes and did not voice any additional changes

Motion: Jason Shook motioned to approve October 20, 2022, meeting minutes as presented. Ryan Baysinger seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.

Material: NOV17_Attach2- 1f. October 20, 2022, Meeting Minutes.docx

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AGENDA ITEM 2 – REVIEW OF PAST ACTION ITEMS

Lottie Jones discussed outstanding issues highlighted in red font, including the action items added from the last meeting. Lottie walked the group through updates on action items collected at the previous session and updates for existing in-progress action items.

- Action Item 164 – In-Progress - Planning Model Bus Numbering (MDAG FG Currently Testing)
- Action Item 176 – In-Progress – Batteries Acting as a Load (Still In-Progress)
- Action Item 197 – Completed – How are Competitive Projects Determined in the Common Model (Based on Current FERC 1000) – Future Planning
- Action Item 198 – In-Progress – How Does Legacy Dispatch in Look in the New GI Dispatch (To Be Discussed in 11/18 GIMTF Meeting)

AGENDA ITEM 3 – SPP 2023 ROADMAP DISCUSSION

SPP staff, Lottie Jones, discussed the 2023 roadmap qualifying criteria as well as the new initiatives proposed for 2023.

- Implementing MOD-032 SAR changes for DERs
- EMT Modeling SAR changes
- Rate 3 changes

The deadline for comments and updates to the roadmap process is December 9, 2022.

SPP staff, discussed the first two initiatives with the group. The LSE is no longer applicable in the first case. The LSE is deregistered so SPP asked who would be supplying the data. This responsibility would be moved to the Distribution Provider (DP), but the DP is not currently an applicable entity in the MOD-032 standard. NERC would like to combine MOD-026 and MOD-027 as part of the EMT modeling discussion. RTOs have brought forth the difficulty of getting the data required for a proper EMT study. SCR screening is used to determine if an EMT study is necessary. In addition, SPP staff, discussed that we would like to utilize the roadmap process to track the SAR updates and changes as well as to bring awareness to the various affected groups.

Shawn Wang concluded the discussion by inquiring about TO requirements as it relates to EMT modeling. SPP staff stated that they would connect Shawn with the correct SPP staff member to answer those particular questions.

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AGENDA ITEM 4 – MDAG CONSOLIDATION PROPOSAL (APPROVAL ITEM)

Brianna Haug gave the group some background information on the MDAG FG and MDAG MTF as well as the proposal to combine the MDAG FG and MDAG MTF into one consolidated monthly meeting.

Brianna Haug discussed the possibility of having an MDAG member lead this new consolidated meeting. If no member takes on this role, SPP staff will lead the meeting on a six-month rotational basis. MDAG members are open to volunteering to lead this new group until November 23, 2022. Anyone open to volunteering can email Lottie Jones, Brianna Haug, or John Turner.

Motion: Jason Shook motioned to approve the combination of the MDAG FG and MDAG MTF into one consolidated group. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.

Material: NOV17_Attach3- 4. MDAG Consolidation Proposal

AGENDA ITEM 5 – DISCUSSION OF FUTURE MEETINGS (APPROVAL ITEM)

AGENDA ITEM 5A – MDAG: DECEMBER 15, 2022 (9:00 A.M. – 12:00 P.M.)

SPP staff, Lottie Jones, discussed the proposed schedule for 2023 MDAG meetings with the group, including a Monday afternoon meeting in March as well as a combined in-person meeting in June and July. Concluding with 11 meetings in 2023 and continuing the trend of Thursday morning meetings.

Motion: Jason Shook motioned to approve the 2023 MDAG meeting schedule as presented. John Vara seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.

Material: NOV17_Attach4- 5. Discussion of Future Meetings

AGENDA ITEM 6 – MODIFICATION TO THE 2023 MDAG SCHEDULE (APPROVAL ITEM)

Mae Cruz discussed with the group the note at the bottom of the 2022 MDAG schedule in which members can submit updates during the weekend (after the Friday due date). This language is not in the current 2023 MDAG schedule. Mae stated that there is the benefit to having this language since they are in the middle of a Self-Certification with MRO, and others may be faced with having to produce evidence why some of the data submitted did not fall exactly during the scheduled times. Staff provided reasoning why the previous “weekend” language was proposed

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to be reviewed by another SPP member. Staff provided draft language that mitigated the original concern and address SPS recent inquiry.

Joe Fultz had a question regarding the Dynamics schedule and the submission of the most severe TPL fault. Zach Sabey clarified that this is a voluntary submission and is not required to be submitted.

Motion: Liam Stringham motioned to approve the membership data submittal language update to the 2023 MDAG schedule as presented. Joe Fultz seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.

Added language: *“Modeling data shall be submitted per this schedule. For data submittals due on a Friday, data submission is allowed through the weekend until Monday at 8:00 AM. If that Monday falls a SPP Holiday, data submissions are due on Tuesday by 8:00 AM. SPP may extend the data submittal periods in the schedule, if the SPP Models On Demand and Engineering Data Submittal Tool (EDST) web portals suffer technical difficulties during the data submittal periods identified in the Schedule.”*

Material: NOV17_Attach5- 6. Modification to 2023 MDAG Schedule

AGENDA ITEM 7 – FOCUS GROUP/TASK FORCE UPDATES

AGENDA ITEM 7A – MDAG FOCUS GROUP

SPP staff, Becca McCann, updated the group on the on-going MDAG FG action items.

- Create a pilot case that uses a separate modeling area for the GO and PPA units that will be presented at the January FG meeting.
- What would be the preferred meeting time for the newly combined MDAG FG and MDAG MTF meeting? Tuesday or Thursday as well as a.m. or p.m.? (Mae commented that she would prefer the Tuesday afternoon time slot)

Becca is going to send out a poll with the combined meeting time options for 2023.

AGENDA ITEM 8 – TOPOLOGY RATE 3 DATA COLLECTION PROPOSAL

SPP staff, Sunny Raheem, provided the group with a Topology Rate 3 Data Collection Proposal presentation, including the current approach, the proposal from SPP, and the impacts and benefits of this proposal. This adjusted emergency conductor rating would affect the discussion of the ambient conductor rating.

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Calvin Coates asked SPP if the current definition for the emergency rating for conductors is a 4-hour limit. This time is 30 minutes for operations but will require more research from SPP to answer this limit from a modeling and planning standpoint.

Brianna asked the group if this will apply to the current model build schedule. Sunny commented that this topic would not have an effect on the current model build.

The group would like to avoid making this a MOD-032 requirement but instead allow it to be optional.

This item will be added to the 2023 roadmap discussion and discussed further in the new consolidated MDAG FG meeting.

AGENDA ITEM 9 – CPPTF COMMON MODEL

SPP staff, Brandon Hentschel, updated the group on the current CPPTF Common Model and Common Topology discussion. The recommendations were approved by TWG and will be presented in a future ESWG meeting.

AGENDA ITEM 10 – 2022 SERIES MDAG MODEL BUILD/2023 TPL UPDATES

AGENDA ITEM 10A – DYNAMICS

SPP staff, Zach Sabey, updated the group on the 2023 TPL Dynamics model build.

- Completed Tasks
 - Incorporated Portfolio
 - Created 24L, 24L-SENS, 24S-SENS
 - 24L was created to match ITP BR models used in TPL assessment
- In-Progress Tasks
 - Initializing and Fault Testing
- Future Tasks
 - Post TPL Models (11/28)

Informed MDAG of the proposed TPL renaming convention and reminded the group of key dates.

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AGENDA ITEM 11 – 2023 SERIES MDAG MODEL BUILD/2023 TPL UPDATES

AGENDA ITEM 11A – POWERFLOW

SPP staff, Lottie Jones, updated the group on the 2023 MDAG Powerflow model build and provided an update on the 2022 MMWG Powerflow cases as well.

- Completed Tasks
 - Posted Pass 1 -Trial 2 models and materials
 - Unlocked MOD/EDST for submissions for Pass 2 – Trial 1
 - Performed data quality checks
- In-Progress Tasks
 - Review MMWG 2022 final models, ties, and transactions for external merge
 - Review Transmission Service Inputs (AG1) Data
- Future Tasks
 - Lockdown MOD/EDST for Pass 2 – Trial 1
 - Review data submissions via MOD/EDST/GlobalScape for Pass 2 – Trial 1

In addition to the MDAG update, SPP staff informed MDAG about the EDST 4.1 update that will go into production on 12/1.

AGENDA ITEM 11B – SHORT CIRCUIT

SPP staff, Eric Sullivan, updated the group on the current 2023 MDAG Short Circuit model build.

- Completed Tasks
 - Posted Pass 1 - Trial 2 models and materials
- Future Tasks
 - Review data submissions via email and GlobalScape for Pass 2 - Trial 1

SPP staff also reminded the group of key short-circuit dates.

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AGENDA ITEM 11C – GMD

SPP staff, Eric Sullivan, updated the group on the upcoming GMD deadline and the current GMD status.

- Completed Tasks
 - GMD Spreadsheet Updated with Area/Owner Numbers in the Substation, Transformer, and Branch Tabs
 - Owner numbers were added based on Owner 1 in PSSE
 - Sent Out for Member Review to be Returned by November 25, 2022
- Future Tasks
 - Update with Member Changes

AGENDA ITEM 11D – DYNAMICS

SPP staff, Zach Sabey, updated the group on the 2023 MDAG Dynamics model build and proposed a draft 2023 Dynamics schedule. This proposed agenda will be presented for approval at the December MDAG meeting.

AGENDA ITEM 12 – SUMMARY OF ACTION ITEMS

Lottie discussed the action items from this meeting:

- **Action Item: Connect Shawn with Doug Bowman for the SAR requirements**
- **Action Item: Post the updated schedule on SPP.org**
- **Action Item: Post the new items out to the Roadmap Process**

AGENDA ITEM 13 – ADJOURN

John Turner adjourned the meeting at 11:33 a.m. (CST).

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Respectfully Submitted,

Lottie Jones
Secretary

Attachments

NOV17_Attach1- 1e. MDAG Meeting Agenda.docx

NOV17_Attach2- 1f. October 20, 2022, Meeting Minutes.docx

NOV17_Attach3- 4. MDAG Consolidation Proposal

NOV17_Attach4- 5. Discussion of Future Meetings

NOV17_Attach5- 6. Modification to 2023 MDAG Schedule



SOUTHWEST POWER POOL, INC.

MODEL DEVELOPMENT ADVISORY GROUP MEETING

November 17, 2022

Conference Call

9:00 a.m. – 12:00 p.m. (CST)

AGENDA

- 1. Administrative Items.....John Turner (10 mins)
a. Call to Order
b. Antitrust Statement
c. Attendance
d. Proxies
e. Agenda Review (Approval Item)
i. Acknowledgment for the posting of meeting materials
f. Previous October Meeting Minutes (Approval Item)
2. Review of Past Action Items Lottie Jones (10 mins)
3. SPP 2023 Roadmap Discussion.....John Turner (30 mins)
4. MDAG Consolidation Proposal(Approval Item)John Turner (30 mins)
a. MDAG Volunteers
5. Discussion of Future Meetings(Approval Item).....Lottie Jones (30 mins)
All meeting times are represented in the central time zone
a. MDAG: December 15, 2022 (9:00 AM – 12:00 PM)
i. Bring calendars to November meeting to discuss 2023 meeting schedule
6. Modification to 2023 MDAG Schedule(Approval Item)Mae Cruz (30 mins)
7. Focus Group/Task Force Updates
a. MDAG Focus GroupJohn Turner/Becca McCann (5 mins)
8. Topology Rate 3 Data Collection Proposal..... SPP Staff (15 mins)
9. CPPTF Common Model Brandon Hentschel (15 mins)
10. 2022 series MDAG Model Build/2023 TPL Updates
a. DynamicsZach Sabey/Theo Brown (10 mins)
11. 2023 series MDAG Model Build/Application Updates

Antitrust: SPP strictly prohibits use of participation in SPP activities as a forum for engaging in practices or communications that violate the antitrust laws. Please avoid discussion of topics or behavior that would result in anti-competitive behavior, including but not limited to, agreements between or among competitors regarding prices, bid and offer practices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that might unreasonably restrain competition.

- a. PowerflowBecca McCann/Lottie Jones (20 mins)
 - i. MMWG Powerflow Update
 - ii. EDST update
 - b. Short CircuitEric Sullivan (10 mins)
 - c. MOD-033Eric Sullivan (15 mins)
 - d. Dynamics.....Zach Sabey/Theo Brown (30 mins)
12. Summary of Action Items..... Lottie Jones (5 mins)
13. Adjourn..... All

* The approval items denoted with "*" shall be jointly developed by PC, TP, and MDAG

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October 20, 2022

SOUTHWEST POWER POOL MODEL DEVELOPMENT ADVISORY GROUP MEETING

October 20, 2022 9:00 am – 12:00 pm (CST)

Conference Call

SUMMARY OF MOTIONS AND ACTION ITEMS

Action Items:

- **Action Item: SPP to follow up with CPPTF on how competitive projects would be determined in the common model.**
- **Action Item: SPP to follow up on how legacy dispatch would be in the new proposed GI dispatch**

Motions:

- **Motion: Steve Hohman motioned to approve the presented agenda. Scott Schichtl seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**
- **Motion: Scott Schichtl motioned to approve September 21, 2022, meeting minutes as presented. Preston Blinsky seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Brianna Haug motioned to approve the additional 3 seats. Tyler Baxter seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Steve Hohman motioned to approve the RAD Task Force recommendation as written. Ryan Baysinger seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Jason Shook motioned to approve the CPP Common Model Topology recommendation table. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Steve Hohman motioned to approve the CPP Common Model Topology recommendation as written. Jason Shook seconded the motion. The group did not voice concerns during the discussion of the motion.**

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Southwest Power Pool MODEL DEVELOPMENT ADVISORY GROUP MEETING

October 20, 2022 9:00 am – 12:00 pm (CST)

Conference Call

MINUTES

AGENDA ITEM 1 – ADMINISTRATIVE ITEMS

AGENDA ITEM 1A & 1B – CALL TO ORDER AND ANTITRUST STATEMENT

SPP MDAG Chair, John Turner, called the meeting to order at 9:02 a.m. (CST) with Quorum. SPP Staff Secretary, Lottie Jones, read the anti-trust statement to the group.

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AGENDA ITEM 1C & 1D – ATTENDANCE AND PROXIES

The following members attended or were represented by proxy:

MDAG Member	Present	Proxy	Present	Company
Tyler Baxter	Yes			Corn Belt Power Cooperative
Jerry Bradshaw	No			City Utilities of Springfield
Dustin Betz	Yes			Nebraska Public Power District
Preston Blinsky	Yes			Basin Electric Power Cooperative
Joe Fultz	Yes			Grand River Dam Authority
Brianna Haug	Yes			Western Area Power Administration
Steve Hohman	Yes			Omaha Public Power District
Reené Miranda	No	Mae Cruz	Yes	Southwestern Public Service
Alex Mucha	No			Oklahoma Municipal Power Authority
Scott Rainbolt	No	David Zhong	Yes	American Electric Power
Scott Schichtl	Yes			Arkansas Electric Cooperative Corporation
Jason Shook	Yes			GDS Associates
Liam Stringham	Yes			Sunflower Electric Power Corporation
John Turner	Yes			Western Farmers Electric Power
Lottie Jones	Yes			Southwest Power Pool, Inc., MDAG Secretary
John Vara	Yes			Golden Spread Electric
Ryan Baysinger	Yes			Evergy

Material: OCT20_Attach2- 1c. MDAG Conference Call Attendance-10-20-2022.xlsx

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AGENDA ITEM 1E – AGENDA REVIEW (**APPROVAL ITEM**)

John Turner asked the group if they had a chance to review the agenda and if the group had any modifications to the agenda.

Motion: Steve Hohman motioned to approve the presented agenda. Scott Schichtl seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.

Material: OCT20_Attach1- 1e. MDAG Meeting Agenda

AGENDA ITEM 1F – PREVIOUS SEPTEMBER 21, 2022 MEETING MINUTES (**APPROVAL ITEM**)

Lottie Jones asked the group if they had any proposed changes for the previous September 21, 2022, meeting minutes.

The group reviewed the meeting minutes and did not voice any additional changes

Motion: Scott Schichtl motioned to approve September 21, 2022, meeting minutes as presented. Preston Blinsky seconded the motion. The group did not voice concerns during the discussion of the motion.

Material: OCT20_Attach3- 1f. September 21, 2022, Meeting Minutes.docx

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AGENDA ITEM 2 – REVIEW OF PAST ACTION ITEMS

Lottie Jones discussed outstanding issues highlighted in red font, including the action items added from the last meeting. Lottie walked the group through updates on action items collected at the previous session and updates for existing in-progress action items.

- Action Item 164 – In-Progress (revisit this topic at a future meeting)
- Action Item 176 – In-Progress (SPP to follow up with MVTF)
- Action Item 177 – Completed (RAD Task Force Recommendation)
- Action Item 182 – Completed (issue is higher level than can be addressed)
- Action Item 184 – Completed (MTF to include in 7.0 version of manual)
- Action Item 193 – Completed (no discussion regarding the issue)
- Action Item 195 – In-Progress (will be discussed MDAG FG meeting today)
- Action Item 196 – Completed (discussed in September MDAG meeting)

AGENDA ITEM 3 – MEMBER SOLICITATION (APPROVAL ITEM)

SPP staff, Lottie Jones, asked for approval from the group to have 3 seats opened up for MDAG as we had 2 seats open previously and an additional member resigned as well.

Motion: Brianna Haug motioned to approve the additional 3 seats. Tyler Baxter seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 4 – 2022-2023 ROADMAP CYCLE

SPP staff, Kristen Darden, went over the important dates for the 2022-2023 roadmap cycle, encouraging members to register for the opportunity to learn more about the roadmap process. Lottie Jones also sent this email out to email distribution list.

AGENDA ITEM 5 – 2022 SERIES MDAG MODEL BUILD FOR THE 2023 TPL

AGENDA ITEM 5A – DYNAMICS

SPP staff, Zach Sabey, updated the group on the 2022 series MDAG dynamics model build.

AGENDA ITEM 6 – FOCUS GROUP/TASK FORCE UPDATES

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AGENDA ITEM 6A – RENEWABLE ASSUMPTIONS DISPATCH TASK FORCE (APPROVAL ITEM)

SPP staff, Lottie Jones, discussed the updated MDAG RAD TF recommendation as well as each part of the recommendation. During discussion of the recommendation, membership revised the recommendation to exclude *RAD TF would like to move the task of creating a methodology for dispatch percentages based on historical or forecast basis for RR493 to the Generation Interconnection Manual Task Force (GIMTF)*, since RAD TF was never asked to create a methodology by TWG. After refining recommendation, MDAG approved the below recommendation.

Recommendation: MDAG would like to approve the completion of TWG task of providing how 5 year average is compiled; and reviewing the DISIS Study Group-specific fuel-based dispatch (for wind) number and comparing it with Operational Data provided by SPP Operations. MDAG RAD TF will give GIMTF the data collected from SPP Operations.

Motion: **Steve Hohman motioned to approve the RAD Task Force recommendation as written. Ryan Baysinger seconded the motion. The group did not voice concerns during the discussion of the motion.**

AGENDA ITEM 6B – MDAG FOCUS GROUP

SPP staff, Becca McCann, gave a verbal update on the last MDAG FG meeting. The group discussed the MDAG RAD TF recommendation as well as the MDAG portion of the CPPTF common model effort and the proposed dispatch of the energy model. Some upcoming topics are the GO area 550 pilot case as well as the continuation of the CPPTF common model work. November meeting is pending poll results at end of today's agenda.

AGENDA ITEM 6C – MANUAL TASK FORCE

SPP staff, Brandon Hentschel, gave a verbal update on the last MTF meeting. No updates were made to the current MDAG manual during the meeting. There was a discussion of that group getting merged with another group (to be discussed later in this meeting).

AGENDA ITEM 7 – CPPTF COMMON MODEL (APPROVAL ITEM)

AGENDA ITEM 7A – COMMON TOPOLOGY RECOMMENDATION

SPP staff, Brandon Hentschel, updated the group on the latest CPPTF common model recommendation for C3.1 sub-recommendation. Including two options of how the new common model workflow and how it integrates into other models like MMWG, a common model timeline, and how the energy model would be dispatched.

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During discussion membership asked how CPPTF group would be determining competitive projects in the common model. MDAG membership, CPPTF representative would bring this question to a future CPPTF meeting.

Recommendation 1:

NAME	TOPOLOGY
Common Topology (MOD – Models on Demand)	<ul style="list-style-type: none">• EXISTING EQUIPMENT<ul style="list-style-type: none">➢ CORRECTIONS AND UPDATES• SPP-APPROVED UPGRADES<ul style="list-style-type: none">➢ NTC PROJECTS• TO PLANNED PROJECTS• AQ<ul style="list-style-type: none">➢ Approved load delivery points➢ Associated upgrades or topology changes• GI<ul style="list-style-type: none">➢ GIA or IGIA and not on suspension

Recommendation 2: At a minimum, the Common Model Topology set in MOD should include the year/seasons necessary for the next MMWG and also include any additional year/seasons desired for the CPP process.

Motion: Jason Shook motioned to approve the CPP Common Model Topology recommendation table. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.

Motion: Steve Hohman motioned to approve the CPP Common Model Topology recommendation as written. Jason Shook seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 8 – 2023 SERIES MDAG MODEL BUILD/APPLICATION UPDATES

AGENDA ITEM 8A – POWERFLOW

AGENDA ITEM 8AI – MMWG POWERFLOW UPDATE

SPP staff, Lottie Jones, updated the group on the current MDAG powerflow model build schedule. Staff has built and solved models, and are currently QAing models to post on time, October 28th. Pre-final MMWG models were approved, and final MMWG models are still pending.

AGENDA ITEM 8B – SHORT CIRCUIT

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SPP staff, Eric Sullivan, updated the group on the current short circuit model build schedule. Staff is currently reviewing member updates, and future task include updating GMD data with comments.

AGENDA ITEM 8C – MOD-033

SPP staff, Eric Sullivan, updated the group on the current MOD-033-2 East study schedule. Notifying the group that January 2023 member updates are due to SPP.

AGENDA ITEM 8D – DYNAMICS

SPP staff, Zach Sabey, updated the group on the current dynamic model build notifying everyone that it has not yet started and there is no update.

AGENDA ITEM 9 – MDAG CONSOLIDATION PROPOSAL

John Turner is proposing to consolidate the MDAG Focus Group and Manual Task Force into a single group, presenting what will change and what will remain the same. Although this is not an approval item, it will be voted on at the next MDAG meeting in November.

Lottie asked the group if they would be in favor of this change. The group did not voice any concerns in combining the groups.

Brianna Haug asked the group if this would cause a time-constraint combining both groups into one discussion. John Turner and Brandon Hentschel commented that these topics could be brought to a future meeting or discussed in an additional supplemental meeting, and additional meetings could be added if a discussion required more time.

AGENDA ITEM 10 – SUMMARY OF ACTION ITEMS

Lottie discussed the action items from this meeting:

- **Action Item: SPP to follow up with CPPTF on how competitive projects would be determined in the common model.**
- **Action Item: SPP to follow up on how legacy dispatch would be in the new proposed GI dispatch**

AGENDA ITEM 11 – DISCUSSION OF FUTURE MEETINGS

- MDAG: November 17, 2022 (9:00 AM – 12:00 PM)
- MDAG Focus Group: No Meeting

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- October in meeting poll decided that MDAG FG would NOT meet in November.

AGENDA ITEM 13 – ADJOURN

John Turner adjourned the meeting at 11:07 a.m. (CST).

Respectfully Submitted,

Lottie Jones
Secretary

Attachments

OCT20_Attach1- 1e. MDAG Meeting Agenda.docx

OCT20_Attach2- 1c. MDAG Conference Call Attendance-10-20-2022.xlsx

OCT20_Attach3- 1f. September 21, 2022, Meeting Minutes.docx

OCT20_Attach4- 3. MDAG System Reduction.pptx

OCT20_Attach5- 4. MDAG Scope Review.pdf



MDAG CONSOLIDATION PROPOSAL

JOHN TURNER

OVERVIEW

- Background
- Current Assessment
- MDAG Consolidation Proposal
 - MDAG Focus Group (MDAG FG)
 - Manual Task Force (MTF)

BACKGROUND

- MDAG Manual Task Force (MTF): Informal task force created to document and add transparency on existing modeling reporting, development, and quality assurance check activities
- MDAG Focus Group (FG): Created to provide avenue for staff and stakeholder education, gradual MDAG discussion, and continuous improvement topics

CURRENT ASSESSMENT

- Under MDAG MTF, the MDAG Manual is up to speed on current day modeling reporting requirements
- MDAG FG is in good standing with continuous improvement efforts

MDAG CONSOLIDATION PROPOSAL

- MDAG leadership is proposing to consolidate the MDAG Focus Group & Manual Task Force into a single group
- The consolidated group will:
 - Eliminate multiple and parallel MDAG focused meetings
 - Will ask for MDAG volunteer to lead group
 - If no volunteers, staff will facilitate meetings
 - Allow MDAG members to participate in more efficient meeting structure
 - Can discuss initiatives and associated MDAG Manual changes at the same time
 - Meet once a month
 - *Frequency may increase based on need*
 - Will still require MDAG approval

WHAT WILL CHANGE?

- **Structure of meetings**
 - Technical discussion in the beginning of meeting
 - Reviewing the language that supports technical discussion latter half of meeting
- **Leadership**
 - Solicit for MDAG volunteer
 - If no volunteer, Staff lead meetings (similar to current MTF) on a rotation basis
 - Six month rotation
- **One group outside of MDAG**
 - No longer will there be separate MDAG FG or MTF

WHAT WILL STAY THE SAME?

- Topic submittal for meetings
 - Based on the needs on MDAG, and what members suggest should be discussed further outside of MDAG
- **Formality**
 - No official votes
 - No tracking of attendance
 - Exceptions are made upon request
- **Frequency**
 - Once a month on a agreed time



QUESTIONS?

DRAFT 2023 MDAG SCHEDULE

MONTH	DATE	Time (CT)	LOCATION	ALT. LOCATION
Meeting 1	19-Jan	9-12	Net Conference Only	
Meeting 2	16-Feb	9-12	Net Conference Only	
Meeting 3	20-Mar	1-4	Net Conference Only	
Meeting 4	20-Apr	9-12	Net Conference Only	
Meeting 5	18-May	9-12	Net Conference Only	
Meeting 6	15-Jun	9-12	Net Conference Only	
Meeting 7	17-Aug	9-12	Net Conference Only	
Meeting 8	21-Sep	9-12	Net Conference Only	
Meeting 9	19-Oct	9-12	Net Conference Only	
Meeting 10	16-Nov	9-12	Net Conference Only	
Meeting 11	14-Dec	9-12	Net Conference Only	

FILE

Notes

Merge June/July Meeting Meeting before model kick off 7/10.
Potential in person meeting.

MEETING LOCATION OPTIONS

ARKANSAS

Southwest Power Pool Campus

201 Worthen Drive
Little Rock, AR 72223

COLORADO

Tri-State

1100 West 116th Avenue
Westminster, CO 80234

KANSAS

Kansas Power Pool (KPP)

100 North Broadway
Wichita, KS 67202

MISSOURI

Evergy

1200 Main Street
Kansas City, MO 64105

OKLAHOMA

Grand River Dam Authority

9933 East 16th Street
Tulsa, OK 74128

Oklahoma Municipal Power

2701 West I-35 Frontage Road
Edmond, OK 73013

TEXAS

Golden Spread Electric Company

905 South Fillmore
Amarillo, TX 79101

Golden Spread Electric Company

4717 South Loop 289
Lubbock, TX 79424

Tenaska Power Services

300 East John Carpenter Freeway
Irving, TX 75062

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Task Name	Duration	Start	Finish
2023 MDAG Model Series (Powerflow, Short Circuit, Geomagnetic) - PSS/E v35.3# - MOD v11.2 (MOD-032 East) - MDAG Manual 6.0	180 days	Mon 7/11/22	Mon 3/20/23
Data Submitters provide Powerflow (PF) and Short Circuit (SC) data Updates through MOD and EDST	74 days	Mon 3/28/22	Mon 7/11/22
Data Submitter Updates (Load, Generation, MOD Commit, Transaction, Topology & Sequence Data) Due	0 days	Mon 7/11/22	Mon 7/11/22
SPP Staff send out kick-off email	0 days	Mon 7/11/22	Mon 7/11/22
Pass 0: Powerflow (PF) & Short Circuit (SC) Data (Topology, Sequence Data, Initial Generator Retirements Updates, & Year 1 and 5 MOD committed)	10 days	Mon 7/11/22	Fri 7/22/22
Pass 0: SPP Staff Lock Down MOD and EDST	10 days	Mon 7/11/22	Fri 7/22/22
SPP Staff compiles EDST/MOD data, initial dispatch information, and review projects	5 days	Mon 7/11/22	Fri 7/15/22
SPP Staff Build/Solve Pass 0 Powerflow Models	5 days	Mon 7/18/22	Fri 7/22/22
<i>SPP Staff Post Pass 0 Models, DocuCode, and conflicting Generator Retirement List for Data Submitter Review</i>	0 days	Fri 7/22/22	Fri 7/22/22
Pass 0 - Complete	0 days	Fri 7/22/22	Fri 7/22/22
Pass 1 - Coordinate & Submit Load, Generation, Transaction, Topology, SC Data, Geomagnetic Data Updates	70 days	Mon 7/25/22	Fri 10/28/22
Data Submitters review Pass 0 models and submit load, generation, transaction, topology and SC data updates through MOD and EDST for use in Pass 1 - Trial 1 Models	15 days	Mon 7/25/22	Fri 8/12/22
Data Submitter Updates (Load, Generation, Transaction, Topology & Sequence Data) Due	0 days	Fri 8/12/22	Fri 8/12/22
Pass 1-Trial 1: SPP Staff Lock Down MOD and EDST	20 days	Mon 8/15/22	Fri 9/9/22
SPP Holidays - Labor Day	1 day	Mon 9/5/22	Mon 9/5/22
SPP Staff compiles EDST/MOD data, dispatch information, and review projects	4 days	Tue 8/16/22	Fri 8/19/22
SPP Staff Build/Solve Pass 1 - Trial 1 Powerflow Models	15 days	Mon 8/22/22	Fri 9/9/22
SPP Staff Review/Build Pass 1 - Trial 1 Short Circuit Models	5 days	Mon 9/5/22	Fri 9/9/22
<i>SPP Staff Post Pass 1 - Trial 1 PF and SC models, Report Card, Retirement List, DocuCode, and Geomagnetic Data for Data Submitter Review</i>	0 days	Fri 9/9/22	Fri 9/9/22
Data Submitters review Pass 1 - Trial 1 models and submit PF and SC data updates through MOD and EDST for use in Pass 1 - Trial 2 Models	15 days	Mon 9/12/22	Fri 9/30/22
Data Submitter Updates (Load, Generation, Transaction, Topology & Sequence Data) Due	0 days	Fri 9/30/22	Fri 9/30/22
Pass 1-Trial 2: SPP Staff Lock Down MOD and EDST	20 days	Mon 10/3/22	Fri 10/28/22
SPP Staff compiles EDST/MOD data, dispatch information, and review projects	5 days	Mon 10/3/22	Fri 10/7/22
SPP Staff Build/Solve Pass 1 - Trial 2 Powerflow Models	15 days	Mon 10/10/22	Fri 10/28/22
SPP Staff Review/Build Pass 1 - Trial 2 Short Circuit Models	5 days	Mon 10/24/22	Fri 10/28/22
<i>SPP Staff Post Pass 1 - Trial 2 PF and SC models and DocuCode for Data Submitter Review</i>	0 days	Fri 10/28/22	Fri 10/28/22
Pass 1 - Complete	0 days	Fri 10/28/22	Fri 10/28/22
Pass 2: (Last Chance for Generator Additions & Retirements, Loads and Interchange)	73 days	Mon 10/31/22	Fri 2/10/23
Data Submitters review Pass 1 - Trial 2 models and submit PF and SC data updates through MOD and EDST for use in Pass 2 - Trial 1 Models	20 days	Mon 10/31/22	Fri 11/25/22
SPP incorporate 2021 AG1 Transmission Service updates into EDST	4 days	Mon 11/21/22	Fri 11/25/22
SPP Holidays - Thanksgiving days	2 days	Thu 11/24/22	Fri 11/25/22
Data Submitters provide Transmission Service Inputs (AG1) Data, review Pass 2 models/data submission through MOD, Final update load and generation (Pmax, Pmin, retirement) reports/reconcile transaction discrepancies	0 days	Fri 11/25/22	Fri 11/25/22
Data Submitters provide Geomagnetic Model Updates	0 days	Fri 11/25/22	Fri 11/25/22
SPP Staff for Pass 2 Lock Down MOD and EDST	35 days	Mon 11/28/22	Mon 1/16/23
SPP Staff compiles EDST/MOD data, dispatch information, and review projects	5 days	Mon 11/28/22	Fri 12/2/22
SPP Staff Build/Solve Pass 2 Powerflow models (Merge with latest MMWG models)	29 days	Mon 11/28/22	Fri 1/6/23
SPP Holidays - Christmas days	2 days	Thu 12/22/22	Sun 12/25/22
SPP Holidays - New Years days	1 day	Mon 1/2/23	Mon 1/2/23
SPP Holidays - Dr. Martin Luther King, Jr. Day	1 day	Mon 1/16/23	Mon 1/16/23
<i>SPP Staff Post Pass 2 - Trial 1 PF and SC models and DocuCode for Data Submitter Review</i>	0 days	Fri 1/6/23	Fri 1/6/23
Data Submitters review Pass 2 - Trial 1 models, provide Final Transmission Service Inputs (AG1) Data and submit PF and SC data updates through MOD and EDST for use in Pass 2 - Trial 2 Models	10 days	Mon 1/9/23	Fri 1/20/23
MDAG Face-to-Face Meeting	2 days	Tue 1/10/23	Wed 1/11/23
SPP Staff for Pass 2 - Trial 2 Lock Down MOD and EDST	10 days	Mon 1/23/23	Fri 2/3/23
SPP Staff compiles EDST/MOD data, dispatch information, and review projects	5 days	Mon 1/23/23	Fri 1/27/23
SPP Staff Build/Solve Pass 2 Powerflow models	10 days	Mon 1/23/23	Fri 2/3/23
SPP Staff Review/Build Pass 2 Short Circuit Models (Merge with latest SERC SC Models)	5 days	Mon 2/6/23	Fri 2/10/23
<i>SPP Staff Post Pass 2 PF and SC models and DocuCode for Data Submitter Review</i>	0 days	Fri 2/10/23	Fri 2/10/23
Pass 2 - Complete	0 days	Fri 2/10/23	Fri 2/10/23
FINAL PASS (Final Generation Dispatch, DocuCheck Issues and Topology Updates, Voltage Schedule Review)	31 days	Mon 2/13/23	Mon 3/27/23
Data Submitters Review Pass 2 Models; Submit PF and SC corrections through MOD and EDST for use in the Final Pass Models	10 days	Mon 2/13/23	Fri 2/24/23
Data Submitters submit FINAL Generation Dispatch, DocuCheck Corrections and Topology data updates through MOD and EDST	0 days	Fri 2/24/23	Fri 2/24/23
Member/Stakeholder Holidays - Presidents' Day	0 days	Mon 2/20/23	Mon 2/20/23
SPP Staff Build/Solve Final Pass Powerflow Models	10 days	Mon 2/27/23	Fri 3/10/23
SPP Staff Review/Build Final Pass Short Circuit Models	5 days	Mon 3/13/23	Fri 3/17/23
<i>SPP Staff Post Final PF and SC models and DocuCode for Data Submitter Review</i>	0 days	Fri 3/17/23	Fri 3/17/23
Finalization - MDAG Net Conference to Vote and Approve 2023 MDAG Powerflow Models as Final	0 days	Mon 3/20/23	Mon 3/20/23
Finalization - TWG to Vote and Approve 2024 ITP Powerflow Models as Initial-Final	0 days	TBD	TBD
Finalization - MDAG Net Conference to Vote and Approve 2023 MDAG Short Circuit Models as Final	0 days	Mon 3/20/23	Mon 3/20/23
Finalization - TWG to Vote and Approve 2024 ITP Short Circuit Models as Initial-Final	0 days	TBD	TBD

Model Build Schedule Color Identifier
Orange: SPP Staff Lock Down Model on Demand and Engineering Data Submission Tool
Green: Data Submitters Review
Red: Data Submitters Updates Due
Black: SPP PowerFlow Build
Blue: Short Circuit Build
Black Italic: SPP Posting or Pass Completion
Purple: MDAG Potential Face-to-Face Meeting
Green Italic: Final SPP Staff / Member Conference Call Vote and Approval
2022 Series MDAG/2023 ITP Model Selection
Red: MMWG Models
Black: MDAG and ITP Models- Posted on GlobalScope

Abbreviation	Description
MDAG PF	MDAG Powerflow
MDAG SC	MDAG Short Circuit
MDAG DYN	MDAG Dynamics
ITP BR PF	ITP Base Reliability Powerflow
ITP MPM F1	ITP MPM Future 1 (TBD)
ITP MPM F2	ITP MPM Future 2 (TBD)
ITP MEM F1	ITP MEM Future 1
ITP MEM F2	ITP MEM Future 2
ITP BR SC	ITP Base Reliability Short Circuit

Modeling data shall be submitted per this schedule. For data submittals due on a Friday, data submission is allowed through the weekend until Monday at 8:00 AM. If that Monday falls a SPP Holiday, data submissions are due on Tuesday by 8:00 AM. SPP may extend the data submittal periods in the schedule, if the SPP Models On Demand and Engineering Data Submittal Tool (EDST) web portals suffer technical difficulties during the data submittal periods identified in the Schedule

Year Definition	2023 Series MDAG / 2024 ITP Model Selection										
	Year	Season	MDAG PF	MDAG SC	MDAG DYN	ITP BR PF	ITP MPM F1 (TBD)	ITP MPM F2 (TBD)	ITP MEM F1	ITP MEM F2	ITP BR SC
1	2024	Light Load	1		1						
1	2024	Spring	1								
1	2024	Summer	*1	1	1	1					
1	2024	Fall	1			1					
1	2024	Winter	*1		1	1					
2	2025	Light Load	1			1	1				
2	2025	Spring	1			1					
2	2025	Summer	1		1	1	1		1		1
2	2025	Fall				1					
2	2025	Winter	1			1					
3	2026	Light Load	1		1						
3	2026	Summer	1		1						
5	2028	Light Load	1		1	1	1				
5	2028	Summer	1	1	1	1	1	1	1	1	1
5	2028	Summer Shoulder	1								
5	2028	Winter	1		1	1					
10	2033	Light Load				1	1				
10	2033	Summer	1		1	1	1	1	1	1	1
10	2033	Winter	1		1	1					
Reviewed Total		62	17	2	11	14	6	4	3	2	3

2022 MDAG / 2023 ITP Models - MOD/EDST Data Submissions					
Year	Season	Load Profile	Generation Profile Review	Topology	Transactions
2024	Light Load	Yes	Yes	Yes	Yes
2024	Spring	Yes	Yes	Yes	Yes
2024	Summer	Yes	Yes	Yes	Yes
2024	Fall	Yes	Yes	Yes	Yes
2024	Winter	Yes	Yes	Yes	Yes
2025	Light Load	Yes	Yes	Yes	Yes
2025	Spring	Yes	Yes	Yes	Yes
2025	Summer	Yes	Yes	Yes	Yes
2025	Fall	Yes	Yes	Yes	Yes
2025	Winter	Yes	Yes	Yes	Yes
2026	Light Load	Yes	Yes	Yes	Yes
2026	Summer	Yes	Yes	Yes	Yes
2028	Light Load	Yes	Yes	Yes	Yes
2028	Summer	Yes	Yes	Yes	Yes
2028	Summer Shoulder	Yes	Yes	Yes	Yes
2028	Winter	Yes	Yes	Yes	Yes
2033	Light Load	Yes	Yes	Yes	Yes
2033	Summer	Yes	Yes	Yes	Yes
2033	Winter	Yes	Yes	Yes	Yes

MDAG MINUTES
November 17, 2022

SOUTHWEST POWER POOL
MODEL DEVELOPMENT ADVISORY GROUP MEETING

November 17, 2022 9:00 am – 12:00 pm (CST)

Conference Call

SUMMARY OF MOTIONS AND ACTION ITEMS

Action Items:

- **Action Item: SPP staff: Lottie Jones to connect Shawn with Doug Bowman for the SAR requirements**
- **Action Item: SPP staff: Lottie Jones to post the updated schedule on SPP.org**
- **Action Item: SPP staff to submit new initiatives to the Roadmap Process**

Motions:

- **Motion: Motion: Jason Shook motioned to approve the presented agenda as modified. Alex Mucha seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**
- **Motion: Motion: Jason Shook motioned to approve October 20, 2022, meeting minutes as presented. Ryan Baysinger seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**
- **Motion: Motion: Jason Shook motioned to approve the combination of the MDAG FG and MDAG MTF into one consolidated group. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**
- **Motion: Motion: Jason Shook motioned to approve the 2023 MDAG meeting schedule as presented. John Vara seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**
- **Motion: Motion: Liam Stringham motioned to approve the membership data submittal language update to the 2023 MDAG schedule as presented. Joe Fultz seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**