



SOUTHWEST POWER POOL, INC.

MODEL DEVELOPMENT ADVISORY GROUP MEETING

September 21, 2022

Conference Call

9:00 a.m. – 12:00 p.m. (CST)

AGENDA

1. Administrative Items..... Brianna Haug (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 August Meeting Minutes (**Approval Item**)
2. Review of Past Action Items Lottie Jones (10 mins)
3. MDAG Scope Review(**Approval Item**)Lottie Jones (15 mins)
4. Chair Nomination(**Approval Item**)..... MDAG (10 mins)
5. System Reduction(**Approval Item**) Josh Pilgrim/Becca McCann (15 mins)
6. 2022 series MDAG Model Build/Application Updates
 - a. Dynamics(**Approval Item**).....Zach Sabey/Theo Brown (30 mins)
7. Focus Group/Task Force Updates
 - a. Renewable Assumptions Dispatch Task Force(**Approval Item**).....Andy Berg/
David Duhart (10 mins)
 - b. MDAG Focus GroupJohn Turner/Becca McCann (5 mins)
 - c. Manual Task Force..... Brandon Hentschel (10 mins)
8. 2023 series MDAG Model Build/Application Updates
 - a. PowerflowBecca McCann/Lottie Jones (15 mins)
 - b. Short CircuitEric Sullivan (15 mins)
 - c. MOD-033Eric Sullivan (15 mins)
9. CPPTF Common Model Brandon Hentschel (15 mins)
10. Member Solicitation Lottie Jones (5 mins)

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.



- 11. Summary of Action Items..... Lottie Jones (5 mins)
- 12. Discussion of Future Meetings..... Brianna Haug (5 mins)

All meeting times are represented in the central time zone

- a. MDAG: October 20, 2022 (9:00 AM – 12:00 PM)
- b. Manual Task Force: October 13, 2022 (10:00 AM – 12:00 PM)
- c. MDAG Focus Group: October 11, 2022 (1:00 PM – 3:00 PM)

- 13. Adjourn..... All

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

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Attendance worksheet

1. Input your group's name in A1

2. Enter your representative information

- A. Enter the names of your rostered representatives in column A, beginning with your name (staff secretary) in row 7
- B. Enter the company name for each of the rostered representatives in column B, beginning with "SPP" in row 7

2. Enter your meeting details

- A. Enter your meeting dates beginning in column C, row 1 and continue across the worksheet until all meeting dates are entered
- B. Enter the actual duration for each meeting beginning in column c, row 2. Round to the nearest .5 hours.
- C. Enter the actual number of votes taken per meeting beginning in column c, row 3. **Do not count** administrative votes such as votes to approve the agenda or adjourn the meeting. When counting consent votes, count one vote for each item under the consent topic. Do not count a consent vote as 1 if it includes multiple items.
- D. Enter the total number of attendees for each meeting beginning in column c, row 4
- E. Enter the meeting format for each meeting beginning in column c, row 5

3. Track attendance at each meeting per representative

- A. For yourself and each member note how the individual attended the meeting using the drop down for the cell. Options are webex, in-person, proxy, absent or non-member. Non-member is to be used for those who were members for only part of the assessment period. If you have a member that joined or left the group during the assessment period, utilize the non-member option for all meetings in which they were not considered a rostered member of the group.

Org Report Survey worksheet

1. Enter member demographic data

- A. Indicate Yes if the member is current and No if they are no longer a part of the group
- B. Enter the type of member for each representative in column D
- C. Enter the sector type for each representative in column E
- D. If a representative leaves mid assessment period add a red asterick in front of their name

2. Enter Yes or No to indicate the status of your scope review in L8

3. Enter Assessment Period in A2

Model Development Advisory Group

August 2021 - July 2022

Name	Company	Is Current Member?
Alex Mucha	Oklahoma Municipal Power Authority	Yes
Andrew Berg	Missouri River Energy Services	Yes
Brianna Haug (Vice Chair)	Western Area Power Administration	Yes
Dustin Betz	Nebraska Public Power District	Yes
Holli Krizek	Western Area Power Administration	No
Jason Shook	GDS Associates	Yes
Jerad Ethridge	Oklahoma Gas and Electric Company	No
Jeremy Harris	KCP&L and Westar, Evergy Companies	No
Jerry Bradshaw	City Utilities of Springfield	Yes
Joe Fultz	Grand River Dam Authority	Yes
John Boshears	City Utilities of Springfield	No
Liam Stringham	Sunflower Electric Power Corporation	Yes
Preston Blinsky	Basin Electric Power Cooperative	Yes
Reené Miranda	Southwestern Public Service	Yes
Ryan Benton	Midwest Energy	Yes
Scott Rainbolt	American Electric Power	Yes
Scott Schichtl	Arkansas Electric Cooperative Corporation	Yes
Steve Hohman	Omaha Public Power District	Yes
Sunny Raheem	SPP	No
Tyler Baxter	Corn Belt Power Cooperative	Yes
Amine Chenaf	DNV	No
Andrew Howard	Lincoln Electric System	No
Antonio Barrera	Southwestern Public Service	No
Armin Sehic	Nebraska Municipal Power Pool	No
Becca McCann	SPP	No
Brandon Hentschel	SPP	No
Brooke Keene	SPP	No
John Turner (Chair)	Western Farmers Electric Power	Yes
Bruce Doll	Nebraska Municipal Power Pool	No
Casey Cathey	SPP	No
Chris Colson	Western Area Power Administration	No
Conner Sweet	City Utilities of Springfield	No
David Duhart	SPP	No
David Zhong	American Electric Power	No
Diego Toledo	Grand River Dam Authority	No

Edin Terzic	Lincoln Electric System	No
Eli Nyambegera	Sunflower Electric Power Corporation	No
Ellen Cook	SPP	No
Frank Favela	Southwestern Public Service	No
Garrick Nelson	Western Area Power Administration	No
Grace Bouziden	Oklahoma Gas and Electric Company	No
James Okenfuss	Savion Energy	No
Jason Menke	Nebraska Public Power District	No
Jeff Plew	NextEra	No
Jeremy Severson	Basin Electric Power Cooperative	No
Jesse Kreutzfeldt	Missouri River Energy Services	No
Joe Williams	Western Farmers Electric Power	No
John Mayhan	Omaha Public Power District	No
John Vara	Golden Spread Electric	Yes
Kim Farris	SPP	No
Kimberly Woods	SPP	No
Mae Cruz	Southwestern Public Service	No
Marc Moor (Eversy)	Eversy	No
McKady Kellam	Eversy	No
Mike Swan	Omaha Public Power District	No
Moses Rotich	Gridliance	No
Nolan Fertig	SPP	No
Peter Jones	Savion	No

Member Type	Sector	Present	Proxy	Absent	Percent Present
Staff	RTO	9	0	1	90%
Staff	RTO	10	0	0	100%
TO	Investor Owned Utility	10	0	0	100%
TU	Cooperative	10	0	0	100%
TU	Cooperative	0	0	0	N/A
TO	Cooperative	7	0	3	70%
TU	Municipal	#REF!	#REF!	#REF!	N/A
TO	State	4	0	0	100%
TO	Cooperative	9	1	0	100%
TO	State	8	1	1	90%
TO	Investor Owned Utility	0	0	0	N/A
TO	Federal	9	1	0	100%
TO	State	7	2	1	90%
TU	Investor Owned Utility	7	3	0	100%
TU	Municipal	7	0	2	78%
TU	Investor Owned Utility	9	1	0	100%
TU	Investor Owned Utility	9	1	0	100%
TU	Cooperative	10	0	0	100%
TO	Cooperative	1	0	0	100%
TO	Cooperative	8	1	1	90%

Annual Assessment Totals**Average Length of Meetings (hrs) 3****Number of Votes Taken 42****Average Overall Attendance 61****Total Meetings this Assessment 13****Live 1****Teleconference 12****Scope Reviewed No****Transmission Owner(s) 7****Transmission User(s) 6****Director(s) 0****Investor Owned Utility 4****Cooperative 5****Municipal 1****State 2****Federal 1****Independent Power Producer / Marketer 0****Independent Transmission Company 0****Large Retail 0****Alt Power / Public Interest 0****Small Retail 0**

MDAG MINUTES

August 18, 2022

SOUTHWEST POWER POOL MODEL DEVELOPMENT ADVISORY GROUP MEETING

August 18, 2022 9:00 am – 12:00 pm (CST)

Conference Call

SUMMARY OF MOTIONS AND ACTION ITEMS

Action Items:

- Review the CPPTF common model flow chart and bring it back to the September meeting.
- Include the RAD TF discussion in the next MDAG meeting in September in order to come up with a recommendation.

Motions:

- Andy Berg motioned to approve the presented agenda with updates. John Turner seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.
- Mae Cruz motioned to approve the July 27, 2022, meeting minutes as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.

MDAG MINUTES

August 18, 2022

Southwest Power Pool MODEL DEVELOPMENT ADVISORY GROUP MEETING

August 18, 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, Brianna Haug, called the meeting to order at 9:09 a.m. (CST) with Quorum.
SPP Staff Secretary, Lottie Jones, read the anti-trust statement to the group.

MDAG MINUTES

August 18, 2022

AGENDA ITEM 1C & 1D – ATTENDANCE AND PROXIES

The following members attended or were represented by proxy:

MDAG Member	Present	Proxy	Present	Company
Tyler Baxter	No	Larry Brusseau	Yes	Corn Belt Power Cooperative
Jerry Bradshaw	Yes			City Utilities of Springfield
Ryan Benton	No			Midwest Energy
Andrew Berg	Yes			Missouri River Energy Services
Dustin Betz	Yes			Nebraska Public Power District
Preston Blinsky	No			Basin Electric Power Cooperative
Joe Fultz	No	Dona Parks	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	Martin Green	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: AUG18_Attach2- 1c. MDAG Conference Call Attendance-8-18-2022.xlsx

MDAG MINUTES

August 18, 2022

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 updated the agenda moving the dynamics update before the MDAG FG update and making the RAD topic an approval item as well.

Motion: Andy Berg motioned to approve the presented agenda with updates. John Turner seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.

Material: AUG18_Attach1- 1e. MDAG Meeting Agenda

AGENDA ITEM 1F – PREVIOUS JULY 27, 2022 MEETING MINUTES (APPROVAL ITEM)

Lottie Jones asked the group if they had any proposed changes for the previous July 27, 2022, meeting minutes other than updating the dates to say July instead of June.

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

Motion: Mae Cruz motioned to approve the July 27, 2022, meeting minutes as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.

Material: AUG18_Attach3- 1f. July 27, 2022, Meeting Minutes.docx

MDAG MINUTES

August 18, 2022

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 176 – In-Progress – SPP to follow-up.
- Action Item 177 – In-Progress – to be discussed during the RAD discussion.
- Action Item 180 – Completed – taken to MTF and updated by Brandon during the last MTF meeting in August. Lottie asked the group if this needs to be included in manual revision 6.1 or if it can wait until revision 7. This topic will be discussed further in the MTF agenda item.
- Action Item 182 – In-Progress – some testing was performed by Zach Sabey on the one battery that we have in the model and tried to initialize the case but ran into an issue with the exciter model. More work will need to be performed in order to make negative generation for a battery work in a model.
- Action Item 183 – Marked as Completed – update shown in red in the action item spreadsheet.
- Action Item 184 – In-Progress – to be discussed in the MTF agenda item.
- Action Item 185 – Completed – moved to the September MDAG FG meeting.
- Action Item 186 – In-Progress – pending an email response from Seimens.
- Action Item 187 – Completed – update shown in red in the action item spreadsheet.
- Action Item 190 – Completed – posted on spp.org.
- Action Item 191 – In-Progress – to be discussed later on in the agenda.
- Action Item 192 – In-Progress – will be posted with the dynamics final models in September.
- Action Item 193 – In-Progress – will be included as an update in the September MDAG FG meeting.

AGENDA ITEM 3 – 2022 SERIES MDAG MODEL BUILD/APPLICATION UPDATES

AGEMDA ITEM 3A - DYNAMICS

MDAG MINUTES

August 18, 2022

SPP staff, Zach Sabey, updated the group on the latest 2022 dynamics model build. Reviewing completed, in progress, and future dynamic task. After the successful dynamics update, there were brief discussion around some questions related to the current dynamics build. SPP staff, Zach Sabey, notified the groups that only first tier entities loads are applied, and that NERC standards indicate that motor D is to be disabled for now for CMLD data. SPP staff also mentioned an issue with the DSUSER .dll file. Staff encouraged data submitters to contact them if they experience issues while utilization models or data submission.

AGENDA ITEM 4 – FOCUS GROUP/TASK FORCE UPDATES

AGENDA ITEM 4A – MDAG FOCUS GROUP

SPP staff, Becca McCann, updated the group on the August MDAG FG meeting. There is a new proposal for how to model GIA (put GOs with PPA so that they no longer come from the host but from the new area). There will be a pilot case from everyone to review in Q3/Q4 of 2022, to participate in feedback in order to successful benchmark this effort. RAD task force also presented in the focus group, that will be later discussed in the meeting. SPP staff, Zach and Brandon, also presented topics: Dynamic model changes and CPPTF common model updates. Future MDAG focus group topics will discuss the GIA proposal as well as onboarding checklist for the GOs and the short circuit discussion for an ASPEN/CAPE conversion.

AGENDA ITEM 4B – MANUAL TASK FORCE

SPP staff, Brandon Hentschel, provided an update of the August MTF meeting. The definition of mothballed was discussed and Brandon is going to the topic back to the September meeting to gain consensus if the definitions would be added to manual revision 6.1 or if it can wait until manual revision 7. Brandon discussed the impacts of MOD-026-2, which will replace MOD-026-1 and MOD-027-1. After internal discussion as it relates to NERCs stance on this, NERC has moved out this topic for now and SPP will follow up with members once we have next steps from NERC on MOD-026-2. There was also discussion around the MOD Matrix, in an updated manual staff would like to add it as a table to replace the current screenshot. SPP staff, Hugh Benfer, also included that he would to have a clear definition for material modifications in the current manual.

AGENDA ITEM 4C – RENEWABLE ASSUMPTIONS DISPATCH TASK FORCE (APPROVAL ITEM)

MDAG RAD TF chair, Andy Berg, updated the group on the RAD task force discussion. Reviewing highlights from what was originally presented in the July MDAG to allow for member refreshing on the topic, discussion begin around the proposed renewable assumptions. RAD TF made the group aware that the presented values were picked during the RAD task force and denote the best fitting data (closest data) to the negotiated values.

MDAG MINUTES

August 18, 2022

TWG chair joined the discussion clarifying that the original intent was to have the MDAG group make their recommendation as the modelers and then present this to TWG for approval.

SPP staff, Juliano, mentioned that GI would like more time with the modeling staff and MDAG MTF before presenting this information for approval to the TWG. Is there a plan to implement this first to the ITP/MDAG models before adding this to the DISIS models? Derek mentioned that this would likely be implemented in the DISIS models first and then to the ITP/MDAG models afterwards. Andy mentioned that we already have an approach for the MDAG models so this need is not immediate for those models. RAD TF and MDAG to come up with a proposal first. Sunny concluded the discussion by recommending that we also review how to update the data when we get variances (update annually or waiting until the data passes some kind of threshold).

RAD TF chair, Andy, mentioned that the next step of the recommendation is to revise it to be more specific. This will be brought back to the September MDAG FG meeting and a future RAD TF meeting.

AGENDA ITEM 5 – 2023 SERIES MDAG MODEL BUILD/APPLICATION UPDATES

AGENDA ITEM 5A – POWERFLOW

SPP staff, Lottie Jones, updated the group on the 2023 MDAG powerflow model build and upcoming dates. Also reviewing completed, in progress, and future powerflow task. Staff is currently building models and will perform case quality checks for posting on 9/9/2022.

AGENDA ITEM 5B – SHORT CIRCUIT

SPP staff, Eric Sullivan, updated the group on the 2023 MDAG short circuit model build and upcoming dates. Max-fault exception file template submitted for member review and due back by 9/2/22, with the build starting 3 days later.

AGENDA ITEM 5C – MOD-033

SPP staff, Eric Sullivan, updated the group on the MOD-033 East project and timeline.

AGENDA ITEM 6 – CPPTF COMMON MODEL

SPP staff, Brandon Hentschel, updated the group on the CPPTF common model discussion.

There was discussion around non-firm service being added to the common model set, SPP staff mentioned that it depends on the reason for non-firm service. Additional discussion revolved around how SPP would feed MMWG models into the common models. SPP staff mentioned that we would use the latest information provided from the MMWG models.

MDAG MINUTES

August 18, 2022

Brandon is going to consult with the group to see if he needs to fix the path for the MMWG models and bring it back to the September MDAG meeting.

AGENDA ITEM 7 – CHAIR SOLICITATION

Lottie has sent out an email for chair solicitation that is due back by August 25th. Any nominations can be sent to either Lottie Jones or Brianna Haug via email.

AGENDA ITEM 8 – SUMMARY OF ACTION ITEMS

1. Review the CPPTF common model flow chart and bring it back to the September meeting.
2. Include the RAD TF discussion in the next MDAG meeting in September in order to come up with a recommendation.

AGENDA ITEM 9 – DISCUSSION OF FUTURE MEETINGS

- MDAG: September 22, 2022 (9:00 AM – 12:00 PM)
- Manual Task Force: September 8, 2022 (10:00 AM – 12:00 PM)
- MDAG Focus Group: September 13, 2022 (1:00 PM – 3:00 PM)

AGENDA ITEM 10 – ADJOURN

Brianna Haug adjourned the meeting at 11:09 a.m. (CST).

Respectfully Submitted,

Lottie Jones
Secretary

Attachments

AUG18_Attach1- 1e. MDAG Meeting Agenda.docx

AUG18_Attach2- 1c. MDAG Conference Call Attendance-8-18-2022.xlsx

AUG18_Attach3- 1f. July 27, 2022, Meeting Minutes .docx

MDAG MINUTES
September 21, 2022

SOUTHWEST POWER POOL
MODEL DEVELOPMENT ADVISORY GROUP MEETING

September 21, 2022 9:00 am – 12:00 pm (CST)

Conference Call

SUMMARY OF MOTIONS AND ACTION ITEMS

Action Items:

- **Action Item: Brianna and Lottie suggested moving the RAD recommendation topic to the next MDAG FG meeting to allow further discussion and moving the motion to a future MDAG meeting.**

Motions:

- **Motion: Alex Mucha motioned to approve the presented agenda with updates. 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 the August 18, 2022, meeting minutes as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Andrew Berg motioned to approve the MDAG Scope Review with the updates as shown. Alex Mucha seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Mae Cruz motioned to approve the chair nomination as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Steve Hohman motioned to approve the system reduction recommendation as presented. Dustin Betz seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Steve Hohman motioned to approve the final dynamics model build contingent on updates. Andrew Berg seconded the motion. The group did not voice concerns during the discussion of the motion.**

MDAG MINUTES
September 21, 2022

Southwest Power Pool
MODEL DEVELOPMENT ADVISORY GROUP MEETING

September 21, 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, Brianna Haug, called the meeting to order at 9:01 a.m. (CST) with Quorum.
SPP Staff Secretary, Lottie Jones, read the anti-trust statement to the group.

MDAG MINUTES
September 21, 2022

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	John Boshears	Yes	City Utilities of Springfield
Andrew Berg	Yes	Jesse Kreuzfeldt	Yes	Missouri River Energy Services
Dustin Betz	Yes			Nebraska Public Power District
Preston Blinsky	No	Brianna Haug	Yes	Basin Electric Power Cooperative
Joe Fultz	No			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	Yes			American Electric Power
Scott Schichtl	Yes			Arkansas Electric Cooperative Corporation
Jason Shook	No			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	No	David Mendoza	Yes	Golden Spread Electric
Ryan Baysinger	Yes			Evergy

Material: SEP21_Attach2- 1c. MDAG Conference Call Attendance-09-21-2022.xlsx

MDAG MINUTES
September 21, 2022

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 Jones updated the agenda, moving the system reduction update before agenda item 6 the 2022 series MDAG Model Build/Application Updates

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

Material: SEP21_Attach1- 1e. MDAG Meeting Agenda

AGENDA ITEM 1F – PREVIOUS AUGUST 18, 2022 MEETING MINUTES (APPROVAL ITEM)

Lottie Jones asked the group if they had any proposed changes for the previous August 18, 2022, meeting minutes.

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

Motion: Scott Schichtl motioned to approve August 18, 2022, meeting minutes as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.

Material: SEP21_Attach3- 1f. August 18, 2022, Meeting Minutes.docx

MDAG MINUTES
September 21, 2022

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 176 (In-Progress) – no update at this time, to be brought up at the next MVTF
- Action Item 177 (In-Progress) – updated recommendation to be approved 9/21/22
- Action Item 182 (In-Progress) – Zach following up with Renee on the request, initial testing completed
- Action Item 184 (In-Progress) – to be brought up at the October MTF meeting
- Action Item 186 (Completed) – pending response email from Seimens, Becca mentioned that the current version of MOD does not allow this functionality but there is an effort to add this in to a future version of MOD
- Action Item 191 (In-Progress) – mark as complete once the recommendation is approved in the MDAG meeting today (9/21/22)
- Action Item 193 (In-Progress) – will be in October MDAG FG meeting
- Action Item 194 (In-Progress) – Review the CPPTF common model flow chart and bring it back to the September meeting.
- Action Item 195 (In-Progress) – Include the RAD TF discussion in the next MDAG meeting in September in order to come up with a recommendation.

AGENDA ITEM 3 – MDAG SCOPE REVIEW (APPROVAL ITEM)

SPP staff, Lottie Jones, posted the MDA sScope review and has only noted one correction at this time. She mentioned that the scope seems to be missing item 7, so item 8 would change to item 7 and the date would be updated as well.

Andrew Berg mentioned that there should be representation from each planner as per MOD-032-1. Sunny mentioned that we currently have up to 24 voting seats ~~open within the group~~ though it is open for participation in the discussion. Andy agrees to leave it as-is for the time.

MDAG MINUTES
September 21, 2022

Motion: Andrew Berg motioned to approve the MDAG Scope Review with the updates as shown. Alex Mucha seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 4 – CHAIR NOMINATION (APPROVAL ITEM)

Brianna Haug discussed the chair nomination with the group:

“John Turner to Chair the current term for the MDAG. John Turner to be the nomination for Chair and Brianna Haug to be the nomination for Vice Chair for the Model Development Advisory Group until the next term renewal.”

Motion: Mae Cruz motioned to approve the chair nomination as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 5 – SYSTEM REDUCTION (APPROVAL ITEM)

SPP staff, Josh Pilgrim, presented a system reduction topic ~~with to~~ the group. SPP staff analyzed two different methods of reduction and no significant impact on footprint accuracy has been found. Josh provided details on both methods, as well as a comparison of the methods resulting in Josh presenting the below recommendation:

“SPP recommends using the Gen/Load Method and the proposed MDAG dynamics boundary (reduce tier 3 areas and beyond, retain all MRO areas) to reduce the MDAG power flow models.”

Due to member discussion, this discussion was tabled, and later brought back towards the end of the meeting with an approved motion.

Motion: Steve Hohman motioned to approve the system reduction recommendation as presented. Dustin Betz seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 6 – 2022 SERIES MDAG MODEL BUILD/APPLICATION UPDATES

AGENDA ITEM 6A – DYNAMICS (APPROVAL ITEM)

SPP staff, Zach Sabey, updated the group on the 2022 MDAG proposed final dynamics model build posting and future tasks (building TPL models with 2022 ITP portfolio updates). There were several updates received and included, which all are listed in 6a. dynamics presentation.

“Staff recommends that MDAG approve the 2022 MDAG Final Dynamic Models, contingent upon the updates being applied before posting.”

MDAG MINUTES
September 21, 2022

- Recent Updates Deadline: 9/23/2022
- Anticipated Posting: 10/7/2022

After the 2022 models were approved, Zach provided detailed update on the next steps for the TPL models, as well provided additional dynamic model updates that will begin January 2023

Motion: Steve Hohman motioned to approve the final dynamics model build contingent on updates. Andrew Berg seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 7 – FOCUS GROUP/TASK FORCE UPDATES

AGENDA ITEM 7A – RENEWABLE ASSUMPTIONS DISPATCH TASK FORCE

Andrew Berg updated the group on the RAD task force discussion recommendation:

"RAD TF would like to use the historical and data-driven approaches demonstrated in the RAD TF to derive a DISIS Study Group-specific fuel-based dispatch (for wind). The dispatch percentages should have a historical or forecast bases and reflected in RR493. To be reviewed every DISIS cycle (or annually if utilized by MDAG and ITP), and updated if the dispatch percentage changes by greater than +/-6%."

- As with the latest available model series, we could use the latest available dispatch percentages

Dustin voiced his concerns against the recommendation as he believes that using an average is not appropriate for GI studies. He believes that a minimum and a maximum are more appropriate for these types of studies. Steve Hohman voiced some similar concerns as well.

Steve Hohman and Dustin Betz mentioned that this should not be an MDAG decision and should instead be left up to the GI MTF or the TWG to ~~make the approval of~~ approve the recommendation.

Action Item: Brianna and Lottie suggested moving the RAD recommendation topic to the next MDAG FG meeting and moving the motion to a future MDAG meeting.

AGENDA ITEM 7B – MDAG FOCUS GROUP

SPP staff, Becca McCann, updated the group verbally on the last MDAG FG meeting.

The December MDAG FG meeting has been cancelled and the system reduction and onboarding checklist were discussed during the last FG meeting in September.

MDAG MINUTES

September 21, 2022

The RAD TF discussion and system reduction topic will be discussed at the next FG meeting in October.

AGENDA ITEM 7C – MANUAL TASK FORCE

~~SPP staff, Brandon Hentschel, updated the group on~~The SPP staff, Brandon Hentschel, updated the group that the last MDAG MTF meeting was cancelled. However, to ~~pelase-please~~ review material sent out to the MTF email ~~distrubution-distribution~~ for October meeting

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

AGENDA ITEM 8A – POWERFLOW

SPP staff, Becca McCann, updated the group on the powerflow model build. Becca provided a status update, upcoming MDAG deadline and reminders, and then open the floor for questions.

AGENDA ITEM 8B – SHORT CIRCUIT

SPP staff, Eric Sullivan, updated the group on the short circuit model build. Eric provided a status update, upcoming MDAG deadline and reminders, and then open the floor for questions

AGENDA ITEM 8C – MOD-033

SPP staff, Eric Sullivan, updated the group on the MOD-033-2 East powerflow model build. Eric provided NERC MOD-033-2 standard background information, review the MOD-033 process, presented the results from the 2021 event student, and informed MDAG of upcoming deadlines and reminders

AGENDA ITEM 9 – CPPTF COMMON MODEL

SPP staff, Brandon Hentschel, updated the group on the CPPTF common model discussion.

The CPPTF common model will be very similar to the Base Reliability (BR) models; however, it is designed to help clean up some of the issues related to using the BR models, such as mapping to GI.

Potential MDAG Recommendations:

- Define the topology for the CPP Common Model set, as shown in slide 5.
- Dispatch the CPP Common Model using a firm transmission service.

MDAG MINUTES
September 21, 2022

- At a minimum, the Common Model set should include the year/seasons necessary for the MMWG and also include any additional year/seasons desired for the CPP Common Model

This topic will be on the MDAG agenda for the next several months to ensure that MDAG has a strong recommendation to ~~provide to supportingsupport~~ CPPTF working groups.

AGENDA ITEM 10 – MEMBER SOLICITATION

Lottie would like to get the groups ~~input on adding two additional chairs to the group's input on adding two additional chairs~~. Brianna suggested having both seats open and available. Alex Mucha concurred with Brianna.

Josh Hesselbein asked if you have one seat per member or could you have multiple voting parties from one entity? Lottie confirmed that it is one seat open per entity.

Lottie asked if it would be ok to add these additional seats before the end of the year. Brianna and Josh both agreed as well.

Commented [SR1]: Can we summarize this discussion?
Looks choppy to me

AGENDA ITEM 11 – SUMMARY OF ACTION ITEMS

1. Brianna and Lottie suggested moving the RAD recommendation topic to the next MDAG FG meeting and moving the motion to a future MDAG meeting.

AGENDA ITEM 12 – DISCUSSION OF FUTURE MEETINGS

- MDAG: October 20, 2022 (9:00 AM – 12:00 PM)
- Manual Task Force: October 13, 2022 (10:00 AM – 12:00 PM)
- MDAG Focus Group: October 11, 2022 (1:00 PM – 3:00 PM)

AGENDA ITEM 13 – ADJOURN

Brianna Haug adjourned the meeting at 11:52 a.m. (CST).

Respectfully Submitted,

Lottie Jones
Secretary

Attachments

MDAG MINUTES
September 21, 2022

SEP21_Attach1- 1e. MDAG Meeting Agenda.docx

SEP21_Attach2- 1c. MDAG Conference Call Attendance-9-21-2022.xlsx

SEP21_Attach3- 1f. August 18, 2022, Meeting Minutes .docx

SEP21_Attach4- 3_ MDAG System Reduction.pptx

SEP21_Attach5- 4_ MDAG Scope Review.pdf

SEP21_Attach6- 6a. 2022 series MDAG Dynamics model build update.pptx



SYSTEM REDUCTION

BECCA MCCANN

JOSHUA PILGRIM

*Working together to responsibly and economically
keep the lights on today and in the future.*



SouthwestPowerPool



SPPorg



southwest-power-pool

OVERVIEW

OVERVIEW

- Current MDAG (powerflow and short circuit) and ITP (reliability powerflow and short circuit) models contain topography from areas far from SPP's footprint
 - Florida
 - New York
 - Chicago
 - Kentucky
 - DPC ("Dairyland Power Cooperative")
- These areas do not significantly contribute to ITP or SPP planning studies
- However, they do contribute to delays in model building, solving, and non-convergence results review
- Some level of equivalence/reduction in ITP economic and MDAG dynamics models exists in current day processes
- Full interconnection-wide reliability models available under MMWG effort

OVERVIEW CONT.

- Non-converge cases
 - During Market Powerflow build
 - During Needs Assessment
 - During P3/P6 POM runs
- These cases are time-consuming, each issue requires a manual investigation for a solution to be found

OVERVIEW CONT.

- SPP staff analyzed two different methods of reduction and no significant impact on footprint accuracy has been found

METHOD 1

- Thevenin Equivalency Method
- This method reduces each external area down to as few equivalence lines and loads as possible
- Does not fully remove any area, just simplifies it

METHOD 2

- Gen/Load Method
- This method reduces external areas to a simple gen/load, removing them entirely from the model
- Significantly alters the areas present in the model

COMPARISON

- No changes in internal gen and load amounts
- No significant change in branch flows (<3%)
- DC ties
 - No change in DC Tie flows from Method 1.
 - Method 2 removes some DC ties through reduction; no change in flows for remaining DC ties.
- Method 1 reduces system swing by 80 MW

COMPARISON CONT.

- ACCC testing did not show any significant difference in reported violations

COMPARISON CONT.

	Base	Method 1	Method 2
Bus count	86327	37116	22478
kB size	48571	22478	18752
Areas	137	137	85
ACCC Time	46 minutes	13 minutes	16 minutes

RECOMMENDATION

- SPP recommends using the Gen/Load Method and the proposed MDAG dynamics boundary (reduce tier 3 areas and beyond, retain all MRO areas) to reduce the MDAG power flow models

**Southwest Power Pool
Model Development Advisory Group
Scope Statement
09/21/2021**

PURPOSE

The Model Development Advisory Group (MDAG) is responsible for the coordination, development, and maintenance of transmission system planning models in accordance with Southwest Power Pool (SPP) Planning Criteria, Regional Standards, and procedures. The MDAG is also responsible for supporting development of interconnection-wide models by providing SPP transmission system planning models and related information to the Eastern Interconnection Reliability Assessment Group (ERAG) Multiregional Modeling Working Group (MMWG).

SCOPE OF ACTIVITIES

In carrying out its purpose, the MDAG:

1. Develops and maintains the MDAG Model Development Procedure Manual.
2. Develops, maintains, and coordinates steady state, short circuit, dynamic, and geomagnetic disturbance models in accordance to the SPP Planning Criteria, SPP Regional Standards, and procedures.
3. Works with SPP staff and the Transmission Working Group (TWG) to determine the models that should be used in SPP, basis for the models, and how they are modified to ensure that the transmission system planning models support the needs of SPP and SPP Organizational Groups, advisory groups and user forums.
4. Provides recommendations to SPP Organizational Groups, advisory groups, and user forums for proposed SPP Planning Criteria, Revision Requests, or Tariff modifications pertinent to transmission system planning model needs.
5. Reviews and monitors existing and proposed NERC Reliability Standards for impacts to the development, maintenance, and coordination of SPP transmission system planning models. Coordinates responses to new and proposed standards with SPP and other SPP Organizational Groups, advisory groups and user forums.

6. Supports the SPP submission of modeling data to the ERAG MMWG for the SPP transmission system. Coordinates the incorporation of ERAG MMWG modeling information for facilities external to the SPP transmission system into the SPP models.
7. Responds to assignments from the TWG, Markets and Operations Policy Committee, or the board of directors.

REPRESENTATION

The MDAG is comprised of at least 8 and no more than 24 representatives from SPP Member companies and contract signatories, including the chair and vice-chair, if one is appointed. The MDAG shall elect/appoint a chair using the process defined in Section 3.3 of the Bylaws, however it has the discretion to determine the need for a vice-chair position.

MDAG representatives will be selected based on their experience with coordination, development, and maintenance of transmission system planning models and interconnection-wide models.

REPORTING

The MDAG provides as needed advice on management and development of transmission system planning models and interconnection-wide models to SPP Organizational Groups, other advisory groups, and user forums.



2022 MDAG DYNAMICS MODEL BUILD UPDATE

ZACH SABEY, PE

THEO BROWN



2022 SERIES MDAG DYNAMIC MODEL BUILD UPDATE

- Moved to PSSE v34.9.0 due to dynamics issues in v34.8.2
- Completed Tasks
 - Posted Proposed Final Models (9/2/2022)
 - Posted TPL Sensitivity Dispatch Models (9/22/2022)
- In-Progress Tasks
 - Review and Approval of Final MDAG Models
- Future Tasks
 - Build TPL Models with 2022 ITP Portfolio Updates

UPDATES RECEIVED AND INCLUDED (BY 9/13/2022)

- Grand Prairie Wind Vestas Model
- WFECC Generator Updates
- Caddo Wind WF Update
- Missing Models for Offline Wind
 - 25 Mile Creek, Rockhaven

STAFF RECOMMENDATION

- Staff recommends that MDAG approve the 2022 MDAG Final Dynamic Models, contingent upon the updates being applied before posting.
 - Recent Updates Deadline: 9/23/2022
 - Anticipated Posting: 10/7/2022

TPL MODEL UPDATE

- Year 1 alignment with ITP – need to add in 2024L for the 2024L-Sensitivity
- Match up with ITP BR Powerflow for TPL models
- Utilize 25L case adjustments to create 24L

Requirement	Description	Base case	Sensitivity case
R2.4.1	year 2 peak	2022 MDAG model series 2024S	2022 MDAG model series 2024S (high wind dispatch)
R2.4.2	year 2 off-peak	2022 MDAG model series 2024L	2022 MDAG model series 2024L (high wind dispatch)
R2.2.5	year 10 peak	2022 MDAG model series 2032S	N/A

Table 2. Stability Analysis Study Models

KEY DATE REMINDERS

- Post Proposed Final TPL Models – 11/28/2022
- Member review of TPL models – 11/29/2022 thru 12/13/2022
- TPL Model Approval Vote – 12/15/2022

EXTRA REMINDERS

- Dynamics v35 model build with begin January 2023
 - USRMDL .dll's will need to be updated
 - Original notice of v35 transition was in kick-off email (January 2022)

EXTRA REMINDERS

- PSSE V35 Testing by PowerTech Labs
 - 2 - List of USRMDL_ObjLibDll_SPP.xlsx
 - Review column H for notes based on the simulation
 - New .dll will be needed for:
 - "Turn off the model in DYRE file and GNETted"
 - Further testing needed for:
 - "off-line"
 - No changes needed for:
 - "Handled by PSSE or SRC code"

QUESTIONS?

MDAG MINUTES
September 21, 2022

SOUTHWEST POWER POOL
MODEL DEVELOPMENT ADVISORY GROUP MEETING

September 21, 2022 9:00 am – 12:00 pm (CST)

Conference Call

SUMMARY OF MOTIONS AND ACTION ITEMS

Action Items:

- **Action Item: Brianna and Lottie suggested moving the RAD recommendation topic to the next MDAG FG meeting to allow further discussion and moving the motion to a future MDAG meeting.**

Motions:

- **Motion: Alex Mucha motioned to approve the presented agenda with updates. 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 the August 18, 2022, meeting minutes as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Andrew Berg motioned to approve the MDAG Scope Review with the updates as shown. Alex Mucha seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Mae Cruz motioned to approve the chair nomination as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Steve Hohman motioned to approve the system reduction recommendation as presented. Dustin Betz seconded the motion. The group did not voice concerns during the discussion of the motion.**
- **Motion: Steve Hohman motioned to approve the final dynamics model build contingent on updates. Andrew Berg seconded the motion. The group did not voice concerns during the discussion of the motion.**

MDAG MINUTES
September 21, 2022

Southwest Power Pool
MODEL DEVELOPMENT ADVISORY GROUP MEETING

September 21, 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, Brianna Haug, called the meeting to order at 9:01 a.m. (CST) with Quorum.
SPP Staff Secretary, Lottie Jones, read the anti-trust statement to the group.

MDAG MINUTES
September 21, 2022

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	John Boshears	Yes	City Utilities of Springfield
Andrew Berg	Yes	Jesse Kreuzfeldt	Yes	Missouri River Energy Services
Dustin Betz	Yes			Nebraska Public Power District
Preston Blinsky	No	Brianna Haug	Yes	Basin Electric Power Cooperative
Joe Fultz	No			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	Yes			American Electric Power
Scott Schichtl	Yes			Arkansas Electric Cooperative Corporation
Jason Shook	No			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	No	David Mendoza	Yes	Golden Spread Electric
Ryan Baysinger	Yes			Eergy

Material: SEP21_Attach2- 1c. MDAG Conference Call Attendance-09-21-2022.xlsx

MDAG MINUTES
September 21, 2022

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 Jones updated the agenda, moving the system reduction update before agenda item 6 the 2022 series MDAG Model Build/Application Updates

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

Material: SEP21_Attach1- 1e. MDAG Meeting Agenda

AGENDA ITEM 1F – PREVIOUS AUGUST 18, 2022 MEETING MINUTES (APPROVAL ITEM)

Lottie Jones asked the group if they had any proposed changes for the previous August 18, 2022, meeting minutes.

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

Motion: Scott Schichtl motioned to approve August 18, 2022, meeting minutes as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.

Material: SEP21_Attach3- 1f. August 18, 2022, Meeting Minutes.docx

MDAG MINUTES

September 21, 2022

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 176 (In-Progress) – no update at this time, to be brought up at the next MVTf
- Action Item 177 (In-Progress) – updated recommendation to be approved 9/21/22
- Action Item 182 (In-Progress) – Zach following up with Renee on the request, initial testing completed
- Action Item 184 (In-Progress) – to be brought up at the October MTF meeting
- Action Item 186 (Completed) – pending response email from Seimens, Becca mentioned that the current version of MOD does not allow this functionality but there is an effort to add this in to a future version of MOD
- Action Item 191 (In-Progress) – mark as complete once the recommendation is approved in the MDAG meeting today (9/21/22)
- Action Item 193 (In-Progress) – will be in October MDAG FG meeting
- Action Item 194 (In-Progress) – Review the CPPTF common model flow chart and bring it back to the September meeting.
- Action Item 195 (In-Progress) – Include the RAD TF discussion in the next MDAG meeting in September in order to come up with a recommendation.

AGENDA ITEM 3 – MDAG SCOPE REVIEW (APPROVAL ITEM)

SPP staff, Lottie Jones, posted the MDAG Scope review and has only noted one correction at this time. She mentioned that the scope seems to be missing item 7, so item 8 would change to item 7 and the date would be updated as well.

Andrew Berg mentioned that there should be representation from each planner as per MOD-032-1. Sunny mentioned that we currently have up to 24 voting seats within the group though it is open for participation in the discussion. Andy agrees to leave it as-is for the time.

MDAG MINUTES
September 21, 2022

Motion: Andrew Berg motioned to approve the MDAG Scope Review with the updates as shown. Alex Mucha seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 4 – CHAIR NOMINATION (APPROVAL ITEM)

Brianna Haug discussed the chair nomination with the group:

“John Turner to Chair the current term for the MDAG. John Turner to be the nomination for Chair and Brianna Haug to be the nomination for Vice Chair for the Model Development Advisory Group until the next term renewal.”

Motion: Mae Cruz motioned to approve the chair nomination as presented. Steve Hohman seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 5 – SYSTEM REDUCTION (APPROVAL ITEM)

SPP staff, Josh Pilgrim, presented a system reduction topic to the group. SPP staff analyzed two different methods of reduction and no significant impact on footprint accuracy has been found. Josh provided details on both methods, as well as a comparison of the methods resulting in Josh presenting the below recommendation:

“SPP recommends using the Gen/Load Method and the proposed MDAG dynamics boundary (reduce tier 3 areas and beyond, retain all MRO areas) to reduce the MDAG power flow models.”

Due to member discussion, this discussion was tabled, and later brought back towards the end of the meeting with an approved motion.

Motion: Steve Hohman motioned to approve the system reduction recommendation as presented. Dustin Betz seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 6 – 2022 SERIES MDAG MODEL BUILD/APPLICATION UPDATES

AGENDA ITEM 6A – DYNAMICS (APPROVAL ITEM)

SPP staff, Zach Sabey, updated the group on the 2022 MDAG proposed final dynamics model build posting and future tasks (building TPL models with 2022 ITP portfolio updates). There were several updates received and included, which all are listed in 6a. dynamics presentation.

“Staff recommends that MDAG approve the 2022 MDAG Final Dynamic Models, contingent upon the updates being applied before posting.”

MDAG MINUTES

September 21, 2022

- Recent Updates Deadline: 9/23/2022
- Anticipated Posting: 10/7/2022

After the 2022 models were approved, Zach provided detailed update on the next steps for the TPL models, as well provided additional dynamic model updates that will begin January 2023

Motion: Steve Hohman motioned to approve the final dynamics model build contingent on updates. Andrew Berg seconded the motion. The group did not voice concerns during the discussion of the motion.

AGENDA ITEM 7 – FOCUS GROUP/TASK FORCE UPDATES

AGENDA ITEM 7A – RENEWABLE ASSUMPTIONS DISPATCH TASK FORCE

Andrew Berg updated the group on the RAD task force discussion recommendation:

“RAD TF would like to use the historical and data-driven approaches demonstrated in the RAD TF to derive a DISIS Study Group-specific fuel-based dispatch (for wind). The dispatch percentages should have historical or forecast bases and reflected in RR493. To be reviewed every DISIS cycle (or annually if utilized by MDAG and ITP), and updated if the dispatch percentage changes by greater than +/-6%.”

- As with the latest available model series, we could use the latest available dispatch percentages

Dustin voiced his concerns against the recommendation as he believes that using an average is not appropriate for GI studies. He believes that a minimum and a maximum are more appropriate for these types of studies. Steve Hohman voiced some similar concerns as well.

Steve Hohman and Dustin Betz mentioned that this should not be an MDAG decision and should instead be left up to the GI MTF or the TWG to approve the recommendation.

Action Item: Brianna and Lottie suggested moving the RAD recommendation topic to the next MDAG FG meeting and moving the motion to a future MDAG meeting.

AGENDA ITEM 7B – MDAG FOCUS GROUP

SPP staff, Becca McCann, updated the group verbally on the last MDAG FG meeting.

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MDAG MINUTES

September 21, 2022

The RAD TF discussion and system reduction topic will be discussed at the next FG meeting in October.

AGENDA ITEM 7C – MANUAL TASK FORCE

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

AGENDA ITEM 8A – POWERFLOW

SPP staff, Becca McCann, updated the group on the powerflow model build. Becca provided a status update, upcoming MDAG deadline and reminders and then open the floor for questions.

AGENDA ITEM 8B – SHORT CIRCUIT

SPP staff, Eric Sullivan, updated the group on the short circuit model build. Eric provided a status update, upcoming MDAG deadline and reminders, and then open the floor for questions

AGENDA ITEM 8C – MOD-033

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- Dispatch the CPP Common Model using a firm transmission service.

MDAG MINUTES

September 21, 2022

- At a minimum, the Common Model set should include the year/seasons necessary for the MMWG and also include any additional year/seasons desired for the CPP Common Model

This topic will be on the MDAG agenda for the next several months to ensure that MDAG has a strong recommendation to support CPPTF working groups.

AGENDA ITEM 10 – MEMBER SOLICITATION

SPP staff, Lottie Jones, notified MDAG that there are two vacant seats and would like to get the group's input on filling the vacancies before the end of the year. Jerad Ethridge and Ryan Benton stepped down from their MDAG positions. Interim chair, Brianna Haug, suggested having both seats open and available for solicitation. Alex Mucha concurred with Brianna. There was clarification provided that only one seat per member company could be occupied. Without any remaining discussion or questions, MDAG agreed to solicit membership to fill the two vacant seats in MDAG.

AGENDA ITEM 11 – SUMMARY OF ACTION ITEMS

Brianna and Lottie suggested moving the RAD recommendation topic to the next MDAG FG meeting and moving the motion to a future MDAG meeting.

AGENDA ITEM 12 – DISCUSSION OF FUTURE MEETINGS

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AGENDA ITEM 13 – ADJOURN

Brianna Haug adjourned the meeting at 11:52 a.m. (CST).

Respectfully Submitted,

Lottie Jones
Secretary

Attachments

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September 21, 2022

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