

## **MDWG MINUTES**

March 27, 2020

### **SOUTHWEST POWER POOL MODEL DEVELOPMENT WORKING GROUP MEETING**

March 27, 2020 9:00 am – 12:00 pm (CDT)  
Conference Call

## **SUMMARY OF MOTIONS AND ACTION ITEMS**

#### Action Items:

1. Staff (Lottie Richardson) to send out meeting notification for the Generation Dispatch Focus Group meeting.
2. Staff (Michael Odom) post final MDWG short circuit models within a week.
3. Staff to explore planned retirement data collection improvements to accommodate refueling.

#### Motions:

1. Motion: Jason Shook motioned to adopt the agenda as modified. Jerad Ethridge seconded the motion. The motion passed unanimously.
2. Andy Berg made a motion to approve the short circuit models with the edited recommendation presented on the screen. Joe seconded it. The motion passed unanimously.

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### MINUTES

#### AGENDA ITEM 1 – ADMINISTRATIVE ITEMS

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

SPP MDWG Chair, Nate Morris, called the meeting to order at 9:33 am with Quorum. SPP Staff Secretary, Sunny Raheem, read the anti-trust statement to the group.

##### AGENDA ITEM 1C & 1D – ATTENDANCE AND PROXIES

The following members attended or represented by proxy:

MDWG Member	Present	Proxy	Present	Company
Nate Morris	YES			Empire District Electric Company, MDWG Chair
Jerad Ethridge	YES			Oklahoma Gas & Electric, MDWG Vice-Chair
Charles Aleman	YES			Golden Spread Electric Cooperative
Andrew Berg	YES			Missouri River Energy Services
Preston Blinsky	YES			Basin Electric Power Cooperative
John Boshears	No	Jerry Bradshaw	YES	City Utilities of Springfield
Joe Fultz	YES			Grand River Dam Authority
Jeremy Harris	YES			KCP&L and Westar, Evergy Companies
Jason Hofer	YES			Nebraska Public Power District
Steve Hohman	YES			Omaha Public Power District
Holli Krizek	YES			Western Area Power Administration
Jordan Lamb	NO			East River Electric Power Cooperative
Reené Miranda	YES			Southwestern Public Service
Alex Mucha	YES			Oklahoma Municipal Power Authority
Scott Rainbolt	YES			American Electric Power
Scott Schichtl	NO	Josh Hesselbein	YES	Arkansas Electric Cooperative Company
Jason Shook	YES			GDS Associates
Liam Stringham	YES			Sunflower Electric Power Corporation
Sunny Raheem	YES			Southwest Power Pool, Inc., MDWG Secretary

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### Additional Guests:

Guests	Company
Josh Hesselbein	Arkansas Electric Cooperative Corporation
David Zhong	American Electric Power
Conner Sweet, Jerry Bradshaw	City Utilities of Springfield
Jeff Crites	Empire District Electric Company
Cristina Ortiz, Lafayette Gatewood, Ryan Baysinger	Eergy Companies
Dona Parks	Grand River Dam Authority
Michael Wegner	ITC Transco
Edin Terzic	Lincoln Electric System
Ryan Benton	Midwest Energy
Armin Sehic	Municipal Energy Agency of Nebraska
Daryl Huslig	Oklahoma Gas and Electric
Eddie Watson, Hugh Benfer, Jeff McDiarmid, Kimberly Woods, Lottie Richardson, Michael Odom, Moses Rotich, Shahrokh Akhlaghi, Sherri Maxey, Zach Sabey	Southwest Power Pool, Inc.
Dave Sargent, Scott Mijin	Southwest Power Administration
Hummad Malhi, Joe Williams, Josh Turner	Western Farmers Electric Cooperative
Ben Hammer, Brianna Haug,	Western Area Power Administration

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### AGENDA ITEM 1E – AGENDA REVIEW

Nate Morris asked the group if they had a chance to review the agenda and if the group has any modifications to the agenda. Sunny Raheem mentioned that the dispatch focus group meeting is currently being schedule. The group did not voice any additional modifications.

**Motion: Jason Shook motioned to adopt the agenda as modified. Jerad Ethridge seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**

**Action Item: Staff (Lottie Richardson) to send out meeting notification for the Generation Dispatch Focus Group meeting.**

Material: MAR27\_Attach1 - 1e. MDWG Meeting Agenda 20200327\_redline.docx

### AGENDA ITEM 2 – REVIEW OF PAST ACTION ITEMS

Sunny Raheem requested Moses Rotich provide an update on the recent action items. Moses presented and commented on recently completed action items 78 through 80. Moses mentioned he would update the comments section of the new action items in preparation for the April MDWG meeting.

### AGENDA ITEM 3 – 2020 SERIES MDWG SHORT CIRCUIT MODELS (APPROVAL ITEM\*)

Michael Odom presented the status of the short circuit models. Michael outlined the project updates including internal data submitters and external to SPP data updates provided since the 2/7/2020 deadline. Michael provided the SPP recommendation for the model approval.

The group discussed how the SPP planned retirement list was applied to model updates. OPPD mentioned they have some units that have retired from one fuel and refueled to a different type and those unites seem to be considered retired in the models. Michael mention he could accommodate the change to turn those units on as post processing idev corrections. Eddie Watson commented that the units could be treated as outages and not retirements in those particular scenarios. Steve Hohman clarified that the retirement date is from December - January that is a very short time. Steve commented that the units should not be modeled as out of service in the max fault cases.

Jason Shook asked if staff is requesting the group to approve the previously posted models as the final models or the approve models with the intent that updates will be applied to make the models final. Sunny Raheem mentioned he thought the group could follow the same process as the MDWG powerflow model approvals. Sunny asked Moses Rotich to describe to the group about how the group facilitated the changes in the MDWG powerflow approval. Moses mentioned that any changes received between the posting of the powerflow models and the

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approval vote were applied to the models and posted as final. Any updates received after the posted final were treated as post processing idevs. Andy Berg voiced support for the similar approach for the short circuit approval. Jared Ethridge proposed an update cutoff of Monday March 30 at 9:00am for members to provide updates to be applied to the posted final models. SPP would post the final models to GlobalScape. Most members supported the similar approval approach with an update cutoff date. The group discussed what types of upgrades should be considered from now to the cutoff date. The group decided to limit the upgrades to connection code, vector group, machine status, and impedance/seq only.

**Motion: Andy Berg made a motion to approve the short circuit models with the edited recommendation presented on the screen. Joe seconded it. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**

Material: MAR27\_Attach2 - 3. 2020 MDWG Short Circuit Model Build Update-03272020.pptx

Background Materials Slide 4 Motion Recommendation Language:

- SPP staff recommends the 2020 MDWG short circuit models be approved by the Model Development Working Group with idevs provided by Monday March 30, 2020 by 9am CDT applied to the models.
  - Idev changes limited to connection code, vector group, machine status, impedance/seq only.
  - Significant updates such as topology updates can be considered under post processing idevs.

Sunny Raheem thanked the Data Submitters, MDWG, and staff for the work well done in meeting the schedule deadlines even with the consideration of different roadblocks along the way. Eddie Watson and Nate Morris echoed additional kudos to the group.

**Action Item: Staff (Michael Odom) post final MDWG short circuit models within a week.**

**Action Item: Staff to explore planned retirement data collection improvements to accommodate refueling.**

### AGENDA ITEM 4 – ITP QUARTERLY UPDATE

Sherri Maxey presented the 2020 ITP and 2021 ITP quarterly update. Sherri provided the 2021 ITP base reliability model entity report card results. The group did not voice any concerns or questions about the update.

Material: MAR27\_Attach3 - 4. ITP Quarterly Report\_Apr2020.pptx

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### AGENDA ITEM 5 – SUMMARY OF ACTION ITEMS

1. Staff (Lottie Richardson) to send out meeting notification for the Generation Dispatch Focus Group meeting.
2. Staff (Michael Odom) post final MDWG short circuit models within a week.
3. Staff to explore planned retirement data collection improvements to accommodate refueling.

### AGENDA ITEM 6 – DISCUSSION OF FUTURE MEETINGS

Nate Morris outlined the future MDWG, MDWG workshop, MDWG focus groups, and MDWG manual task force meetings

### AGENDA ITEM 7 – ADJOURN (APPROVAL ITEM)

Nate Morris asked the group if they had any other topics for discussion before the group adjourned. The group did not voice any additional topics. Moses reminded the group to upload any changes they are submitting as corrections/updates, into MOD and EDST as well in preparation for next model build. Moses will be coordinating with MOD base case submissions with Data Submitters to review and inform SPP on whether they can be committed or not.

**Motion: Reene motioned to adjourn the meeting. Andy Berg seconded the motion. The group did not voice concerns during the discussion of the motion. The motion passed unanimously.**

The meeting adjourned at 9:56 am (CDT).

Respectfully Submitted,

Sunny Raheem

Secretary

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### Attachments

Material: MAR27\_Attach1 - 1e. MDWG Meeting Agenda 20200327\_redline.docx

Material: MAR27\_Attach2 - 3. 2020 MDWG Short Circuit Model Build Update-03272020.pptx

Material: MAR27\_Attach3 - 4. ITP Quarterly Report\_Apr2020.pptx

**SOUTHWEST POWER POOL, INC.**  
**MODEL DEVELOPMENT WORKING GROUP MEETING**  
**March 27, 2020**  
**Conference Call**  
**9:00 a.m. – 12:00 p.m. (CDT)**

**AGENDA**

1. Administrative Items.....Nate Morris (10 mins)
  - a. Call to Order
  - b. Antitrust Statement
  - c. Attendance
  - d. Proxies
  - e. Agenda Review (**Approval Item**)
    - i. Acknowledgement of discuss meeting materials
2. Review of Past Action Items ..... Sunny Raheem (5 mins)
3. 2020 series MDWG Short Circuit Models (**Approval Item\***) .....Michael Odom /All (60 mins)
4. ITP Quarterly Update.....Sherri Maxey (15 mins)
5. Summary of Action Items..... Sunny Raheem (5 mins)
6. Discussion of Future Meetings\*\* .....Nate Morris (10 mins)
  - a. MDWG: April 16, 2020 Conference Call (9:00AM – 12:00PM)
  - b. Manual Task Force: April 9, 2020 (10:00AM-12:00PM)
  - c. Focus Groups Meetings:
    - i. Power Flow: April 6, 2020 (9:30AM – 11:30AM)
    - ii. Short Circuit: May 12, 2020 (9:00AM – 11:00AM)
    - iii. Dynamics: April 22, 2020 (10:00AM – 12:00PM)
    - iv. Generation Dispatch: ~~March 24~~Scheduling for April 28, 2020 (2:00PM – 4:00PM)
7. Adjourn (**Approval Item**)..... All

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

**\*\* Future meeting times are in central daylight savings.**

*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.*





# 2020 MDWG SHORT CIRCUIT MODEL BUILD UPDATE

MODELING

MICHAEL ODOM

MARCH 27, 2020

*Helping our members work together to  
keep the lights on... today and in the future.*



SouthwestPowerPool



SPPorg



southwest-power-pool

# OVERVIEW

- Status Update Since 2/7/2020 deadline
- Recommendation

# STATUS UPDATE SINCE 2/7/2020 DEADLINE

- **Model Updates**
  - Data Submitters have submitted updates through the day of final model posting
  - Applying all applicable model updates received for the MDWG powerflow models through March 20, 2020
- **External Data Entities**
  - Requested MISO TO/TP data for the first time in the Short Circuit model build
  - After initially merging topology updates, there were a large number of additions and removals of facilities internal and external to SPP
  - Decision was made to start with the base MDWG powerflow models and apply only the sequence data updates from the external entities to avoid false topology updates

# RECOMMENDATION

- SPP staff recommends the 2020 MDWG short circuit models be approved by the Model Development Working Group with idevs provided by Monday March 30, 2020 by 9am CDT applied to the models.
- Idev changes limited to connection code, vector group, machine status, impedance/seq only.
- Significant updates such as topology updates can be considered under post processing idevs.



**ITP**

# ITP QUARTERLY REPORT






SHERRI MAXEY

MARCH 27, 2020

*Helping our members work together to keep  
the lights on... today and in the future.*



# STATUS LEGEND

Status Indicator	Status	Milestone Tasks Are...
	Complete	Completed on-time or per rebaseline
	On Track	In progress and on schedule
	Monitor/At Risk	Being monitored for potential schedule/ study impact(s)
	In Mitigation	Following mitigation process
	Late/Delayed	Late/behind schedule

# 2020 ITP

# COMPLETED MILESTONES



Milestone	Status	Previous Start Date	Original Approval/End Date	Updated Approval/End Date
<i>Schedule was re-baselined due to MEM mitigation</i>				
Market Economic Model (MEM)	★	2/01/2019	1/08/2020	3/16/2020
Constraint Assessment	★	9/02/2019	1/07/2020	3/16/2020
Market Powerflow Model (MPM)	★	10/18/2019	2/05/2020	3/24/2020
Needs Assessments	★	11/07/2019	3/24/2020	3/24/2020



# CURRENT AND UPCOMING MILESTONES



Milestone	Status	Previous Start Date	Previous End Date	Current Start Date	Current End Date
<i>In mitigation; project end date is currently at low risk</i>					
Detailed Project Proposal (DPP) Window		3/03/2020	4/02/2020	3/25/2020 12:00am	4/23/2020 11:59pm
Staff Solutions Development		3/03/2020	6/08/2020	3/25/2020	4/23/2020
Solutions Technical Validation		3/03/2020	6/08/2020	3/25/2020	6/08/2020
Solutions Evaluation		4/13/2020	6/08/2020	4/13/2020	6/08/2020

# MITIGATION AND GO GREEN PLAN



- Ongoing attention to evaluating resource needs and areas where staff can gain efficiencies
- Acceleration of staff solution development based upon similar issues observed in 2019 ITP
  - Internal staff training to prepare for solutions development and evaluation, and to gain bench strength
- Improvements for DPP submittal tracking and technical validation
  - Submittal form updates including a “self-validating” button
  - DPP Educational Session held to help educate stakeholders and improve quality of submittals
  - Targeted automation enhancements for previously manual tasks

# DEPENDENCIES/RISKS



- TWG/ESWG approval needed for schedule rebaseline at April meetings
- Schedule revisions considered are dependent upon the development of staff solutions during the DPP Window and beginning DPP technical validation as soon as possible
  - Beneficial if DPPs are received prior to end of DPP Window for staff validation
- Schedule estimates based on receiving 1,200 DPPs; if a greater number is received, may need to re-evaluate schedule
- Reduced staff analysis time
- Internal network run issues causing failures
- Uncertainty around timing for 2020 ITP Target Area and coordination on ITP Coordinated System Plan (CSP) efforts with MISO



# 2021 ITP

# COMPLETED MILESTONES



Milestone	Status	Previous Start Date	Original Approval/End Date	Updated Approval/End Date
<i>Schedule was re-baselined due to 2020 ITP - MEM mitigation</i>				
Powerflow Model Development – Initial Final ( <i>Final Approval in Nov. 2020</i> )	★	7/08/2019	3/06/2020	3/24/2020
Load and Generation Review	★	7/16/2019	3/05/2020	3/17/2020
Short Circuit Model Development	★	8/09/2019	3/06/2020	3/31/2020

# CURRENT AND UPCOMING MILESTONES



Milestone	Status	Previous Start Date	Previous End Date	Current Start Date	Current End Date
<i>Schedule was re-baselined due to 2020 ITP mitigation work</i>					
Scope Development*		7/08/2019	1/14/2020	7/08/2019	1/14/2020
Renewable Policy Review		1/03/2020	3/14/2020	1/03/2020	3/31/2020
Renewable Resource Plan		2/03/2020	3/14/2020	2/03/2020	3/31/2020
Conventional Resource Plan		n/a	n/a	2/12/2020	5/12/2020
Siting Plan & Generator Outlet Facilities (GOFs)		n/a	n/a	3/15/2020	7/25/2020
Market Economic Model (MEM) Build		n/a	n/a	11/01/2019	12/15/2020

\* Scope approved at Jan. MOPC pending finalization of Consolidation section at Jul. 2020 MOPC; Apr. MOPC review

# 2021 ITP BASE RELIABILITY MODEL – ENTITY ENGAGEMENT

- Essentially all Data Submitters that participated in the model build submitted data by the scheduled deadline; however, additional corrections were submitted after the deadline by the following entities

Applicable Entities	
Nextera	SPP

- Note: SPP performed evaluations of all late requests/changes per Section 10.3 of the SPP ITP Manual