



Southwest Power Pool, Inc.
OPERATING RELIABILITY WORKING GROUP
Net Conference
Thursday April 4, 2019 8:30 AM – 12:00 PM (CST)

• Action Items and Voting Record •

ACTION ITEM: Track RCWG concerns of RR338 and how it's being addressed amongst other ongoing efforts.
ACTION ITEM: ORWG to review the OEC and loss of VERS pertaining to the SPP RSG at a future ORWG meeting.

Agenda Item 5 - March 6 and 7, 2019 ORWG Meeting Minutes.

Ron Gunderson (Nebraska Public Power District) moved to approve the March 6 and 7, 2019 ORWG Meeting Minutes as amended, and Jeff Wells (Grand River Dam Authority) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 6 – RR338 SPP RSG MSSC Clarification

Abu Elteriefi (ITC Holdings) moved to endorse the RCWG changes to RR338 document 06a in the meeting materials, and Allan George (Sunflower Electric Power Corporation) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 8 – SPP RC and BA NERC Compliance Submissions Guide

Jeff Wells (Grand River Dam Authority) moved to endorse the changes to SPP RC and BA NERC Compliance Submissions Guide, and Gary Plummer (City of Independence, MO) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 11 – OCMTF Nomination Request

Ron Gunderson (Nebraska Public Power District) moved to approve the charter name change, and Jeff Wells (Grand River Dam Authority) seconded the motion. The motion carried without opposition or abstention.



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• M I N U T E S •

Agenda Item 1 – Call to Order

Chairman Allen Klassen (Westar Energy, Inc.) opened the meeting at 8:03 AM on 04/04/2019.

Agenda Item 2 – Attendance

Jason Tanner (Southwest Power Pool) called attendance and a meeting quorum was reached.

Agenda Item 3 – Antitrust Statement

Jason Tanner (Southwest Power Pool) read the SPP Antitrust Statement.

Agenda Item 4 – Agenda Review

Allen Klassen (Westar Energy, Inc.) reviewed the agenda and noted the items that would require action.

Agenda Item 5 – Consent Agenda

Allen Klassen (Westar Energy, Inc.) discussed the consent agenda, which included the March 6 and 7, 2019 ORWG Meeting Minutes.

Ron Gunderson (Nebraska Public Power District) and Allan George (Sunflower Electric Power Corporation) pulled the meeting minutes and made grammatical corrections.

Ron Gunderson (Nebraska Public Power District) moved to approve the March 6 and 7, 2019 ORWG Meeting Minutes as amended, and Jeff Wells (Grand River Dam Authority) seconded the motion. The motion carried without opposition or abstention.

Liaison Reports

PFRTF Activities Update

Allan George (Sunflower Electric Power Corporation) provided an update to the Primary Frequency Response Task Force (PFRTF) activities. Allan stated that the PFRTF reached out to ERCOT for training and lessons learned. Allan stated that the PFRTF will meet next in Dallas to discuss the BAL-003 update, and to set a posting time for the PFRTF report.

SRTF Activities Update

Neil Robertson (Southwest Power Pool) provided an update on the System Restoration Task Force (SRTF) activities and stated that the group sent a survey out to request information regarding capabilities during a restoration event. Neil stated that the due date for the survey is April 12, 2019. Neil stated that the SRTF is expecting to host a face to face meeting on May 8-9, 2019 where the group will review member company details of the survey and discuss restoration scenarios to identify specific task to focus on.

Agenda Item 6 – RR338 SPP RSG MSSC Clarification

Neil Robertson (Southwest Power Pool) explained the MSSC description in the NERC context and stated that RCWG voted to approve the RR with modifications. Neil stated that RCWG wanted the requirements spelled out in the document, and they made grammatical changes to the document. Neil asked for ORWG to endorse the document then have a follow up RR to address the RCWG comments. Ron Gunderson (Nebraska Public Power District) stated that he didn't have any concerns with the grammatical changes.

Abu Elteriefi (ITC Holdings) moved to endorse the RCWG changes to RR338 document 06a in the meeting materials, and Allan George (Sunflower Electric Power Corporation) seconded the motion. The motion carried without opposition or abstention.

Neil discussed RR338 document 06b in the meeting materials and stated that this document is not the correct location to address contingency events. The ORWG decided they would investigate the RCWG comments and track how they are being addressed. Neil provided an example of a balancing contingency event of a wind farm and explained how anything over a minute is a gray area. Neil expressed concerns about using reserves for resource losses that happen longer than one minute and then having another reserve sharing event when reserves are already deployed. NERC Reliability Standards may not recognize the initial event as one that should utilize Contingency Reserves and thus the Reserve Sharing Group may not meet DCS when the subsequent event occurs.

ACTION ITEM: Track RCWG concerns of RR338 and how it's being addressed amongst other ongoing efforts.

ACTION ITEM: ORWG to review the OEC and loss of VERS pertaining to the SPP RSG at a future ORWG meeting.

Agenda Item 7 – RST Time limits for rating

Temper Williams (Southwest Power Pool) discussed the Ratings Submission Tool time parameters. Temper reviewed two options for submitting timing parameters for ORWG to consider. Ron Gunderson (Nebraska Public Power District) stated that all emergency ratings have a time associated with the rating and that operators need time limits for all emergency ratings. However, Ron stated time limits associated with normal rating are not needed. Ron asked if RCWG reviewed the proposal and Neil stated this was the first time it was presented to any SPP group. The ORWG recommended returning with additional details related to option 1 before proceeding. In the current form, option 2 is the only one that would be acceptable.

Agenda Item 8 – SPP RC and BA NERC Compliance Submissions Guide

Neil Robertson (Southwest Power Pool) discussed the changes and reviewed the red-lines to the SPP RC and BA Compliance Submission Guide related to EOP-005 R3. The group discussed removing the standard revision number. However, the ORWG determine that leaving the standard revision number in the guide is the correct action.

Jeff Wells (Grand River Dam Authority) moved to endorse the changes to SPP RC and BA NERC Compliance Submissions Guide, and Gary Plummer (City of Independence, MO) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 9 – 3/4/2019 Conservative Operations

Garrett Crowson (Southwest Power Pool) explained that on Friday March 1, 2019 SPP issued a conservative operations notification. Garrett stated that forecast began showing persistent icing which could lead to units

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Evolutionary vs. Revolutionary • Reliability & Economics Inseparable

failing to start. Garrett stated that SPP began bridging units and increasing reliability margins. Garrett reviewed the wind and load forecast, icing report, capacity margins, and cold weather temperatures. Garrett stated that approximately 1600 MWs of long lead capacity was brought online for the 3/3/2019 – 3/6/2019 time period on 3/1/2019. Garrett stated that SPP continued to run several cases starting on 3/1 through 3/5 scaling load and wind. Garrett stated the cases also accounted for resource fail-to-starts and SPP was committing capacity as needed. Garrett stated that URT team support was engaged throughout the time period, which included a presence on floor early Monday morning on the 4th leading up to morning peak. Allen Klassen (Westar Energy) asked if SPP would change its approach and Garrett stated that it worked as designed.

Agenda Item 10 – Target Level for Auto Activation

Terry Oxandale (Southwest Power Pool) discussed the target level for auto activation and stated that SPP is working to develop metrics to measure performance. Terry stated that we need to decide where to set the effective limit and we need to turn off the monitor limit status changes. Terry stated that we need to consider the impacts to dynamic line ratings since a constraint may already be activated before a limit change is received. Jeff Wells (Grand River Dam Authority) asked if SPP was seeing good results and Terry stated that we are, however some issues still exist. Terry stated that when the primary flowgate activates then secondary flowgates potentially activate as well. Terry stated that even though the flowgate activates at 95% of the flowgate limit, the flowgate will not bind until it reaches the effective limit. Ron Gunderson (Nebraska Public Power District) asked if the suggestion was to set the effective limit at 97% and Terry stated that would likely be his recommendation, however internal discussions are still ongoing.

Agenda Item 11 – OCMTF Nomination Request

William Ragsdale (Southwest Power Pool) presented the OCRTF nominations to ORWG and Allan Klassen (Westar Energy) accepted all the nominations with Doug Peterchuck (Omaha Public Power District) selected as the chairman of the group. Jason Tanner (Southwest Power Pool) recommended changing the name of the group from the Congestion Management Task Force to the Operations Congestion Management Task Force. Jason made a charter change to reflect the new name.

Ron Gunderson (Nebraska Public Power District) moved to approve the charter name change, and Jeff Wells (Grand River Dam Authority) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 12 – Reliability Communication Tool Update

Neil Robertson (Southwest Power Pool) provided an update to the Reliability Communication Tool and stated that the SPP production systems will be ready on 4/5/2019. Neil stated that parallel operations will be conducted from 4/8/2019-6/28/2019, and 7/8/2019 will mark the official production use for messaging and load shed events.

Agenda Item 13 – Reliability in Your Shop (Communication Outages)

Kyle McMenamin (Xcel Energy) discussed communication outages related to ICCP, EMS, RTCA, RTU, and communication lines. Kyle discussed the responsibilities related to planned outages and unplanned outages of communication equipment and explained the procedures associated with both outage types. Kyle discussed the notification and timing responsibilities between the TOP and SPP RC. Kyle also discussed TOP-001-3, R9 and how it compares to the SPP Required Data Specification and explained how Xcel adheres to both documents. Allen Klassen (Westar Energy) asked if the ORWG members could have access to his procedure, and Kyle stated he would have to discuss internally before he could release the procedure.

Agenda Item 14 – Ramp Product

Ricky Finkbeiner (Southwest Power Pool) provided an update on the current status of the ramp product. Ricky stated that the ramp product is really two products, ramp capability up and ramp capability down. Ricky explained that the product treatment would be similar to other reserves. Ricky discussed the key variables associated with the ramp product and stated that SPP is finishing the analysis to bring to MWG in late April and may need additional simulations to refine key variables. Ricky explained the Day Ahead Market RTBM full simulation methodology and provided a simulation example. Ron Gunderson (Nebraska Public Power District) asked how the ramp product is replaced after deployment, and Ricky explained how it's not a regulation reserve and stated we would have to make sure the product is available all the time. Ricky stated that he would return to ORWG with Ramp product results for discussion.

Agenda Item 15 – NERC Update

This item was postponed to a future meeting.

Agenda Item 16 – Event analysis process

This item was postponed to a future meeting.

Agenda Item 17 – ORWG Charter Update

This item was postponed to a future meeting.

Other Items:

Agenda Item 18 – ORWG Member Topic List

The ORWG member topic list was provided in the meeting material packet.

Action Item Review:

Agenda Item 19 – Review of Open and Closure Pending Actions

The action item list was provided in the meeting material packet.

Agenda Item 20 – New Action Items

Jason Tanner (Southwest Power Pool) reviewed the new action items with the ORWG.

Agenda Item 21 – General Q&A/Open Forum

Agenda Item 22 – Meeting Schedule

- a. 5/2/2019 WebEx (Thurs) 0830-1200
- b. 5/29 - 5/30/2019 Face-to-Face (Juno Beach, FL)(NextEra) – CONFIRMED
- c. 6/27/2019 WebEx (Wed) 0830-1200
- d. 8/1/2019 WebEx (Thurs) 0830-1200
- e. 9/5/2019 WebEx (Thurs) 0830-1200
- f. 10/2 - 10/3/2019 Face-to-Face (Dallas, TX)(AEP Office) – CONFIRMED
- g. 11/7/2019 WebEx (Thurs) 0830-1200
- h. 12/5/2019 WebEx (Thurs) 0830-1200
- i. 1/07 - 1/08/2020 Face-to-Face (Denver, CO)(Xcel) – CONFIRMED



- j. 2/6/2020 WebEx (Thurs) 0830-1200
- k. 3/5/2020 WebEx (Thurs) 0830-1200
- l. 4/01 - 4/02/2020 Face-to-Face (Amarillo, TX)(Xcel) – CONFIRMED
- m. 5/7/2020 WebEx (Thurs) 0830-1200
- n. 6/4/2020 WebEx (Thurs) 0830-1200
- o. 6/30 - 7/01/2020 Face-to-Face (Tulsa, OK)(GRDA) – CONFIRMED
- p. 8/6/2020 WebEx (Thurs) 0830-1200
- q. 9/3/2020 WebEx (Thurs) 0830-1200
- r. 9/30 - 10/01/2020 Face-to-Face (Little Rock, AR)(SPP) – CONFIRMED
- s. 11/5/2020 WebEx (Thurs) 0830-1200
- t. 12/3/2020 WebEx (Thurs) 0830-1200

Agenda Item 23 – Adjournment

Chairman Allen Klassen (Westar Energy, Inc.) adjourned the ORWG at 12:08 PM (CST) on 04/04/2019.

Respectfully Submitted,
Jason Tanner, Secretary



Operating Reliability Working Group
Meeting Attendance: 4/4/2019
M=Member, G=Guest, S=SPP Staff, P= Proxy

| Day 1 | | Name | Status | Company |
|-------|----|------------------------------------|--------|--------------------------------------|
| x | 1 | Allen Klassen, Chairman | M | Westar Energy |
| x | 2 | Ron Gunderson, Vice Chairman | M | Nebraska Public Power District |
| P | 3 | Jim Useldinger | M | South Central MCN |
| x | 4 | Gary Plummer | M | City of Independence, MO |
| x | 5 | Kyle McMenamain | M | Xcel Energy |
| x | 6 | Laurie Gregg | M | Lincoln Electric System |
| x | 7 | Allan George | M | Sunflower Electric Power Corporation |
| x | 8 | Jeff Wells | M | Grand River Dam Authority |
| P | 9 | Mark Eastwood | M | City Utilities of Springfield |
| x | 10 | Doug Peterchuck | M | Omaha Public Power District |
| P | 11 | Bryn Wilson | M | Oklahoma Gas and Electric Co. |
| x | 12 | Chris Shaffer | M | American Electric Power |
| x | 13 | David Pham | M | Empire District Electric Company |
| x | 14 | Matthew Stoltz | M | Basin Electric Power Cooperative |
| x | 15 | Chance Myers | M | Western Farmers Electric Cooperative |
| x | 16 | Craig Speidel | M | Western Area Power Administration |
| x | 17 | Abu Elteriefi | M | ITC Holdings |
| a | 18 | Keith Carmen | M | Tri-State G&T |
| x | 19 | Kevin Ma Proxy for Bryn Wilson | G | Oklahoma Gas and Electric Co. |
| x | 20 | John Allen Proxy for Mark Eastwood | G | City Utilities of Springfield |
| x | 21 | Ron Thompson | G | Nebraska Public Power District |
| x | 22 | Allie Gavin | G | ITC Holdings |
| x | 23 | Ellen Watkins | G | Sunflower Electric Power Corporation |
| x | 24 | Steve Gaw | G | The Wind Coalition |
| x | 25 | Carrie Dixon | G | Xcel Energy |
| x | 26 | John Hare | G | Oklahoma Gas and Electric Co. |
| x | 27 | Kevin Ma | G | Oklahoma Gas and Electric Co. |
| x | 28 | Ryan Kirk | G | American Electric Power |
| x | 29 | Tyler Springer | G | American Electric Power |
| x | 30 | Jack Madden | G | GDS Associates |
| x | 31 | Jason Mazigian | G | Basin Electric Power Cooperative |
| x | 32 | Keeth Works | G | Southwestern Power Administration |
| x | 33 | Ben Hammer | G | Western Area Power Administration |
| x | 34 | Tim Hooker | G | Grand River Dam Authority |
| x | 35 | Eric Alexander | G | Grand River Dam Authority |
| x | 36 | Cindy Sabin | G | Grand River Dam Authority |
| x | 37 | Chris Lyons | G | Customized Energy Solutions |
| x | 38 | Amber Joyce | G | Montana-Dakota Utilities |
| x | 39 | Kevin Galke | G | The Energy Authority |
| x | 40 | Tom Mayhan | G | Omaha Public Power District |
| x | 41 | Jason Tanner | S | Southwest Power Pool |
| x | 42 | Kristen Darden | S | Southwest Power Pool |
| x | 43 | Jerry Stone | S | Southwest Power Pool |
| x | 44 | Will Tootle | S | Southwest Power Pool |
| x | 45 | Kevin Bates | S | Southwest Power Pool |
| x | 46 | Jeff Rooker | S | Southwest Power Pool |
| x | 47 | Jason Russell | S | Southwest Power Pool |
| x | 48 | John Gunter | S | Southwest Power Pool |
| x | 49 | Cody Parker | S | Southwest Power Pool |
| x | 50 | Erin Cathey | S | Southwest Power Pool |
| x | 51 | Kathryn Dial | S | Southwest Power Pool |
| x | 52 | Terry Oxandale | S | Southwest Power Pool |
| x | 53 | Neil Robertson | S | Southwest Power Pool |
| x | 54 | Temper Williams | S | Southwest Power Pool |
| x | 55 | Abram Harder | S | Southwest Power Pool |
| x | 56 | Derek Hawkins | S | Southwest Power Pool |
| x | 57 | Scott Aclin | S | Southwest Power Pool |
| x | 58 | Margaret Q. Adams | S | Southwest Power Pool |

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| x | 59 | Jim Williams | S | Southwest Power Pool |
| x | 60 | Garrett Crowson | S | Southwest Power Pool |
| x | 61 | Ricky Finkbeiner | S | Southwest Power Pool |
| x | 62 | Temper Williams | S | Southwest Power Pool |