

Southwest Power Pool, Inc.

OPERATING RELIABILITY WORKING GROUP

Little Rock, AR Face to Face Meeting

Day 1 – March 02, 2016 8:00 - 5:00 p.m. (CST)

Day 2 – March 03, 2016 8:00 - 12:00 p.m. (CST)

• Action Items and Voting Record •

1. Request the Synchrophasor Strike Team to report to ORWG face to face meeting in the August/September.
2. Present the WIS phase two scope to ORWG.
3. Send NASPI links for PMU start up and PMU documentation to the ORWG exploder.
4. ORWG to review documents located on the secure site and recommend the need to flag the documents as secure or unsecure.
5. Post flowgate Q/A document to the ORWG website document folder.
6. Post the WIS recommendation document to the ORWG website document folder.

Consent Agenda

Ron Gunderson (Nebraska Public Power District) moved to approve the Consent Agenda, and Jim Useldinger (South Central MCN) seconded the motion. The motion was approved without opposition or abstention.

SPP RR156 Modification to Business Practice 7650 – DPP Clarification

Jim Useldinger (South Central MCN) moved to approve RR156 modifications to Business Practice 7650, and Allan George (Sunflower Electric Power Corporation) seconded the motion. The motion was approved without opposition or abstention.

SPP Operations Communications Protocol

Ron Gunderson (Nebraska Public Power District) moved to approve the SPP Operations Communications Protocol as modified, and Jeff Wells (Grand River Dam Authority) seconded the motion. The motion was approved without opposition or abstention.

Voltage Task Force Charter

Jeff Wells (Grand River Dam Authority) moved to approve the Voltage Task Force Charter as amended, and Kyle McMenamini (Xcel Energy) seconded the motion. The motion was approved without opposition or abstention.

Operating Criteria Review Task Force Charter

Jeff Wells (Grand River Dam Authority) moved to approve the Operating Criteria Review Task Force Charter as amended, and Allan George (Sunflower Electric Power Corporation) seconded the motion. The motion was approved without opposition or abstention.

Wind Integration Study and Recommendations

Jim Useldinger (South Central MCN) moved to acknowledge the Wind integration Study has met the scope and approves the recommendations as modified on March 2nd 2016, and Abu Eleriefi (ITC Holdings) seconded the motion. The motion was approved without opposition or abstention.

RR147 50% Project Completion Milestone Determination for Competitive Upgrades

Ron Gunderson (Nebraska Public Power District) moved to approve RR147 as no reliability impact, and Steve Haun (Lincoln Electric System) seconded the motion. The motion passed without opposition or abstention.

RC Restoration Plan

Todd Gosnell (Omaha Public Power District) moved to approve the RC restoration plan as amended, and Jeff Wells (Grand River Dam Authority) seconded the motion. The motion passed without opposition or abstention.

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• M I N U T E S •

Administrative Items / Attendance / Agenda Review

Chairman Allen Klassen (Westar Energy, Inc.) opened day 1 of the ORWG at 8:01 AM (CST) on 3/2/2016.
Chairman Allen Klassen (Westar Energy, Inc.) opened day 2 of the ORWG at 8:00 AM (CST) on 3/3/2016.
Jason Tanner (Southwest Power Pool) called attendance.
Allen Klassen reviewed the agenda and noted the approval items that would require action.

Consent Agenda

Chairman Allen Klassen (Westar Energy, Inc.) asked the ORWG if they were prepared to approve the Consent Agenda, which contained the meeting minutes for February 4, 2016 and February 18, 2016.

Ron Gunderson (Nebraska Public Power District) moved to approve the Consent Agenda, and Jim Useldinger (South Central MCN) seconded the motion. The motion was approved without opposition or abstention.

Liaison Reports

Capacity Deficiency Load Shed Test Update

Karen Thomas (Southwest Power Pool) presented the results of the SPP BA capacity load deficiency load shed test. Karen stated that two of the three subset pilots groups were completed and the latest test occurred on February 25, 2016. Karen stated that 7 TOPs of 22 were contacted to provide a total MW amount of 57 MWs. Karen stated that 7 TOPs replied with simulated amounts totaling 60.68 MWs. The ORWG also held discussions around how to handle public appeals. Steve Gaw (The Wind Coalition) asked about SPPs visibility for directing load shed. Jason Tanner (Southwest Power Pool) explained that SPP does not have the same granularity that TOPs and DOCs have, such as, how much load is on each individual load block. Jason stated that at the RTO level the RC depends on the TOPs to understand their critical loads and locations. The RC will provide the necessary relief value to the TOPs that is required to solve reliability issues. TOPs will need to determine where and how much to load to shed to meet the obligation provided by the RC.

Approval Items and Staff Reports for Discussion

Agenda Item 6 – RR156 Modification to Business Practice 7650 – DPP Clarification

Tony Green (Southwest Power Pool) presented RR156 Modification to Business Practice 7650. Tony discussed the changes to the Detailed Project Proposal (DPP) selection and explained the language modifications within the document. Tony stated that projects submitted through a DPP must solve at least the same needs, transmission line voltage, and termination points as the selected transmission project. Tony also explained the MVA limits and percentage requirements for DPP selection. Tony also stated that after the SPP Board of Directors approves an ITP portfolio of projects SPP staff will notify each of the submitters.

Jim Useldinger (South Central MCN) moved to approve RR156 modifications to business practice 7650, and Allan George (Sunflower Electric Power Corporation) seconded the motion. The motion was approved without opposition or abstention.

Agenda Item 7 – RR134 Outage Scheduler Derate Threshold

Neil Robertson (Southwest Power Pool) explained the adjusted language to RR134 and provided a recap of the previous ORWG meeting discussions. Kyle McMenamin (Xcel Energy) asked if this Revision Request was created because of a previous icing event. Neil stated that the additional language was added due to a recent event. Neil continued explaining the language adjustments in the document and the reliability enhancements the additional requirements would provide. Bryn Wilson (Oklahoma Gas and Electric) asked how offer curves are utilized in the market system. Casey Cathey (Southwest Power Pool) explained that we take a conservative approach. Casey stated that if a 200 MW wind farm didn't have a CROW derate then the forecast would utilize the full capability, but if a CROW derate was submitted then the forecast would take into consideration the limited unit capability. Casey stated that the Icing report is a module we added after an event that occurred during Thanksgiving 2015, but we have not incorporated it into the actual forecast used by the market system. Ron stated that even with the enhancement of systematic tools for handling CROW derates, he would expect manual intervention in certain situation where the operator is expecting conservative operations. Casey stated that we are currently using the icing report information to make manual offsets as necessary when a potential event is forecasted.

Agenda Item 8 – SPP Communications Protocol

Neil Robertson (Southwest Power Pool) discussed the SPP Operations Communications Protocol, Neil discussed Jim Useldinger's (South Central MCN) submitted comments. Jim recommended removing the "Command" sentence within the document and David Pham (Empire District Electric Company) suggested changing "may" to "shall" in the document. The group held discussions on the recommended changes and agreed to use the word "will". Steve Gaw (The Wind Coalition) suggested leaving directive as a sub bullet. After discussions, Allen Klassen (Westar Energy) requested a show of hands to poll for the removal of the word directive altogether for reduced confusion. The group supported removing the word directive from the document.

Ron Gunderson (Nebraska Public Power District) moved to approve the SPP Operations Communications Protocol as modified, and Jeff Wells (Grand River Dam Authority) seconded the motion. The motion was approved without opposition or abstention.

Agenda Item 9 – RR131 XML Reliability Clarification

Neil Robertson (Southwest Power Pool) discussed the history of RR131 XML Reliability Clarification. Neil stated that in previous meetings ORWG discussed withdrawing RR131 if the SPP Communications Protocol was approved. Terry Gates (American Electric Power) stated that he is still in favor of the revision request and wanted to know where SPP landed internally on the need for XML communication. Casey Cathey (Southwest Power Pool) stated the CJ Brown (Southwest Power Pool) is still in favor of the revision request, but Casey commented that he doesn't think the revision request is needed because the data for XML is only as good as the inbound and outbound ICCP data. Casey stated that if inbound ICCP became stale then the XML data leaving SPP would not be quality data. Casey stated that he would like to officially remove RR131 XML Reliability Clarification under the reason XML is not necessary for reliability of the BES. Casey commented that if anyone in the membership feels strongly about continuing to pursuing XML as an alternative to ICCP communications, then that member always has the option to sponsor a new revision request.

Agenda Item 10– Review Wind Summit Recommendations

Jason Tanner (Southwest Power Pool) presented the Wind Integration Study (WIS) recommendations and explained the details for each of the seven recommendations. Jason asked to the ORWG to make language modifications and assignments. The ORWG worked to produce a recommendation document where assignments were made and three of the recommendation were modified. The document is posted on the ORWG website for tracking purposes. Jim Useldinger (South Central MCN) and Abu Eleriefi (ITC Holdings) expressed their appreciation to SPP Staff and commended SPP for an excellent study.

Jim Useldinger (South Central MCN) moved to acknowledge the Wind integration Study has met the scope and approves the recommendations as modified on March 2nd 2016, and Abu Eleriefi (ITC Holdings) seconded the motion. The motion was approved without opposition or abstention.

Agenda Item 11 – Voltage Task Force Charter

Jason Tanner (Southwest Power Pool) presented the Voltage Task Force (VTF) Charter to ORWG. Jason stated that the VTF will develop, review, and coordinates the implementation of voltage criteria for the secure operation of the Bulk Electric System within the SPP Reliability Coordinator, Balancing Authority, and SPP Reserve Sharing Group (RSG) footprints. Jason stated that the VTF would report to the Operating Reliability Working Group (ORWG), and make recommendations to ORWG and the Transmission Working Group (TWG). Jason commented that the VTF membership would consist of up to 11 representatives from the SPP membership, including the chair and vice-chair. The VTF will be represented by a mix of operations and planning representatives. Jason stated that meetings would be open, but the VTF may limit attendance during specific portions of a meeting by an affirmative vote of the VTF consistent with the SPP Bylaws. Kyle McMenamain (Xcel Energy) asked why the VTF would need to host closed meetings, and Jason stated that the language was added to the charter in case the VTF needed to discuss operational sensitive information. The ORWG made modifications to the VTF scope and to the representation section of the VTF Charter.

Jeff Wells (Grand River Dam Authority) moved to approve the Voltage Task Force Charter as amended, and Kyle McMenamain (Xcel Energy) seconded the motion. The motion was approved without opposition or abstention.

Agenda Item 12 – Operating Criteria Review Task Force

Neil Robertson (Southwest Power Pool) presented the Operating Criteria Review Task Force (OCRTF) charter and stated that the OCRTF would review the current SPP Operating Criteria and Appendices and make changes as necessary. Neil stated that the OCRTF would review SPP Operating Criteria using the following guidelines; identify and recommend modifications to any language that is antiquated based on currently used common industry terminology, identify and recommend modifications to any language that could potentially be interpreted, as deemed by the OCRTF, as contradictory to current or approved and awaiting implementation NERC Reliability Standards or the current SPP Operating Criteria and appendices, identify and recommend the removal of any language that is redundant with other language in the SPP Operating Criteria Restates and/or paraphrases NERC Reliability Standards without adding additional clarification or details as to how a standard is addressed within the SPP region. Neil stated that OCRTF membership would consist up to 7 representatives from the SPP membership, including the chair and vice-chair, and the ORWG will be responsible for nominating and approving 5 representatives. The RCWG will be responsible for nominating and approving 2 representatives. Neil stated that the OCRTF meetings would be open, but by sufficient notice; the OCRTF may limit attendance during specific portions of a meeting by an affirmative vote of the OCRTF for reasons that are consistent with the SPP Bylaws. The ORWG adjusted the OCRTF membership to consist of up to 11 representatives where 7 representatives would be nominated and approved from ORWG and 4 would be nominated and approved from the RCWG.

Jeff Wells (Grand River Dam Authority) moved to approve the Operating Criteria Review Task Force Charter as amended, and Allan George (Sunflower Electric Power Corporation) seconded the motion. The motion was approved without opposition or abstention.

Agenda Item 13 – RR140 30 Minute Standardization of Ratings Status Update

Derek Hawkins (Southwest Power Pool) discussed RR140 and stated that the ORWG had previously reviewed RR140 and recommended a number of changes. The inclusion of a 30 minute rating for use in the operating horizon provides a standard rating format by which the RC and TOP can reliably return actual loading below normal limits. Derek stated that ORWG held a vote and passed RR140 at the February 4th ORWG meeting, but TWG decided to resend the document with the language ORWG removed from the document added back into the document. Allen Klassen (Westar Energy) asked if we are proposing a 4th number and stated that he understands that some folks are currently using rate C. Derek agreed and Casey Cathey (Southwest Power Pool) stated the rating submission tool that is being monitored at CWG is future proofed for a rate C. Derek commented that he would like to have the language ready to go, for the future implementation date. Ron Gunderson (Nebraska Public Power District) stated that the 30 minute rate will be needed for the RC to act and control a flowgate within 30 minutes. Ron stated that you could use a 4 hour rating as your submitted 30 minute rating and the RC would have to react to the 4 hour rating within 30 minutes. Kyle McMenamain (Xcel Energy) stated that he believes that in this case we would be withholding transmission. Allen Klassen recommended decoupling the language from TWG and the ORWG decided to schedule an e-mail vote then resend the document with the language added back.

Agenda Item 14 – EOP006 – Annual Restoration Drill Invitations from the SPP RC

Neil Robertson (Southwest Power Pool) discussed the annual restoration drill invitation notices from the SPP RC, and discussed the requirements. Neil stated that he would like for the members to begin providing in their individual restoration plans a list of any additional GOPs that participate in the plan. Neil stated that by creating a list of all applicable parties in each plan it would help the RC coordinate the Annual Restoration Drill Invitations.

Agenda Item 15 – SPP RC Area Restoration Plan Updates

Neil Robertson (Southwest Power Pool) discussed the requirements within the SPP RC Area Restoration Plan, and discussed the document updates. Neil stated that updates were made to section 5 “TOP Restoration Plan Requirements”, Attachment 1 “Contacts” and added attachment 4 “System Restoration Drill Required Entity Participation”. The ORWG review the document and made additional language modifications, and Neil requested that the group provide updated restoration plans by June 1st, 2016.

Todd Gosnell (Omaha Public Power District) moved to approve the RC restoration plan as amended, and Jeff Wells (Grand River Dam Authority) seconded the motion. The motion passed without opposition or abstention.

Agenda Item 16 – SPP Approach to Model Review of Real-Time Voltage

Tim Miller (Southwest Power Pool) explained SPP’s approach to model review of real-time voltage. Tim explained that we added tap positions through ICCP to state estimator and customized tap modeling for each data provider. Tim stated that we improved the modeling of generator d-curves using operational data and test reports. Tim explained that these efforts will lead to improved EMS studies. Tim explained the proposed approach to review real-time pre-contingent voltage results. Tim also discussed the metrics we capture for Voltage measurements. Tim stated that we have ICCP coverage on voltage measurements, capacitor output, and status. Tim also discussed the models and documents available for member review.

Agenda Item 17 – Temporary/Permanent Flowgates and Notifications

Tim Miller (Southwest Power Pool) discussed the questions submitted by Bryn Wilson (Oklahoma Gas and Electric) surrounding temporary and permanent flowgates. Tim explained that SPP has both creation and termination records available on the SPP OASIS and IM Portal. Tim discussed in detail each of the questions and the ORWG recommended posting this information as a Q/A document to the ORWG website. Bryn Wilson suggested adding the bus number and IDC Flowgate number to the e-mail process when notifying members of new flowgates. Bryn stated that it would greatly help his operators quickly identify the elements associated with new or terminated flowgates. Ron Gunderson (Nebraska Public Power District) asked how long it takes to build a temporary flowgate. Will Tootle (Southwest Power Pool) stated that it takes around 20 to 25 minutes.

Agenda Item 18 – Posting of TOP Next Day Studies

Will Tootle (Southwest Power Pool) discussed the need for an FTP site for the sharing of next day study reports between TOPs in the SPP RC area. Will stated that currently SPP uses e-mail for communication of such information, but suggested that instead of e-mail or using OPS1 for storage, testing an FTP site could bring membership value. Will stated that OPS1 is not the most efficient or optimal way to communicate and store data. The ORWG agreed to begin a trial run of an FTP site and asked for Will Tootle to come back to ORWG with statistical results.

Agenda Item 19 – Public and Secure Reliability Related Documents

Neil Robertson (Southwest Power Pool) discussed the public and secure reliability related documents. Neil stated that certain documents are located on the secure site, and they do not necessarily need to be housed in a secure location. Neil requested that ORWG review why certain documents need to be placed on a secure site. The ORWG recommended reviewing the documents located on the secure site, and recommended the need to flag new and existing documents as secure or public. Ron Gunderson (Nebraska Public Power District) expressed cyber concerns with documents be publically available in some cases. Ron stated that he would like to see web site enhancements for secure all SPP members document access.

ACTION ITEM: ORWG to review documents located on the secure site, and recommended the need to flag the documents as secure or insecure.

Agenda Item 20 – RR147 50% Project Completion Milestone Determination for Competitive Upgrades

Ben Bright (Southwest Power Pool) presented RR147 explaining that the new business practice describes the process for how the determination is made by SPP if a Competitive Upgrade is 50% complete. Ben explained that in Attachment Y of the SPP Tariff it requires the Selected RFP Respondent to provide a 2% cash deposit upon accepting the responsibilities of being the Designated Transmission Owner. Ben explained that SPP will refund the deposit once the 50% completion milestone of the Competitive Upgrade is reached.

Ron Gunderson (Nebraska Public Power District) moved to approve RR147 as no reliability impact, and Steve Haun (Lincoln Electric System) seconded the motion. The motion passed without opposition or abstention.

Agenda Item 21 – Meeting Schedule

- i. 4/7/2016 WebEx (Thurs) 0830-1200
- ii. 5/5/2016 WebEx (Thurs) 0830-1200
- iii. 5/31-6/1/2016 Face-to-Face (Tampa Bay, FL; FRCC offices) - CONFIRMED

- iv. 7/7/2016 WebEx (Thurs) 0830-1200
- v. 8/4/2016 WebEx (Thurs) 0830-1200
- vi. 8/31-9/1/2016 Face-to-Face (Little Rock, Arkansas) - CONFIRMED
- vii. 10/6/2016 WebEx (Thurs) 0830-1200
- viii. 11/3/2016 WebEx (Thurs) 0830-1200
- ix. 12/1/2016 WebEx (Thurs) 0830-1200

Agenda Item 22 – Summary of Action Items

Short Term Action Items:

- AI 44 Neil Robertson Stated we are on track to close during the April meeting.
- AI 50 ORWG changed status to “Closed”
- AI 56 ORWG requested a follow up with Tim Miller to create a due date.
- AI 59 ORWG requested a touch base with Jason Smith
- AI 60 ORWG changed status to “Closed”
- AI 61 ORWG left status to “In Progress”
- AI 63 ORWG changed status to “Closure Pending”

Long Term Action Items:

- AI 38 Gerardo Ugalde is working on coordination with PJM and MISO. ORWG requested Gerardo to present an update at the next ORWG meeting.
- AI 47 Published an OOME Example/Reasons Document. ORWG changed status to “Closed”
- AI 48 Casey Cathey stated a Revision Request will be needed.
- AI 57 SPP is not going to endorse a RR, but is open to members endorsing a revision request.
- AI 58 ORWG requested Tim Miller to be added to the next ORWG agenda.

Agenda Item 23 – Adjourn

Chairman Allen Klassen (Westar Energy, Inc.) adjourned day 1 of the ORWG at 4:54 PM (CST) on 3/2/2016.

Chairman Allen Klassen (Westar Energy, Inc.) adjourned day 2 of the ORWG at 12:13 PM (CST) on 3/3/2016.

Respectfully Submitted,

Casey Cathey
Secretary



Operating Reliability Working Group
 Meeting Attendance: 3/02/2016 - 3/03/2016
 M=Member, G=Guest, S=SPP Staff, P= Proxy



Day 1	Day 2	Name	Status	Company
x	x	1 Allen Klassen, Chairman	M	Westar Energy
x	x	2 Ron Gunderson, Vice Chairman	M	Nebraska Public Power District
x	x	3 Jim Useldinger	M	South Central MCN
P	P	4 Paul Lampe	M	City of Independence, MO
x	x	5 Kyle McMenamin	M	Xcel Energy
x	x	6 Steve Haun	M	Lincoln Electric System
x	x	7 Allan George	M	Sunflower Electric Power Corporation
x	x	8 Jeff Wells	M	Grand River Dam Authority
P	P	9 John Stephens	M	City Utilities of Springfield
x	x	10 Todd Gosnell	M	Omaha Public Power District
x	x	11 Bryn Wilson	M	Oklahoma Gas and Electric Co.
P	P	12 Dennis Sauriol	M	American Electric Power
P	P	13 Darrel Yohnk	M	ITC Holdings
x	x	14 David Pham	M	Empire District Electric Company
x	x	15 Matthew Stoltz	M	Basin Electric Power Cooperative
x	x	16 Chance Myers	M	Western Farmers Electric Cooperative
x	x	17 Craig Speidel	M	Western Area Power Administration
x	x	18 Gary Plummer	P	Proxy for Paul Lampe
x	x	19 Mike Anderson	P	Proxy for Dennis Sauriol
x	x	20 Abu Eleriefi	P	Proxy for Darrel Yohnk
x	x	21 Mark Eastwood	P	Proxy for John Stephens
x	x	22 Denney Fales	G	Kansas City Power & Light
x	x	23 Jamie Hajek	G	NorthWestern Energy
x	x	24 Jay Patel	G	Kansas City Power & Light
x	x	25 Jim Jacoby	G	American Electric Power
x	x	26 Jim Krajecki	G	Customized Energy Solutions
x	x	27 John Allen	G	City Utilities of Springfield
x	x	28 Kevin Harrison	G	ITC Holdings
x	x	29 Mark Robinson	G	Southwestern Power Administration
x	x	30 Mike Wech	G	Southwestern Power Administration
x	x	31 Neal Faltys	G	Omaha Public Power District
x	x	32 Ben Hammer	G	Western Area Power Administration
x	x	33 John Boshears	G	City Utilities of Springfield
x	x	34 Kevin Ma	G	Oklahoma Gas & Electric
x	x	35 Sing Tay	G	Oklahoma Gas & Electric
x	x	36 Steve Gaw	G	The Wind Coalition
x	x	37 Terry Gates	G	American Electric Power
x	x	38 Tom Mayhan	G	Omaha Public Power District
x	x	39 Casey Cathey	S	Southwest Power Pool
x	x	40 Derek Hawkins	S	Southwest Power Pool
x	x	41 Tony Green	S	Southwest Power Pool
x	x	42 Temper Williams	S	Southwest Power Pool
x	x	43 Jason Tanner	S	Southwest Power Pool
x	x	44 Will Tootle	S	Southwest Power Pool
x	x	45 Karen Thomas	S	Southwest Power Pool
x	x	46 Ben Bright	S	Southwest Power Pool
x	x	47 Neil Robertson	S	Southwest Power Pool
x	x	48 Cody Parker	S	Southwest Power Pool
x	x	49 Tim Miller	S	Southwest Power Pool