

Southwest Power Pool, Inc.
OPERATING RELIABILITY WORKING GROUP
Net Conference
Thursday September 05, 2019 8:30 AM – 12:00 PM (CDT)

• Action Items and Voting Record •

Agenda Item 5a – Consent Agenda (a) (July 30, 2019 ORWG Meeting Minutes, (b) RR369 PCWG update to BP 7060 Sections 2.2, 10 & 13, and (e) RR372 Evaluation of ESR’s for Interconnection Service)

Jeff Wells (Grand River Dam Authority) moved to approve the consent agenda, and Chris Shaffer (American Electric Power) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 5b – Items Pulled from the Consent Agenda - (c) RR370 (Dispatch Assumptions for Generator Interconnection)

Jeff Wells (Grand River Dam Authority) Moved to approve RR370 with comments. “The ORWG believes the GIA process needs additional improvements and would like to be involved”. David Pham (Empire District Electric Company) seconded the motion, and the motion carried with 1 opposition and no abstentions.

Agenda Item 7 – VRL Analysis

Ron Gunderson (Nebraska Public Power District) moved to approve the VRL analysis with no change, and Abu Elteriefi (ITC Holdings) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 8 – RR375 FERC Order on Fast Start Pricing

Jeff Wells (Grand River Dam Authority) moved to approve RR375 as presented, and Kyle McMenamin (Xcel Energy) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 9 – RR377 ITP Manual – Persistent Operation Issues

Bryn Wilson (Oklahoma Gas and Electric Co.) moved to approve ORWG’s recommendation that the MOPC renew the waiver to identify all persistent operational issues as informational in the 2020 ITP and require staff to continue investigating a process to economically evaluate persistent operational issues and bring an RR once an accepted proof of concept has been identified. Allan George (Sunflower Electric Power Corporation) seconded the motion, and 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 8:37 AM on 07/30/2019.

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 and Notification

Allen Klassen (Westar Energy, Inc.) reviewed the agenda and noted the items that would require action. Jason Tanner (Southwest Power Pool) notified ORWG that RR365 - Day Ahead Market Timeline Enhancement was officially withdrawn.

Agenda Item 5a – Consent Agenda

Allen Klassen (Westar Energy, Inc.) discussed the consent agenda, which included the July 30, 2019 ORWG Meeting Minutes, R369 PCWG update to BP 7060 Sections 2.2, 10 & 13, and RR372 Evaluation of ESR's for Interconnection Service.

Jeff Wells (Grand River Dam Authority) moved to approve the consent agenda, and Mark Eastwood (City Utilities of Springfield) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 5b – Items Pulled from the Consent Agenda

Ron Gunderson (Nebraska Public Power District) requested to pull RR370 (Dispatch Assumptions for Generator Interconnection) and RR371 (Change Assignment Threshold for ERIS in GI Studies SPP BP 7250).

c. RR370 (Dispatch Assumptions for Generator Interconnection)

Ron Gunderson (Nebraska Public Power District) raised concerns about the way firm is being backed down in the study process, and he indicated that the system could be overstated on how much it can support. Steve Purdy (Southwest Power Pool) explained how the system is ramped in the Generator Interconnection studies and explained how counter flow is being produced. Steve explained that variable resources are designated at a continually increasing rate and the amount of counter flow within the ITP planning models have increased to levels that no longer require counter flow to be provided in the GI study process. Steve explained that some scenarios have produced situations where there is not enough load in the footprint to absorb all the requested generation.

Jeff Wells (Grand River Dam Authority) Moved to approve RR370 with comments. "The ORWG believes the GIA process needs additional improvements and would like to be involved". David Pham (Empire District Electric Company) seconded the motion, and the motion carried with 1 opposition and no abstentions.

Ron Gunderson (Nebraska Public Power District) “NPPD voted NO on RR370 due to our continued concerns regarding the increased practice of displacing pre-existing firm delivery service in the SPP footprint to continue to allow new ERIS wind interconnection service to be studied in the SPP GI process. NPPD believes that this practice is not consistent with the definition of ERIS in the SPP OATT. Another significant reliability concern for NPPD involves scaling down generation behind a known stability constraint in an external group. Scaling up generation in the study group and then scaling down generation in an adjacent external group will mask the impacts of the new generator interconnection projects on certain known stability limited flowgates. This practice also contributes to real-time operating issues and congestion on the transmission system.”

d. RR371 (Change Assignment Threshold for ERIS in GI Studies SPP BP 7250)

Steve Purdy (Southwest Power Pool) stated that RR371 was officially withdrawn at the TWG during their September 4, 2019 meeting. Based on the updated information provided the ORWG did not review or take any action on RR371.

Agenda Item 6 - Liaison Reports

6a - PFRTF Activities Update

Due to time constraints the PFRTF update was postponed to the October 2 ORWG meeting.

6b - SRTF Activities Update

Due to time constraints the SRTF update was postponed to the October 2 ORWG meeting.

6c - OCMTF Activities Update

Due to time constraints the OCMTF update was postponed to the October 2 ORWG meeting.

Agenda Item 7 – VRL Analysis

Abram Harder (Southwest Power Pool) explained the VRL analysis and stated that congestion has continued to decrease year over year and spinning reserve shortages are continuing to increase in frequency. Abram explained that ramp product is forecasted to significantly help reduce the number of spinning reserve shortages. Abram stated that during the spinning reserve sensitivity analysis the simulation range included 194 intervals between 9/9/18 and 6/22/19, which included operating reserve product scarcity and marginal energy component at or above \$50. Abram recommended no changes to the operating constraint VRL values and no change to the VRLs for resource capacity, power balance, and ramp. Ron Gunderson (Nebraska Public Power District) suggested that it may be worthwhile to look at reducing VRL values but start limiting at lower levels. This may be something for the OCMTF to consider as part of their work. The hope is that by limiting earlier with lower VRL costs we may not bounce over the highest limit for the SOL.

Ron Gunderson (Nebraska Public Power District) moved to approve the VRL analysis with no change, and Abu Elteriefi (ITC Holdings) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 8 – RR375 FERC Order on Fast Start Pricing

Michael Ray (Southwest Power Pool) explained RR375 FERC Order on Fast Start Pricing and stated that the RR is based on the preliminary findings of the December 2017 Order. Michael explained that FERC found that SPP’s quick-start pricing practices to be unjust and unreasonable since SPP does not allow prices to reflect the

marginal cost of serving load. Michael stated that FERC directed SPP to make the changes to its real-time energy market clearing process to execute the cost-minimizing dispatch solution followed by a pricing run, remove its screening run, and remove the option for enhanced energy offers that incorporate amortized commitment costs in the incremental cost curves of quick-start resources used during the dispatch run. Michael stated that FERC also directed SPP to modify its pricing logic to allow the commitment costs of quick-start resources to be reflected in prices, in both the day-ahead and real-time markets. SPP will also have to include in the definition of quick-start resources a requirement that those resources have a minimum run time of one hour or less, and allow for relaxation of all quick-start resources' economic minimum operating limits by up to 100 percent, such that the resources are considered dispatchable from zero to their economic maximum operating limit for the purpose of setting prices. Michael stated that additionally SPP will have to apply quick-start pricing treatment to both registered and unregistered quick-start resources and include the quick-start pricing requirements in the SPP Tariff.

Jeff Wells (Grand River Dam Authority) moved to approve RR375 as presented, and Kyle McMenamin (Xcel Energy) seconded the motion. The motion carried without opposition or abstention.

Agenda Item 9 – RR377 ITP Manual – Persistent Operation Issues

Will Tootle (Southwest Power Pool) discussed the current method for evaluating solutions for flowgates classified as economic and explained how the day-ahead reliability unit commitment models are used to perform the analysis. Will stated that RR317 was approved by ORWG, TWG, and ESWG in 2018, however MOPC only approved a waiver instead of the approving the revision request. Will explained that by MOPC approving a waiver it allowed the economic issues not to be evaluated in the ITP studies, which allowed staff time to work on the MOPC assigned action item to identify processes to efficiently study economic persistent operational issues. Will stated that TWG withdrew the RR in favor of approving an additional waiver for the 2020 ITP study cycle. Will stated that he is requesting ORWG to vote in favor of the waiver option as well.

Bryn Wilson (Oklahoma Gas and Electric Co.) moved to approve ORWG's recommendation that the MOPC renew the waiver to identify all persistent operational issues as informational in the 2020 ITP and require staff to continue investigating a process to economically evaluate persistent operational issues and bring an RR once an accepted proof of concept has been identified. Allan George (Sunflower Electric Power Corporation) seconded the motion, and the motion carried without opposition or abstention.

Agenda Item 10 – EEA Event 8/6/2019

Ricky Finkbeiner (Southwest Power Pool) discussed the 8/6/2019 EEA event and explained that the Balancing Authority experienced conditions where all available generation resources were committed to meet firm Load, firm transactions, and reserve commitments. Ricky stated that Non-firm wholesale energy sales were curtailed and that SPP was concerned about sustaining its required Contingency Reserves. Ricky stated that SPP experienced significant load forecast errors combined with capacity losses due to forced generation outages and de-rates, and that SPP took real-time actions to curtail exports, commit generation, and to recall grid switchable resources from ERCOT. Ricky stated that SPP will begin evaluating internal procedures for process improvements, review and enhance operator displays, provide internal training scenarios for real-time staff, and continue developing the generation assessment process.

Agenda Item 11 – Generator Outage Assessment

Garrett Crowson (Southwest Power Pool) discussed the generation assessment process and explained that SPP is experiencing an increase in generation outages, in combination with changing system conditions. Garrett stated that the MOPC was informed at its July 16th meeting that SPP has experienced 6 occurrences of Conservative

Operations in 2019, and SPP has started performing additional analysis on generation outage planning and available capacity. Garrett stated that the objective of the generator outage assessment is to determine if an available outage margin threshold should be implemented to protect reliability and decrease risk. Garrett explained the scope of the Generation Assessment Project (GAP) which defines the process for how capacity margins will be protected by the SPP BA. Garrett also explained that the scope includes requirements to develop a methodology for projecting reliability capacity margins.

Agenda Item 12 – FERC Inquiry Report

Charles Cates (Southwest Power Pool) stated that on June 28, 2018 FERC hosted a meeting on the January 2018 Cold Weather Event where MISO, SPP and the Joint Parties briefed FERC Staff of the events. On September 4, 2019, FERC staff informed SPP that FERC and NERC were conducting an “Inquiry” of the events of January 17, 2018. Charles stated that NERC and FERC issued a report from the inquiry with 5 findings and 13 recommendations. Eight recommendations apply to all parties and nine recommendations apply to SPP. Charles stated that SPP has completed four of the recommendations and still has five recommendations pending. Charles stated that the report confirmed SPP’s position that flows above 1,000 MW from MISO North to/from MISO South is non-firm, as-available, and the report noted MISO’s risk in assuming it can use more than 1,000 MW across seam. Charles stated that for a second time, FERC staff recommended NERC create a standard on generation weatherization. The report also noted enhanced cooperation between MISO, SPP & Joint Parties.

Agenda Item 13 – HITT Recommendation

Charles Cates (Southwest Power Pool) provided a high-level overview of the HITT Recommendations and stated that the SPP Board of Directors approved the 21 recommendations. Charles stated that one of the HITT recommendations that ORWG is primary on is the economic evaluations of reliability, and that staff would be returning to ORWG at future meetings to discuss the item. Charles recommended that ORWG keep this item as a standing agenda item for future updates and discussions.

Agenda Item 14 – TCR underfunding

Chris Davis (Southwest Power Pool) discussed the level of DA congestion revenues available to pay out to TCR holders, and the shortfall of funds that get uplifted to TCR holders. Chris stated that a portion of congestion hedges is taken back whenever there is not enough money to pay for them. Chris explained that underfunding happens when more capacity exists for a constraint in the TCR Auction than when it’s bound in the DA Market, and during the monthly processes, the flowgate limit will get expanded to the amount of TCRs already awarded from the annual process. Chris stated that it’s important to have timely submittals of outages to make sure they get included in ARR Allocations and TCR Auctions.

Agenda Item 15 – Scope Review BAOC Edits

Jason Tanner (Southwest Power Pool) provided ORWG with an edited version of the ORWG Scope that includes changes for ORWG absorbing the BAOC functions. Jason requested ORWG members to review the document and provide any language edits and stated that he would request a vote during the October ORWG meeting.

Other Items:

Agenda Item 16 – ORWG Member Topic List

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

Action Item Review:



Agenda Item 17 – Review of Open and Closure Pending Actions

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

Agenda Item 18 – New Action Items

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

Agenda Item 19 – General Q&A/Open Forum

Agenda Item 20 – Meeting Schedule

- a. 10/2 - 10/3/2019 Face-to-Face (Dallas, TX)(AEP Office) – CONFIRMED
- b. 11/7/2019 WebEx (Thurs) 0830-1200
- c. 12/5/2019 WebEx (Thurs) 0830-1200
- d. 1/07 - 1/08/2020 Face-to-Face (Denver, CO)(Xcel) – CONFIRMED
- e. 2/6/2020 WebEx (Thurs) 0830-1200
- f. 3/5/2020 WebEx (Thurs) 0830-1200
- g. 4/01 - 4/02/2020 Face-to-Face (Amarillo, TX)(Xcel) – CONFIRMED
- h. 5/7/2020 WebEx (Thurs) 0830-1200
- i. 6/4/2020 WebEx (Thurs) 0830-1200
- j. 6/30 - 7/01/2020 Face-to-Face (Tulsa, OK)(GRDA) – CONFIRMED
- k. 8/6/2020 WebEx (Thurs) 0830-1200
- l. 9/3/2020 WebEx (Thurs) 0830-1200
- m. 9/30 - 10/01/2020 Face-to-Face (Little Rock, AR)(SPP) – CONFIRMED
- n. 11/5/2020 WebEx (Thurs) 0830-1200
- o. 12/3/2020 WebEx (Thurs) 0830-1200

Agenda Item 20 – Adjournment

Chairman Allen Klassen (Westar Energy, Inc.) adjourned the ORWG at 12:28 PM (CST) on 09/05/2019.

Respectfully Submitted,
Jason Tanner, Secretary



**Operating Reliability Working Group
Meeting Attendance: 9/05/2019
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
a	3	Jim Useldinger	M	South Central MCN
P	4	Gary Plummer	M	City of Independence, MO
x	5	Kyle McMenamin	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
x	9	Mark Eastwood	M	City Utilities of Springfield
x	10	Doug Peterchuck	M	Omaha Public Power District
x	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	Chance Myers	M	Western Farmers Electric Cooperative
x	15	Craig Speidel	M	Western Area Power Administration
x	16	Abu Elteriefi	M	ITC Holdings
x	17	Keith Carman	M	Tri-State G&T
x	18	Mark Eastwood	P	City Utilities of Springfield
x	19	John Mason proxy for Gary Plummer	G	City of Independence, MO
x	20	Kevin Ma	G	Oklahoma Gas and Electric Co.
x	21	Louise Nutter	G	FERC
x	22	Hailey Foote	G	Grand River Dam Authority
x	23	Natasha Henderson	G	Golden Spread Electric Cooperative
x	24	Heather Starnes	G	Healy Law Offices
x	25	Rob Janssen	G	Dogwood Energy
x	26	Ron Thompson	G	Nebraska Public Power District
x	27	Joshua Wakeam	G	Oklahoma Gas and Electric Co.
x	28	Tom Mayhan	G	Omaha Public Power District
x	29	Diana Zake	G	Public Utility Commission of Texas
x	30	Keeth Works	G	Southwestern Power Administration
x	31	Jimmy Wheeler	G	Southwestern Power Administration
x	32	Steve Gaw	G	The Wind Coalition
x	33	John Allen	G	City Utilities of Springfield
x	34	Seth Cochran	G	Nebraska Public Power District
x	35	Pablo Ruiz	G	The Brattle Group
x	36	Ryan Kirk	G	American Electric Power
x	37	Neal Faltys	G	Omaha Public Power District
x	38	Kenny Hale	G	City Utilities of Springfield
x	39	John Boshears	G	City Utilities of Springfield
x	40	John Stephens	G	City Utilities of Springfield
x	41	Jeff Knottek	G	City Utilities of Springfield
x	42	Gary Mayfield	G	Western Area Power Administration
x	43	Ben Hammer	G	Western Area Power Administration
x	44	Garrick Nelson(WAPA-UGPR)	G	Western Area Power Administration
x	45	Chris Bultsma - WAPA	G	Western Area Power Administration
x	46	Carrie Dixon	G	Xcel Energy
x	47	Jason Smith	G	Xcel Energy
x	48	John Hare	G	Oklahoma Gas and Electric Co.
x	49	Jason Mazigian	G	Basin Electric Power Cooperative
x	50	Chris Lyons	G	Customized Energy Solutions
x	51	Jason Tanner	S	Southwest Power Pool
x	52	Charles Cates	S	Southwest Power Pool
x	53	Scott Aclin	S	Southwest Power Pool
x	54	Clint Savoy	S	Southwest Power Pool
x	55	Chris Davis	S	Southwest Power Pool
x	56	Margaret B. Quispe	S	Southwest Power Pool
x	57	YBZ	S	Southwest Power Pool

x	58	Ken Quimby	S	Southwest Power Pool
x	59	Derek Hawkins	S	Southwest Power Pool
x	60	Kristen Darden	S	Southwest Power Pool
x	61	Zachary Sharp	S	Southwest Power Pool
x	62	Kevin Bates	S	Southwest Power Pool
x	63	John O'Dell	S	Southwest Power Pool
x	64	Chris Haley	S	Southwest Power Pool
x	65	Chris Cranford	S	Southwest Power Pool
x	66	Alex Crawford	S	Southwest Power Pool
x	67	Michael Ray	S	Southwest Power Pool
x	68	Dustin Courtright	S	Southwest Power Pool
x	69	Abram Harder	S	Southwest Power Pool
x	70	Will Ragsdale	S	Southwest Power Pool
x	71	Jeff Rooker	S	Southwest Power Pool
x	72	Jerry	S	Southwest Power Pool
x	73	Kim Gorter	S	Southwest Power Pool
x	74	Andrew Davies	S	Southwest Power Pool