

**Southwest Power Pool**  
**SYSTEM PROTECTION AND CONTROL WORKING GROUP**  
**MEETING**

**October 16 & 17, 2019**  
**Evergy Offices, 1200 Main Street**  
**Kansas City, MO**

• M I N U T E S •

**Agenda Item 1: Administrative Items**

Call to Order and Introductions

Chair, Steve Wadas, called the meeting to order at 1pm and welcomed everyone. There were 19 participants, 12 in person and 7 via webex on day one. There were 16 participants, 11 in person and 5 via webex on day two. (Attendance List Attached)

Proxies

None

Approve minutes of previous meetings

The minutes for the July 24-25, 2019 meeting were reviewed by Doug Bowman. A few minor edits were required. The motion to approve the edited minutes was made by Lynn Schroeder and seconded by John Anderson. The group unanimously approved the minutes.

Approve agenda

The agenda for the meeting was reviewed. Minor shuffling of agenda topics was required to accommodate presenters that required certain time frames. The motion to approve the edited minutes was made by Lynn Schroeder and seconded by John Anderson. The group unanimously approved the agenda. (see attached)

**Agenda Item 2: Antitrust Statement**

Doug Bowman provided the following SPP Antitrust Statement to the Group:

“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”

**Agenda Item 3: Review of Past Action Items**

Doug Bowman reviewed the past action items. Items 132 and 135 were closed. Eight (8) new action items were added (see attached).

**Agenda Item 4: Regional UFLS 5 Year Study Assessment**

Scott Jordan presented the results of the UFLS study. CAS will work with consultant to get some of their documentation and will do some sensitivity studies around the undervoltage inhibit

settings and determine if anything is found that will need to be brought to the next SPCWG. Charles says some primary frequency response studies can be done that they can provide. Steve said the changing system may require more studies will. Charles noted the SPS results were in line with what was expected. David Wheeler said they will provide comments on the SPS results from in the near future. Steve asked where does the study go from here? Scott said it will go to TWG for informational purposes.

Motion:

Approve the results of the 2019 UFLS 5 year assessment.

John Anderson made the motion and Jeff Beasley seconded. The membership voted and unanimously approved.

### **Agenda Item 5: Poplar Bluff Request**

Neal Williams from Poplar Bluff requested discussion on their request to be removed as a ufls entity since they shed only 22 MW. Neal want to renew the request for exemption. Peak load is now 70.6 MW. The Resource adequacy report says the peak demand is 72 MW. DP to DP UFLS only is possible. They should un-register as a DP as the first step. Lynn noted we need to be careful in making exceptions. Shannon suggested we look closer at the NERC definition and what that definition needs to be. Jonathan Hayes pointed out that even though Poplar Bluff's MW portion is small, we need to guard against setting a precedent. Allowing this exception could open the door to other entities wanting this as well making the sum total a significant amount of MW.

Lynn suggested the larger issue concerns how to fairly evaluate entities similar to Poplar Bluff while at the same time prevent abuses of the process. A metric would be helpful.

Motion:

Recommend that Poplar Bluff Utilities request to be removed as a UFLS entity be granted. This recommendation is conditional upon Poplar Bluff becoming unregistered as a Distribution Provider (DP). In addition, if in the future SPP determines that Poplar Bluff's contribution to load shed is necessary to meet the UFLS plan's requirements, Poplar Bluff will re-register as a DP or UFLS-only Distribution Provider and become a UFLS Entity.

Lyn Schroeder made the above motion. Jeff Beasley seconded the motion. Vote was taken and unanimously approved

Upon approval of this motion, it will be submitted to the PC for review as the PC will be responsible for final decision.

### **Agenda Item 6: Oklaunion RAS Retirement**

Lalithmani Venkateswaran and Goutam Tadimalla from AEP presented on the RAS retirement and explained how the voltage issue will be resolved with a new second reactor at Oklaunion.

Motion

Approve the Oklaunion RAS to be removed after the additional 50MVAR reactor is placed in service in May 2020.

Motion was made by John Anderson and was seconded by Lynn Schroeder. A vote was taken by the group and was unanimously approved.

### **Agenda Item 7: Xcel Energy RAS Approval Request**

David Wheeler presented the Crossroads-Sagamore Remedial Action Scheme RAS scheme for approval. The group went through the documents and found a few errors on the one-line and ac schematics. David will provide updates as required. Shawn suggested the 20 cycles delay on RAS operation is a bit tight and could be increased to prevent misoperation yet remain below the damage curve with a safety factor.

Motion

Approve the Crossroads-Sagamore RAS contingent on edits being made to the one line, ac schematics, and spreadsheet tables 1 and 3, and resubmittal to the group.

Motion was made by David Oswald and seconded by Shawn Jacobs. A vote was taken and was unanimously approved by the members.

### **Agenda Item 8: Protection in Your Shop**

Steve Wadas presented on fault distance and model verification used at NPPD. He explained how the traveling wave system works on their system through example of an actual fault on their 345kV system.

Jeff Beasley presented on how GRD is preparing for the implementation of PRC-027. This included an explanation of GRDA's process and procedures for doing settings, testing, and coordinated fault studies using RTS, PowerBase, and Aspen software.

### **Agenda Item 9: PRC-012-2 SPP Process Document**

After group discussion, decision was made to remove the three org group columns in the attachment and Neil updated the worksheet. Neil requested some verification on the conversion made to attachment 1 section 2. The implementation was then discussed and April 2020 was decided as the target for implementation of the new process. RAS schemes currently in-service will need to re-submit their documentation before April 2020 but not for approval. Steve said MRO wants to transition the RAS schemes they have over to SPP. Any RAS approval requests between now and April 2020 will utilize the existing process.

Motion:

Approve the PRC-012-2 SPP process document and spreadsheet with the exception of the three columns previously added. Additionally, the edits made to the process document Section 3.1 (as shown below).

The steady state and stability assessment performed will be similar to the NERC TPL-001 assessment utilizing the current year's TPL steady state and stability case sets but will focus on the RAS local area with regard to the contingencies. The PC will monitor the BES for its TPs and neighboring PCs and TPs to ensure that there are no adverse impacts to their Systems. The

PC will provide the assessment to the RAS-entity (ies), any affected System(s), and the SPP TWG, ORWG and SPCWG.

Motion was made by David Wheeler and seconded by Chris Angland to approve. The vote was unanimously approved by the members.

### **Agenda Item 10: SPP NERC Update**

Shannon Mickens provided SPP NERC updates as follows:

The June NERC Planning Committee (PC) meeting consisted of reviewing the functional draft DRI. The PC Executive committee posted the DRI for informal comment on Jun 24. The deadline for Q4 protection system misoperations data submittal into MIDAS is 3/1/2020.

In the June 2019 SPCS meeting, the draft PRC-019 SAR and whitepaper and PRC-023 were discussed. Shannon talked about the SPIDERWG group, which focuses on modeling, verification, studies, and coordination of DER; however, UFLS is also covered. Shannon will be working on collecting and providing comments on the UFLS aspect. Lynn noted that a UFLS/UVLS powerpoint is available on the NERC website.

Effective date of TPL-007-3 was July 1, 2019, which focuses on R5 and R9. PRC-026-1 will be effective January 1, 2020.

### **Agenda Item 11: Criteria Section 8 Revision Request**

John Allen presented the draft request that he and Forrest Brock assembled. Only sections 8.2.7, 8.3, 8.4, and 8.5 will remain. These sections are mainly place holders for future standards that are in development. The draft RR will be placed into the RR process. Edits to Section 8.5 to capture language about individual TP UVLS schemes, and differentiating them from a regional program were made. A motion was made by Rick Gurley to endorse the draft RR with the SPCWG edits. John Anderson seconded and the group provided unanimous approval. An action item was taken for Kathryn to submit the RR on behalf of the SPCWG and the RCWG.

### **Agenda Item 12: Discussion of Future Meeting**

Steve summarized the 2020 meetings:

- January 15,16, 2020 Dallas, AEP Office
- April 15,16 , 2020 Omaha, NE, OPPD Offices
- July 22,23, 2020 Denver, Xcel Office
- October 14,15, 2020 Tulsa, AEP Office

### **Agenda Item 13: EPRI PSET Tool Update**

#### Summarize Action Items:

Doug summarized the action items resolved in the meeting as well as the new items added. (See attached)

#### Discuss upcoming meeting topics:

A few suggested topics for our next meeting are 3-terminal line paper, IBIS report, and RR340 PMU Update from Cody Parker.

Adjourn meeting:

Jeff Beasley motioned to adjourn the meeting and Chris Angland seconded. The meeting was adjourned.

**Respectfully Submitted,**

**Douglas Bowman  
SPCWG Staff Secretary**

# ATTENDANCE



Southwest Power Pool, Inc.

SYSTEM PROTECTION & CONTROL WORKING GROUP MEETING

October 16-17, 2019

KCP&L and Westar, Evergy Companies – Kansas City, MO

• ATTENDANCE LIST •

October 16

Name	Company
Doug Bowman	SPP
John Anderson	Evergy
Mathew Thykkantathid	Sunflower Electric Power
Lynn Schrock	Sunflower Electric
David Wheeler	Xcel Energy
Chris Angland	SPP
David Oswald	Empire District / Liberty Utilities
Matt Wyatt	Empire District / Liberty Utilities
Jeff Brasley	Grand River Dam Authority
SHANNON V. MICKENS	SPP
Steve Wodas	NPPD
Noel Williams	Poplar Bluff Utilities

On The Web

Shawn Jacobs	OGE
Jeff McDermid	SPP
Scott Jordan	SPP
Charles Hendrix	SPP
Kalithmani Venkateswaran	AEP
Goutam Tadimalla	AEP



Southwest Power Pool, Inc.

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October 17

Name	Company
Steve Wados	NPPD
Doug Bowman	SPP
John Anderson	Evergy
Lynn Schroeder	SEPC
Matthew Thyskewitthaid	SEPC
David Wheeler	<del>SEPC</del> Xcel Energy
David Oswald	Empire District - Liberty Utilities
Math Wyatt	Empire District / Liberty Utilities
Chris England	DPPD
Jeff Bersley	GRDA
Shannon V. Mickens	SPP
<u>On Webex</u>	
Shawn Jacobs	OGE
Jeff McDermiad	SPP
Ken Zellefrow	CUS
Neil Robertson	SPP

# AGENDA



Southwest Power Pool, Inc.

## SYSTEM PROTECTION AND CONTROL WORKING GROUP

October 16-17, 2019

Energy Office, Kansas City, MO

### • A G E N D A •

1. Administrative Items ..... Steve Wadas
  - a. Call to Order
  - b. Proxies
  - c. Approve minutes of July 24-25, 2019 meeting
  - d. Approve agenda
2. Antitrust Statement..... Doug Bowman
3. Review of Past Action Items ..... Doug Bowman
4. Regional UFLS 5 Year Study Assessment (Approval)..... Charles Hendrix, Scott Jordan
5. Poplar Bluff Request..... Neal Williams
6. Oklaunion RAS Retirement (Approval)..... Lalithmani Venkateswaran, Goutam Tadimalla
7. Xcel Energy RAS (Approval)..... David Wheeler
8. Protection in Your Shop
  - a. NPPD..... Steve Wadas
  - b. GRDA..... Jeff Beasley
9. PRC-012-2 SPP Process Document(Approval)..... Neil Robertson
10. SPP NERC Update..... Shannon Mickens
11. Draft Misoperations Reporting Document (Discussion)..... Shawn Jacobs
12. Discussion of Future Meetings (Proposed Meeting Dates)..... Steve Wadas
  - a. January 15,16, 2020 Dallas, AEP Office
  - b. April 15,16 , 2020 Omaha, NE, OPPD Offices
  - c. July 22,23, 2020 Denver, Xcel Office
  - d. October 14,15, 2020 Tulsa, AEP Office
13. Closing Administrative Duties..... Steve Wadas
  - a. Summarize Action Items
  - b. Discuss upcoming meeting topics
  - c. Adjourn meeting



# ACTION ITEMS

## Working Group Action Items

Action Item	Date Originated	Action Item	Comments	Status (Not Started, In Progress, Closure Pending, On Hold, Closed)
128	04/18/19	Kathryn to send out requests for nominations for three new member slots to be filled.	Notice sent out 4/22/19	closed
129	07/24/19	Neil Robertson will notify SPCWG members where the new RAS process document will be posted		
130	07/24/19	Neil Robertson will modify the RAS checklist spreadsheet to reflect SPCWG recommendations concerning working group	completed in November meeting	closed
131	07/24/19	Neil and Kathrine will make recommended changes to the RAS document and spreadsheet and then request approval from the SPCWG via email. Deadline for email vote is August 15.	changes made in November meeting. Vote held and document approved	closed
132	07/25/19	Kathrine will work with Scott Jordan to set up a conference call with the SPCWG in late August to provide status update for the UFLS study.	done	closed
133	07/25/19	Michael and Jeff will provide two (2) three-terminal line papers, one less detailed that will refer to the NERC paper, and one more detailed. He will present this to the group at the Charles and Scott (CAS) to discuss the OGE		
134	07/25/19	islanding question as per the Austin White email and provide SPP guidance.		
135	07/25/19	Steve and Jeff will present on "Protection in Your Shop" at the October meeting in Kansas	Presented at November meeting	closed
136	10/16/19	PC (CAS) to approve/disapprove the SPP Poplar Bluff motion		
137	10/16/19	SPCWG to design a metric that will provide a clear threshold for approval/disapproval of future requests for removal as a UFLS entity. Steve Wadas and Doug Bowman volunteered to work on this effort.		
138	10/16/19	SPCWG to follow up Q1 2020 to ensure the Oklaunion RAS approvals are provided by ORWG and TWG and then MOPC.		
139	10/16/19	David Wheeler to resubmit RAS approval package with edits included.		
140	10/16/19	Next meeting's "Protection In Your Shop" will feature David Wheeler presenting on relay commissioning and John Anderson presenting on protection philosophy.		
141	10/16/19	Shannon talk with NERC staff and confirm the MIDAS data submittal deadline of 3/1/2020		
142	10/16/19	Shannon talk with Jim Williams to see if we can get updates from an operations perspective		
143	10/16/19	Shannon will provide the latest version of the draft guideline associated with UFLS/UVLS with respect to SPIDERWG work.		