

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

**April 13-14, 2016**  
**Southwest Power Pool**  
**Little Rock, AR**  
**April 13 (1pm – 5pm)**  
**April 14 (8am – 12pm)**

• M I N U T E S •

**Agenda Item 1: Administrative Items**

Call to Order and Introductions

Chair, Louis Guidry (CLECO), called the meeting to order at 1pm and welcomed everyone. There were 16 in-person participants and 9 teleconference participants. (Attendance List Attached).

Proxies

There were no proxies for this meeting.

Approve minutes of previous meetings (Action Item)

The minutes for the January, 2016 meeting were reviewed and then unanimously approved by the group.

Approve agenda

The agenda was revised to replace Item 11, RR141 Request for Approval, with a discussion of “Other Business” items. Items included under Item 11 were SST Charter, PRC-019, and RR162.

**Agenda Item 2: Review of Past Action Items**

Doug Bowman (SPP) reviewed and updated the status of Action through 73.

**Agenda Item3: Baylor Synchronphasor Project**

Dr. Mack Grady, Baylor University, presented on Baylor’s Synchronphasor Network project. He focused describing a number of disturbance events that have been captured by PMUs in the network.

**Agenda Item 4: WAPA SPS Miles City**

Gayle Nansel provided information (see email in meeting materials) concerning a transmission upgrade that impacts the Miles City SPS. Potential changes to the MCCS SPS logic

programming can be accommodated quickly via a simple logic change. Does the SPCWG need to approve this? The group decided it was no real concern and that SPCWG approval was not required. The 5 year review doesn't change.

#### **Agenda Item 5: NERC Update**

Forrest Brock gave an update of the SPC Subcommittee meeting. See his draft minutes from the meeting. Another report will be given in October.

#### **Agenda Item 6: PRC-006-2 UFLS Update**

Harvey Scribner (SPP) described the need for wording changes in the UFLS plan. Section 3.0 was revised. Also Appendix C removed "Changes to the boundaries....." Language will be added to Appendix C that notes PC and SPCWG to review when there is a material boundary change scenario occur. Harvey to contact PLI for their input on boundary changes that may require a restudy. Other small wording changes were made as well.

#### **Agenda Item 7: Misoperations**

Misoperations Report: Thomas presented the quarterly misoperations deck.

New NERC Reporting Format: Thomas indicated that NERC will take over the collection of misoperations collection on July 1. All historical data will need to be imported into the new system by May 1. An internal spcwg sub-group has been working hard every quarter to scrub misoperations data and will continue to do so.

PRC-004 Workshop Presentation: Louis reviewed the Powerpoint presentation on misoperations he gave at a compliance forum. The standard will go into effect July 1, 2016.

Misoperations Whitepaper: Louis and Doug noted that there wasn't time to do what was needed and work on this will be continued during the upcoming quarter.

Misoperations Summit: Louis discussed the suggestion that a Fall workshop (with the RCWG) be held on misoperations be held and asked the members if they would support it. Member SME's and field personnel, as well as NERC, would be invited to brainstorm issues and share lessons learned on member systems. The workshop will consist of looking at actual misoperations of interest and get discussion going between the engineers and technical people. Breakout sessions were also suggested. Educating others on misoperations was also suggested. Possible locations are at SPP or KC. The group thought it was a good idea. Louis will work on setting it up.

#### **Agenda Item 8: PRC-002-2 DME Reporting Requirements**

Louis presented on how the standard's section R1 requires TOs to calculate placement of fault recorders and noted that the disturbance monitoring requirements were going into effect on July 1, 2016. Additionally, with respect to R5, the PC will providing a list to the TO's and GO's the location at which DDRs are required. This will be required on 7/1/16 as well. There was some confusion about R1.2 and the RE was requested to provide guidance.

### **Agenda Item 9: Out-of-Step Relay Tripping**

Doug Bowman requested comments and suggestions how this might be handled or modeled in the studies. Standard PRC-026-1, Relay Performance During Stable Power Swings, Requirement 1 states that for any “*Element identified in the most recent annual Planning Assessment where relay tripping occurs due to a stable or unstable power swing during a simulated disturbance*”, notification must be made to GO or TO. Zone distance relays would probably trip on the shift of power due to a nearby trip. How would it be simulated? When a fault occurs, the generators swing so maybe place generic distance relays in those areas.

### **Agenda Item 10: Basin Special Protection Scheme**

Approval of the SPS was given in 2015 contingent on the group receiving information on redundancy of dc systems. Tanner Seibel, (BEPC), received a response from the US Army Corp in regards to the timeframe to separate the DC supply on the two relays (21-26A and 21-26B) at the Oahe Substation for the Rapid City HVDC SPS. The Corp. indicated that they will be able to complete the redundant DC supply by the middle of May (May 15th).

### **Agenda Item 11: Other Business**

- a. Synchrophasor Strike Team Charter  
Doug Bowman reviewed the SST’s Charter for the group.
- b. PRC-019  
Jeff Beasley discussed this standard, *Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection*.
- c. Discuss RR-162  
It was noted that this RR requires PMU’s at new generators. Doug pointed out that this was being discussed in the SST meetings.

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

The WG discussed the meeting dates for the remainder of 2016. It was decided that the next meeting will be one day only since flights to and from SD are limited.

7/13/2016 Sioux Falls, SD

10/12,13, 2016 Oklahoma City

### **Agenda Item 13: Closing Administrative Duties**

The action item list was updated and summarized by Doug Bowman. Louis asked everyone to think about future topics for upcoming meetings. The meeting was adjourned.

Respectfully Submitted,

**Douglas Bowman**  
SPCWG Staff Secretary

In-Person

SPCWG Meeting  
April 13, 14, 2016  
Little Rock, AR

Webex / Teleconf.

1. Forrest Brock WFEC
2. Shawn Jacobs OGE
3. Harvey Scribner SPP
4. Rick Gurley AEP
5. Mathew Thykkutathil SUNC
6. Scott Paramore SUNC
7. Gary Condict SUNC
8. Jeff Beasley GRDA
9. Thomas Teafatiller SPP
10. David Oswald EDE
11. Doug Jackson GRDA
12. Heidi Melson EXCEL
13. Jonathan Hayes SPP
14. Mack Grady Baylor
15. Louis Guidrey CLECO
16. Doug Bowman SPP

1. Robert Hershack  
CLECO
2. Steve Wadas  
NPPD
3. John Allen  
SPRM
4. Bob Soper  
WAPA
5. Alan Halling  
KCPL
6. Matt Magill  
WERE
7. Chris Angland

**ATTENDANCE:**

<b>SPCWG Q1 2016 - January 13-14, 2016</b>					
<b>Participant</b>	<b>First Name</b>	<b>Last Name</b>	<b>Attending Through</b>	<b>Company</b>	<b>Email</b>
1	Allen	Halling	Web/Phone Conference	Kansas City Power and Light	allen.halling@kcpl.com
2	Bob	Soper	Web/Phone Conference	Western Area Power Administration- Upper Great Plains Region	soper@wapa.gov
3	Bret	Burford	Web/Phone Conference	American Electric Power	bgburford@aep.com
4	Christopher	Matos	Web/Phone Conference	Golden Spread Electric Cooperative Inc.	cmatos@gsec.coop
5	David	Oswald	Web/Phone Conference	Empire District Electric Company	doswald@empiredistrict.com
6	Douglas	Bowman	Web/Phone Conference	Southwest Power Pool	dbowman@spp.org
7	Forrest	Brock	In person	Western Farmers Electric Coop	f_brock@wfec.com
8	Gary	Condict	In person	Sunflower Electric Power Corp	gcondict@sunflower.net
9	Harvey	Scribner	In person	Southwest Power Pool	<a href="mailto:hscribner@spp.org">hscribner@spp.org</a>
10	Jay	Caspary	Web/Phone Conference	Southwest Power Pool	jaspary@spp.org
11	Jeff	Beasley	In person	Grand River Dam Authority	jbeasley@grda.com
12	John	Hare	Web/Phone Conference	Oklahoma Gas & Electric	harejm@oge.com
13	Joseph	Ghormley	Web/Phone Conference	Southwest Power Pool, Inc.	jghormley@spp.org
14	Ken	Zellefrow	In person	City Utilities Springfield Missouri	ken.zellefrow@cityutilities.net
15	Louis	Guidry	In person	Cleco	louis.guidry@cleco.com

16	Mathew	Thykkuttathil	In person	Sunflower Electric Power Corporation	mthykkuttathil@sunflower.net
17	Matthew	Magill	Web/Phone Conference	Westar Energy	matthew.magill@westarenergy.com
18	Melanie	Hill	In person	Southwest Power Pool, Inc.	mhill@spp.org
19	Nathaniel	Shockley	Web/Phone Conference	AEP	ndshockley@aep.com
20	Neil	Robertson	Web/Phone Conference	Southwest Power Pool, Inc.	nrobertson@spp.org
21	Rick	Gurley	In person	American Electric Power	rlgurley@aep.com
22	Robert	Hirchak	Web/Phone Conference	Cleco	robert.hirchak@cleco.com
23	Shawn	Jacobs	In person	Oklahoma Gas and Electric Co	jacobssw@oge.com
24	Stephen	Wadas	In person	NPPD	stwadas@nppd.com
25	Thomas	Teafatiller	In person	SPP RE	tteafatiller.re@spp.org
26	Tom	Miller	In person	ITC Holdings	tommiller@itctransco.com