

# Agenda

## System Protection and Control Working Group

### Conference Call

November 4, 2021 | 1:00 – 4:00 p.m. Eastern Daylight Time

#### NERC Antitrust Compliance Guidelines and Public Announcement Introduction and Chair's Remarks – Chair Jeff Iler

#### Agenda Items

**1. Review and Approve Meeting Agenda**

**Jeff Iler**

Jeff Iler opened the meeting at 1:04 pm EDT

It was noted that there was a new Alternate Jason Campisi (CNP) to be introduced in Item 3

Motion to approve "Eric Udren. Louis Guidry, with no opposition, motion carries

**2. Review Administrative Documents\***

**Jeff Iler**

a. Review and Approve August 5, 2021 Meeting Minutes

b. Review and Approve September 29, 2021 Meeting Minutes

Minor edits were made to the September 29 minutes. Bill Middaugh motioned to approve, Louis Guidry seconded, no opposition, motion carries.

**3. New Observers/Member introduction**

**All**

Jason Campisi introduced himself to the SPCWG. Noted he was an expert in protection system modeling, disturbance and event analysis. Was asking to be approved to the TRE Alternate

Motion to add Jason to the group as the TRE alternate: Jason Eruneo, David Penney Seconded. No opposition voiced, motion carries.

Tyson Niemann announced himself as an observer from WECC. He does short circuit studies for WECC. Tniemann@wecc.org

**4. Update of Member Roster**

**All**

**5. Vice Chair Nominations/nominee introduction**

**All**

Lynn Schroeder provided an overview of her career, projects she has worked on, and groups that she was worked with.

Manish Patel provided an overview of his career, projects he has worked on, and groups that he was worked with.

## **6. Inter-Entity Short Circuit Model\***

**Lynn Schroeder**

### **a. Review of work and update on progress**

Group is closing in on a completed rough draft and plans on hosting one more meeting prior to the end of the year.

Lynn went through the outline with the SPCWG noting that the emphasis was on the challenges on updating your models and ensuring that your boundary equivalents are brought in correctly and ensuring that you validate your model to make sure it is reasonable.

David Penney asked if an appendix of how to go through the data validation of the models would be useful.

There is a need to determine if the paper to be approved or accepted by the RSTC

ACTION ITEM: Al Schriver should run down what documents need RSTC approval or acceptance prior to posting on the SPCWG site.

Action Item: Rich Bauer to run down what type of paper is called what (White Paper vs Technical Reference, etc.)

## **7. Compliance Implementation Guidance**

**Rich Bauer**

### **a. Update on the PRC-019-2 Compliance Implementation Guidance**

- b. No update. Rich has not had time to work on this and won't until after the first of the year. The Technical reference document has been posted, but the implementation guidance needs to be massaged a bit to make it bit higher level.

### **c. Update on the PRC-024-3 Compliance Implementation Guidance**

Need someone to take over the team so that it can move forward. The goal is to get this guidance out before the standard becomes effective Oct 1, 2022. If anyone is interested, let Jeff, Bill, Rich or Ed know.

It was noted that it was probably about 50 percent done, but of course, there are always complications that occur during the review period. The bulk of the technical material will be placed in a technical reference document, while there is a high level review that points to the TRD from the implementation document. If there are any questions of the Bocovich method, contact John Grimm and he can get in touch with Mike B.

## **8. SAR PRC-025-2 Hybrid Plants**

**Rich Bauer**

### **a. Review and discuss plan to move forward**

We communicated with the entity that provided the issue to begin with asking for some more information. While they said they would provide the information, they have not done so yet.

*I have a new issue to add on to the topic the SPCWG discussion of PRC-025. The current issue is a hybrid plant that has an inverter nameplate capacity that far exceeds the transformer capacity. This potentially can lead to protection settings that are not favorable for transformer protection.*

*A new concern has come up for inverter plants where incremental changes are occurring (e.g., repowering, firmware updates, etc.). The PRC-025 standard has no allowance or guidance for making protection loadability adjustments for small changes within the plant. This can include a GSU transformer tap change, which requires a recalculation due to a ratio change. Also, if inverters are changed out due to failure (to a larger size).*

*The goal is to provide a time period for entities to “re-evaluate and apply” new settings based on existing equipment changes. Alternatively, possibly require entities to periodically re-evaluate protection and include an implementation period. While ensuring compliance is on the entity, the standard is based on synchronous plant topologies (e.g., 1-4 units vs. 50-100 units), however, any GO could have this issue. There is less room for compliance error for a synchronous plant than for asynchronous plants with many units.*

## **9. SPCWG Strategy session**

**All**

### **a. Commissioning Technical Reference**

The report was published today (Nov 4, 2021). A “road show” is being planned to help communicate what the results of this reference document were.

## **10. Round Table Discussion**

**All**

Backup protection for large transformer reference document:

Rich Bauer went through the effort to develop metrics for Reliability Guidelines and if the current Reliability guidelines are indeed guidelines or if it is a reference document.

It was noted that this paper was developed in response to some events that occurred in the late 2000s , early 2010s, when some autotransformers did not have backup protection.

Jeff Iler noted that no matter if it becomes a reference document or remains a reliability guideline, this paper should probably be reviewed and updated.

It was noted that the paper addresses the issue between fault protection and overload protection. Rather than waiting for the operator to take action to remove an overloaded element, a backup protection should be in place just in case to help prevent damage to the transformer. – However, this still need to be periodically reviewed to ensure that it meets loadability issues.

If it remained a reliability guideline, then the SPCWG would need to develop potential metrics.

*ACTION ITEM: Include SPCS Backup Protection Systems Reliability Guideline in the next meeting.*

*ACTION ITEM: Ed Ruck to send out a link to the document and to the RSTC reliability guidelines page.*

## **11. Future Meetings – All**

Ensure future meetings do not conflict with US or Canadian holidays 2<sup>nd</sup> Thursday of event months 1-4 pm eastern prevailing. Conflicts with US or Canadian holidays are pushed to the third week.

SPCWG and Subgroup Meeting Dates	Time	Location
September 29, 2021	12:00 – 3:00 pm ET	WebEx
November 4, 2021	1:00 – 4:00 p.m. ET	WebEx
Late January, Early February		WebEx
March/April 2022 Meeting		WebEx
May/June 2022 Meeting		WebEx
Aug/September 2022 meeting		WebEx
October/November 2022 meeting		WebEx

**Adjourn – Chair Jeff Iler**



