

1. Welcome, Call to Order

Bill Middaugh, Relay Work Group (RWG) Chair, called the meeting to order at 1:02 p.m. MT on June 9, 2022. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

2. Review WECC Antitrust Policy

James Hanson, Senior Event Analysis Engineer, read aloud the WECC Antitrust Policy statement. The meeting agenda included a link to the posted policy.

3. Approve Agenda

Mr. Middaugh introduced the proposed meeting agenda.

By consensus the RWG approved the agenda.

4. Review and Approve Previous Meeting Minutes

Mr. Middaugh introduced the minutes from the meeting on March 17, 2022.

By consensus, the RWG approved the minutes from March 17, 2022.

5. Review Previous Action Items

Nicole Lee, Administrative Assistant, reviewed action items carried over from the RWG meeting on March 17, 2022. Action items that are not closed and will be carried forward can be found [here](#).

6. Standing Committee Updates

Curtis Holland, Reliability Specialist, gave an update on the Event and Performance Analysis Subcommittee (EPAS). Eight events were reported. The next closed meeting will be July 6, 2022. There will be an open and closed meeting held in September.

Gene Henneberg, NV Energy, gave an update on the Remedial Action Scheme Reliability Subcommittee (RASRS). Schemes were reviewed although RC west was not able to attend.

Mr. Henneberg also gave an update on the IEEE Power System Relaying Committee. The P-2800 standard was published in April. It is available to use and is beneficial. The next meeting will be September in Nashville, TN.

Bill Middaugh, Tri-State Generation and Transmission, gave an update on MIDAS Work Group (MIDASWG). The group does not have an update and has not had a meeting.

Mr. Middaugh gave an update on the System Protection and Control Working Group (SPCWG). The governance document was submitted and is waiting for approval. Encouragement was made to attend SPCWG meetings.

David Beach, Portland General Electric Company, did not have an updates on the Short Circuit Modeling Work Group (SCMWG). The next meeting is not scheduled yet.

7. RAS Design Guide

Mr. Middaugh presented the RAS design guide. The RWG made modifications to the document. Mr. Hanson will email the updated guide to the RWG.

8. Review of Installing and Maintaining Protective Relay Systems Paper

The RWG discussed the installing and maintaining protective relay systems paper. It will help with not duplicating documents and it will help reference to other related documents. The RWG agreed to add references to the paper. Mr. Hanson will email the paper to RWG.

The document is posted to the [WECC website](#).

9. Review Lesson Learned Draft for Preventing Undesired Operations during Relay Restarts

Mr. Hanson presented the lesson learned for preventing undesired operations during relay restarts. Mr. Beach provided additional practices applicable to the document. Mr. Hanson will add information to the document and email it to David Beach, Portland General Electric (PGE).

The document is posted to the [WECC website](#).

10. Review RWG Charter

Mr. Hanson presented the RWG Charter. The RWG made modifications.

On a motion by David Beach, the RWG approved the modified agenda.

The charter is posted to the [WECC website](#).



11. Review of Relaying Current Transformer Application

Mr. Beach gave an update on the application for relaying current transformer. It is believed this document should be retired but kept on the RWG site for reference. Research will be done to see if it can be retired without the requirement to update it.

12. Review Committee Questionnaire

Mr. Hanson presented the committee review questionnaire. Mr. Middaugh prefilled it out and the responses were reviewed by the RWG.

The presentation is posted to the [WECC website](#).

13. Future Leadership of RWG Discussion

Mr. Middaugh is the new chair and Dean Bender will remain the vice chair.

14. Share Misoperation Severity Index

Mr. Hanson shared the misoperation severity index. It was created to help entities and make it useful to the owner. The summary of the data will be beneficial.

The document is posted to the [WECC website](#).

15. Closed Session

The RWG reviewed the 2022 quarter one misoperations, followed by a roundtable discussion.

16. Work on 2021 Misoperations Report

Due to time constraints The RWG discussed the 2021 Misoperations Report.

PRC-027 will be discussed during the next meeting.

17. Public Comment

No comments were offered.

18. Review New Action Items

- Email the RAS Design Guide with the edits to RWG.
 - Assigned To: James Hanson
 - Due Date: September 8, 2022
- Email the Installing and Maintaining Protective Relay System Paper with the edits to RWG.
 - Assigned To: James Hanson
 - Due Date: September 8, 2022



- Add information to the Lessons Learned document and send to David Beach.
 - Assigned To: James Hanson
 - Due Date: September 8, 2022
- Research if historical/retired documents can be stored without the requirements to be reviewed and updated.
 - Assigned To: James Hanson
 - Due Date: September 8, 2022
- Email draft 2021 misoperation report to RWG.
 - Assigned To: James Hanson
 - Due Date: September 8, 2022
- Email how many operations occurred to the RWG.
 - Assigned To: James Hanson
 - Due Date: September 8, 2022

19. Upcoming Meetings

September 8-9, 2022Salt Lake City, UT *

December 8-9, 2022Salt Lake City, UT *

**Meeting may be virtual due to the COVID-19 pandemic.*

20. Adjourn

Mr. Middaugh adjourned the meeting without objection at 12:01 p.m.



Exhibit A: Attendance List

Members in Attendance

David Beach.....Portland General Electric Company
 Dean BenderBonneville Power Administration—Transmission
 Xing Chen British Columbia Hydro and Power Authority
 James Hanson.....WECC
 Gene HennebergNV Energy
 Donald Loftis.....Colorado Springs Utilities
 Bill Middaugh Tri-State Generation and Transmission—Reliability
 Josh Moyers Western Area Power Administration
 Mohamed Omer.....Public Service Company of Colorado (Xcel Energy)
 Nick Podany U.S. Bureau of Reclamation
 Cleo Rojas Los Angeles Department of Water and Power
 Jeff Sams.....Salt River Project

Members not in Attendance

Mijo Brkic..... Los Angeles Department of Water and Power
 Mehrdad Majidi San Diego Gas and Electric
 Steven Merriman British Columbia Hydro and Power Authority
 Rafael Pineda..... Pacific Gas and Electric Company
 Curtis Sanden..... Southern California Edison Company
 Harjinder Sidhu AltaLink Management Ltd.
 Tyler SmithIdaho Power Company
 Patrick Sorrells Sacramento Municipal Utility District
 Randy Spacek.....Avista Corporation
 Stephen VanderZandeAlberta Electric System Operator

Others in Attendance

Bryan Diemer Sacramento Municipal Utility District
 Curtis HollandWECC



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