

1. Welcome, Call to Order

Bill Middaugh, Protection and Control Subcommittee (PCS) Chair, called the meeting to order at 08:05 a.m. MT on October 3, 2024. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

2. Review WECC Antitrust Policy

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

3. Approve Agenda

B. Middaugh introduced the proposed meeting agenda.

The 2024-10-03 PCS_MRO PRS Agenda was amended as follows:

- The item “PRC 28, 29, 30 Discussion” was added.

By consensus, the PCS approved the agenda.

4. Review and Approve Previous Meeting Minutes

B. Middaugh introduced the minutes from the meeting on June 6–7, 2024.

By consensus, the PCS approved the minutes from June 6–7, 2024.

5. Review Previous Action Items

Maya Brimhall, Administrative Coordinator, reviewed action items carried over from the PCS meeting on June 7, 2024. Action items that are not closed and will be carried forward can be found [here](#).

6. WECC PCS Overview

J. Hanson presented an overview of the WECC PCS. He covered the following aspects:

- a. Regional overview
- b. Misoperation review process
- c. Analysis on MIDAS Data

- d. Efforts to reduce misoperations
- e. Document library

The presentation can be found on the WECC website.

7. MRO PRS Overview

Jacob Bernhagen, Midwest Reliability Organization (MRO), presented an overview of the MRO PRS. He covered the following topics:

- a. Regional overview
- b. Misoperation review process
- c. Analysis on MIDAS data
- d. Efforts to reduce misoperations
- e. Documents created

8. PRC 28, 29, 30 Discussion

The PCS discussed PRC 28, PRC 29, and PRC 30. Rich Bauer, NERC, answered PCS and MRO members' questions.

9. Discussions on Standards/Orders

The PCS discussed the impacts of FERC Order 881 and approaches to PRC-027, PRC-023, PRC-004.

10. Open Discussion Topics

The PCS discussed the following topics:

- a. Responsibilities during commissioning
- b. Reducing misoperations with an unknown cause
- c. Wildfire mitigation
- d. IBR impacts on protection
- e. Automated relay settings
- f. Coordination of joint-owned lines

11. Standing Committee Updates

Curtis Holland, Senior Reliability Specialist, reported on the Event and Performance Analysis Subcommittee (EPAS). The next EPAS closed meeting occurs on October 9, 2024.



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Gene Henneberg, NV Energy, reported on the Remedial Action Scheme Reliability Subcommittee (RASRS). The next RASRS meeting occurs on November 13–14, 2024.

G. Henneberg reported on the IEEE Power System Relaying Committee. He summarized the PSRC standards, recommended practices, and guides.

Lynn Schroeder, Sunflower Electric Power Corporation, reported on the System Protection and Control Working Group (SPCWG).

D. Beach reported on the Short-circuit Modeling Work Group (SCMWG). There were no new updates.

J. Hanson reported on the Event Analysis Subcommittee (EAS). J. Hanson will be the EAS chair by the end of 2024. They are currently prioritizing making the NERC Lessons Learned library more accessible to the industry and conducting an audit of the library.

John Grimm, MRO, reported on the Transmission Availability Data System (TADS). There will be a TADS training October 16–17, 2024, in Independence, Ohio. Interested participants can still register to attend in person.

12. Debrief Protection Conference

The PCS debriefed on the Protection Conference held in Salt Lake City, Utah, on October 1–2, 2024. J. Hanson asked the participants for their feedback to apply to the next year's conference.

13. Review 2023 Misoperations Report

The PCS reviewed the 2023 Misoperations Report draft together. They contributed comments and completed live edits. J. Hanson requested the PCS committee to complete a final review of the draft before December 2024 meeting.

14. Closed Session

The PCS convened in closed session. They reviewed the Q2 2024 Misoperation Submissions and engaged in a roundtable discussion.

15. Public Comment

No comments were made.

16. Review New Action Items

- Conduct a final review of the 2023 Misoperations Report draft and send any comments to James Hanson.
 - Assigned To: PCS Committee



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- Due Date: October 21, 2024
- Reach out to the Public Service of New Mexico to present on traveling wave application.
 - Assigned To: James Hanson
 - Due Date: December 5, 2024
- Present on fault line research.
 - Assigned To: Bryan Diemer
 - Due Date: December 5, 2024

17. Upcoming Meetings

December 5–6, 2024 Salt Lake City, Utah

March 6–7, 2025..... Salt Lake City, Utah

18. Adjourn

B. Middaugh adjourned the meeting without objection at 12:02 p.m. on October 4, 2024.



Exhibit A: Attendance List

Members in Attendance

David Beach.....Portland General Electric Company
Xing Chen British Columbia Hydro and Power Authority
Ryan Chun Los Angeles Department of Water and Power
Kevin Damron.....Avista Corporation
Bryan Diemer Sacramento Municipal Utility District
James Hanson.....WECC
Gene Henneberg NV Energy
Donald Loftis.....Colorado Springs Utilities
Pamela MendozaPublic Service Company of Colorado (Xcel Energy)
Bill Middaugh Tri-State Generation and Transmission—Reliability
Blake Peck.....Idaho Power Company
Rafael Pineda.....Pacific Gas and Electric Company
Nick Podany U.S. Bureau of Reclamation
Curtis Sanden.....Southern California Edison Company
Masahiko Taniguchi..... Los Angeles Department of Water and Power

Members not in Attendance

Dean BenderBonneville Power Administration—Transmission
Alejandro Castro..... El Paso Electric Company
Orion Chan British Columbia Hydro and Power Authority
Jason Hall.....Puget Sound Energy, Inc.
David Heffernan PacifiCorp
Kawika Lawlor.....San Diego Gas and Electric
Lucy LinAlberta Electric System Operator
Josh MoyersWestern Area Power Administration
Claire PattiPortland General Electric Company
Harjinder SidhuAltaLink Management Ltd.



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Stephen SmithSalt River Project
Tyler SmithIdaho Power Company
Jonathan Trejo El Paso Electric Company

Others in Attendance

Rich Bauer NERC
Maya BrimhallWECC
Jacob BernhagenMidwest Reliability Organization
Ryan Einer OGE Energy
Josh ErdmanXcel Energy
Mark Gragert..... Omaha Public Power District
John GrimmMidwest Reliability Organization
Nathan Gulczynski..... American Transmission Company
Greg Hill Nebraska Public Power District
Curtis HollandWECC
Dennis Lu..... Manitoba Hydro
Casey Malskeit Omaha Public Power District
Sarah Marshall Alliant Energy
Tyler PorterGreat River Energy
Cody Remboldt.....Montana-Dakota Utilities
Edward Ruck..... NERC
Lynn Schroeder Sunflower Electric Power Corporation
Rochelle TrefryMidAmerican Energy Company
Dylan Underwood.....Southwestern Power Administration
Sarah Wernette.....Midwest Reliability Organization

