

Protection and Control Subcommittee

Meeting Minutes
Salt Lake City, Utah

Day 1—June 5, 2025

8:00 a.m. to 5:00 p.m. Mountain Time

1. Welcome, Call to Order

Bill Middaugh, Protection and Control Subcommittee (PCS) Chair, called the meeting to order at 8:00 a.m. MT on June 5, 2025. 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 policy can be found on wecc.org.

3. Approve Agenda

B. Middaugh introduced the proposed meeting agenda.

By consensus, the PCS approved the agenda.

4. Review and Approve Previous Meeting Minutes

B. Middaugh introduced the minutes of the meeting on March 6, 2025.

By consensus, the PCS approved the minutes of the meeting on March 6, 2025.

5. Review Previous Action Items

Maya Brimhall, Administrative Coordinator, reviewed action items carried over from the PCS meeting on March 7, 2025. Action items that are not closed and will be carried forward can be found on wecc.org.

6. Discussion on Use of Sodium Nickel Batteries in Substations

Curtis Crews, Senior Technical Advisor, discussed the use of sodium nickel batteries in substations. J. Hanson agreed to send an email poll to the PCS inquiring about use of sodium nickel acid batteries by September 5, 2025.

7. Interconnection Rating on Hybrid Plants

C. Crews discussed the interconnection rating on hybrid plants. Gene Henneberg, NV Energy; David Beach, Portland General Electric; Blake Peck, Idaho Power Company; Bryan Diemer, Sacramento Municipal Utility District; and Curtis Sanden, Southern California Edison Company, will

create a subgroup to review implementation guidance for PRC-025 regarding hybrid battery energy storage systems (BESS) with other renewables. C. Crews will send his current draft guidance to the subgroup to review, and the subgroup will report back to the PCS on its progress by September 5, 2025.

8. Standing Committee Updates

- i. Curtis Holland, Senior Reliability Specialist, reported on the Event and Performance Analysis Subcommittee (EPAS).
- ii. G. Henneberg reported on the Remedial Action Scheme Review Subcommittee (RASRS).
- iii. G. Henneberg reported on the IEEE Power System Relaying and Control Committee.
- iv. B. Middaugh and D. Beach reported on the System Protection and Control Working Group (SPCWG).
- v. D. Beach reported on Short Circuit Modeling Work Group (SCMWG).
- vi. J. Hanson reported on the Event Analysis Subcommittee (EAS).

9. Falling Conductor Protection

Kawika Lawlor, San Diego Gas and Electric Company (SDG&E), presented on SDG&E's falling conductor protection measures.

10. SPCWG 61850 White Paper Update

Eric Udren, Quanta Technologies, updated the PCS on the SPCWG 61850 white paper.

11. PRC-026 Calculations

Dean Bender, Bonneville Power Administration, reviewed PRC-026 calculations with the PCS. J. Hanson sent the document out via email for the PCS to review.

12. PRC-023 R1.10 Interpretation

Kevin Damron, Avista Corporation (AVA), shared AVA's interpretation of PRC-023 R1.10.

13. Discussion on Protection Related Wildfire mitigation efforts

The PCS discussed protection-related wildfire mitigation efforts. J. Hanson shared the wildfire statistics from the WECC System Performance Data Portal.

14. Discussion on Sync Check Relay Settings Approach

Lucy Lin, Alberta Electric System Operator (AESO), led a discussion on AESO's approach to sync-check relay settings.

15. 2024 Misoperations Analysis Report

The PCS created teams to share aggregated data and discuss their assignments regarding the 2024 misoperations analysis report. J. Hanson will send the updated charts for the misoperations report to different groups by June 27, 2025. The members of the PCS must complete and submit

their misoperations assignments by August 21, 2025, to discuss findings in the September 2025 PCS meeting.

Day 2—June 6, 2025

8:00 a.m. to 12:00 p.m. Mountain Time

16. Closed Session

The PCS held a closed session to review the Q1 2025 misoperation submissions and engage in a roundtable discussion. J. Hanson will send Rafael Pineda's, Pacific Gas & Electric Company, issue on PSPS coordination and two of the Q1 misoperation submissions to B. Middelhaugh to discuss in the NERC SPCWG for additional guidance, and B. Middelhaugh will report back in the September 2025 PCS meeting.

17. Review New Action Items

- Send updated charts for misoperations report to different groups
 - Assigned To: James Hanson
 - Due Date: June 27, 2025
- Work on misoperation assignments for annual report
 - Assigned To: PCS
 - Due Date: August 21, 2025
- Create a small group for implementation guidance for PRC-025 regarding hybrid BESS with other renewables; send draft to work team
 - Assigned To: Gene Henneberg, David Beach, Blake Peck, Bryan Diemer, Curtis Sanden, Curtis Crews
 - Due Date: September 5, 2025
- Send an email poll to the PCS inquiring about use of sodium nickel batteries
 - Assigned To: James Hanson
 - Due Date: September 5, 2025
- Send Rafael Pineda's PSPS coordination issue to Bill Middelhaugh and follow up with the NERC SPCWG on 2 of the Q1 2025 misoperation submissions for additional guidance
 - Assigned To: James Hanson, Bill Middelhaugh
 - Due Date: September 5, 2025
- Follow up with Rafael S. on the March 2026 NPCC meeting
 - Assigned To: James Hanson
 - Due Date: September 5, 2025



18. Review Upcoming Meetings

September 4–5, 2025 Salt Lake City, Utah
December 4–5, 2025 Salt Lake City, Utah

19. Adjourn Day 2

B. Middaugh adjourned the meeting without objection at 11:04 a.m. Mountain Time.



Exhibit A: Attendance List

Members in Attendance

David Beach.....	Portland General Electric Company
Dean Bender	Bonneville Power Administration—Transmission
Orion Chan	British Columbia Hydro and Power Authority
Bryan Diemer	Sacramento Municipal Utility District
James Hanson	WECC
Gene Henneberg	NV Energy
Luke Hoffmann	PacifiCorp
Kawika Lawlor	San Diego Gas and Electric
Lucy Lin.....	Alberta Electric System Operator
Donald Loftis	Colorado Springs Utilities
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
Grant Raymond	Public Service Company of Colorado (Xcel Energy)
Harjinder Sidhu.....	AltaLink Management Ltd.
Masahiko Taniguchi.....	Los Angeles Department of Water and Power
Jonathan Trejo	El Paso Electric Company

Members not in Attendance

Alejandro Castro	El Paso Electric Company
Xing Chen.....	British Columbia Hydro and Power Authority
Ryan Chun.....	Los Angeles Department of Water and Power
Kevin Damron	Avista Corporation
Jason Hall.....	Puget Sound Energy, Inc.
David Heffernan	PacifiCorp
Josh Moyers.....	Western Area Power Administration
Claire Patti	Portland General Electric Company
Curtis Sanden	Southern California Edison Company
Stephen Smith	Salt River Project
Tyler Smith.....	Idaho Power Company
Nathanial Thompson	NorthWestern Energy

Others in Attendance

Maya Brimhall.....	WECC
Curtis Crews	WECC
Curtis Holland.....	WECC
Ruly Parikesit.....	Tacoma Power
Armando Pimentel	Los Angeles Department of Water and Power

