



Protection and Control Subcommittee
Meeting Minutes
September 7, 2023
Salt Lake City, Utah

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 September 7, 2023. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

2. Review WECC Antitrust Policy

James Hanson, Manager Operations Analysis, 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 PCS approved the meeting agenda.

4. Review and Approve Previous Meeting Minutes

Mr. Middaugh introduced the minutes from the meeting on June 8–9, 2023.

By consensus, the PCS approved the minutes from the meeting on June 8–9, 2023.

5. Review Previous Action Items

Marie Smith, Administrative Coordinator, reviewed action items carried over from the PCS meeting on June 8–9, 2023. Action items that are not closed and will be carried forward can be found [here](#).

6. Quicker Under-frequency Load Shedding

Kevin W. Jones, Xcel Energy, provided an update on the need for quicker under-frequency load shedding (UFLS). There are changes in the industry and challenges regarding the UFLS program when operating the system with a higher penetration of inverter-based resources. An automatic UFLS is an effort for the first line of defense to prevent blackouts and generator steam turbine damage. The presentation emphasized the importance of rethinking our existing approach to UFLS as the resource mix is changing.



7. Standing Committee Updates

Curtis Holland, Senior Reliability Specialist, provided an update on seven reports from the Event and Performance Analysis Subcommittee (EPAS) closed meetings. From one of these events, a Disturbance Report was produced and published in August 2023 based on a solar reduction event that occurred in southwestern Utah. This is published on NERC's website. The next closed EPAS meeting will be on October 4, 2023. In December 2023, the EPAS may hold a hybrid meeting.

Mr. Hanson will send out a NERC-WECC Battery Energy Storage Systems Report. This report is expected to be published in September 2023.

Gene Henneberg, NV Energy, provided an update on the Remedial Action Scheme Reliability Subcommittee (RASRS). The RASRS members elected a new vice chair: Davis Erwin from Pacific Gas & Electric Company. The RASRS members discussed the impact of the project in New Mexico with 1,200 megawatts of wind. The IEEE Power System Relay Committee meeting will be in Myrtle Beach, South Carolina.

The Misoperations Information Data Analysis System User Group will meet next on November 7, 2023. Its focus has been on changes to the MIDAS 1600 data request.

Mr. Middaugh and David Beach, Portland General Electric Company, provided an update on the System Protection and Control Working Group (SPCWG). The next SPCWG meeting will be in Atlanta, Georgia, in October 2023.

8. Avista Event Discussion

Cameron Chapman, Avista Corporation, provided an update on a recent Avista event. Substations one and two were the primary focus for this discussion. There was an unintentional grounding to the line, but crews worked on this line and resolved these issues. One line was out of service, but all other lines were in service at this time. Avista is trying to implement new processes and considering different solutions. Please contact [Cameron Chapman](#) directly if you have any items for discussion.

Bryan Diemer, Sacramento Municipal Utility District, discussed how Omicron tested a set of cables called CP CU1. This is a coupling unit for injection into powerlines and HV cables. Mr. Diemer would like to share this information with a larger group.

Mr. Chapman will email out a survey to find out what issues others in the industry may be experiencing concerning misoperations. This will be emailed to the PCS group. Mr. Chapman will forward a copy of the survey to Mr. Hanson.



9. Review Annual Misoperation Report

Mr. Hanson provided an update on the Annual Misoperations Report. This report will be published in October 2023.

10. ERO Protection System Conference

Mr. Hanson will ask Rich Bauer, NERC, to present on the Electric Reliability Organization Conference.

11. NERC Standards Updates (PRC005, PRC019, PRC002, TPL001_SAR)

Mr. Bauer provided an update for Standards PRC005, PRC019, PRC002, and TPL001_SAR. There was nothing new to report on PRC-004, and PRC-019 was not discussed. Many of these standard changes are driven by increased penetration of inverter-based resources.

Mr. Bauer presented on the FERC Order 881. The Standard Authorization Request (SAR) came from the Generator Forum seeking clarification for functions in the voltage regulator. The 881A document issued an order in December 2021 to send questions back to FERC.

12. ERO Protection System Conference

The ERO Protection Conference will take place on October 25–26, 2023, in Atlanta, Georgia.

13. Adjourn

Mr. Middaugh adjourned the meeting without objection at 5:00 p.m.



Exhibit A: Attendance List

Members in Attendance

- David Beach.....Portland General Electric Company
- Xing Chen British Columbia Hydro and Power Authority
- Kevin Damron.....Avista Corporation
- Bryan Diemer Sacramento Municipal Utility District
- Jason Hall..... Puget Sound Energy, Inc.
- James Hanson.....WECC
- Gene HennebergNV Energy
- Donald Loftis.....Colorado Springs Utilities
- Pamela MendozaPublic Service Company of Colorado (Xcel Energy)
- Bill Middaugh Tri-State Generation and Transmission—Reliability
- Josh MoyersWestern Area Power Administration
- Rafael Pineda..... Pacific Gas and Electric Company
- Nick Podany United States Bureau of Reclamation
- Curtis Sanden..... Southern California Edison Company
- Harjinder SidhuAltaLink Management Ltd.
- Tyler SmithIdaho Power Company

Members not in Attendance

- Dean BenderBonneville Power Administration—Transmission
- Alejandro Castro..... El Paso Electric Company
- Orion Chan British Columbia Hydro and Power Authority
- David HeffernanPacifiCorp
- Mehrdad Majidi San Diego Gas and Electric
- Sanjay Mehta Los Angeles Department of Water and Power
- Luis PerezPacifiCorp
- Jeff Sams.....Salt River Project
- Patrick Sorrells Sacramento Municipal Utility District



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Stephen VanderZande Alberta Electric System Operator

Others in Attendance [Only for technical committees]

Bashir Abdulle Colorado Springs Utilities

Rich Bauer NERC

Cameron Chapman Avista Corporation

David Grover WECC

Curtis Holland WECC

Vic Howell WECC

Blake Peck Idaho Power Company

Robert Reynolds North Western Energy

Marie Smith WECC

Kevin W. Jones Xcel Energy

