## Welcome, Call to Order

Bill Middaugh, Relay Work Group (RWG) Chair, called the meeting to order at 8:00 a.m. MT on March 9, 2023. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

## 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.

## Approve Agenda

Mr. Middaugh introduced the proposed meeting agenda.

The RWG made an edit to the section on Quarter Four.

**By consensus, the RWG approved the agenda as amended.**

## Review and Approve Previous Meeting Minutes

Mr. Middaugh introduced the minutes from the meeting on December 8, 2022.

The RWG made an edit to the minutes on relay failure for “transmission lines.”

**By consensus, the RWG approved the minutes from December 8, 2022, as amended.**

## Review Previous Action Items

Marie Smith, Administrative Coordinator, reviewed action items carried over from the **RWG** meeting on December 8, 2022. Action items that are not closed and will be carried forward can be found [here](https://www.wecc.org/Administrative/RWG%20Action%20Items%20-March%202023.pdf).

## Standing Committee Updates

Curtis Holland, Operations Analysis Reliability Specialist, provided an update on activities of the Event and Performance Analysis Subcommittee (EPAS). The subcommittee is currently working on assignments from the RRC three-year work plan, including reliability challenges faced with inverter-based resources (IBR).

Gene Henneberg, NV Energy, provided an update on activities of the Remedial Action Scheme Reliability Subcommittee (RASRS). This group has the final responsibility to review and approve schemes under the PRC-002-12 standard.

Mr. Henneberg gave an update on a recent meeting of the IEEE Power System Relaying Committee.

Mr. Middaugh provided an update on the MIDAS User Group (MIDASUG) DRI. The current DRI was shared and the RWG is encouraged to provide feedback.

Mr. Middaugh gave an update on the System Protection and Control Working Group (SPCWG). The group will be meeting in April 2023.

## Discussion on When Equipment is Released for Service

Bryan Diemer, Sacramento Municipal Utility District (SMUD), led a discussion on misoperations and utilizing a checklist to determine the misoperations. New equipment will correct these issues with the misoperations. The DRI Protection System referred to the breaker tripping as a misoperation. This was discussed with the MIDASUG.

## Review of New RWG Charter

The RWG reviewed the new charter.

## By consensus, the RWG approved the new charter.

The charter is posted on the WECC [website](https://www.wecc.org/Administrative/PCS%20Charter%202023%20Final.docx).

## Input on NERC Severity Index Weights

Mr. Hanson discussed the misoperations security index, and how North American Electric Reliability Corporation (NERC) wants to calculate the metrics on these fixed fields. The RWG commented on various aspects of the metric that will be provided to the MIDASUG.RRC Risk Management Process Presentation

Tim Reynolds, Risk Analysis Manager, reviewed the Reliability Risk Committee (RRC) Risk Management Process. The RRC will look at risks and rely on experts to determine and prioritize these risks. The RRC will be addressing these issues by discussing them as a group and making assignments to committees and work groups evaluate these risks.

An annual meeting will be held to prioritize risks and produce an annual risk report on the highest risks. This process is part of the current RRC Three-Year Work Plan. BPA SEL 787 Internal Bulletin

Dean Bender, Bonneville Power Administration—Transmission, gave an update on the BPA SEL 787 Internal Bulletin. A breaker failure impacted the outputs and leakage currents. There is an SEL Application Guide on SEL Relays. BPA’s solution is to place the resistors in parallel to the input of these isolated inputs. These resistors will serve to stabilize the voltage input.

## MIDAS Reporting Categories Review

Mr. Hanson led a review of the MIDAS Reporting Categories to identify ways the MIDAS 1600 data request can be improved.

## 2023 ERO Protection System Conference

Mr. Hanson discussed the 2023 ERO Protection Systems Conference held on September 27 and 28, 2023. There was a proposal for a nationwide conference where each region will review relevant misoperations. The conference will include analysis and is looking for success stories to present. The conference location has not yet been determined.

## Individual Entity View of Misoperations

Mr. Hanson asked each member of the group to review their entities misoperation history for 20 minutes. There was a debrief from observations of this exercise.

## Work Analysis for 2022 Annual Misoperations Report

Mr. Hanson discussed the analysis for 2022 Annual Misoperations Report. The RWG discussed the approach to take for the 2022 report. WECC’s Data Services team will have graphics generated for the report prior to the June meeting.

## Closed Session

The RWG went into Closed Session.

## Public Comment

No comments were made.

## Review New Action Items

There were no new action items created during this meeting.

## Upcoming Meetings

June 8, 2023 Salt Lake City, UT; Hybrid

September 7, 2023 Salt Lake City, UT; Hybrid

December 7, 2023 Salt Lake City, UT; Hybrid

## Adjourn

Mr. Middaugh adjourned the meeting without objection at 12:00 p.m.

Exhibit A: Attendance List

### Members in Attendance

Dean Bender Bonneville Power Administration—Transmission

Kevin Damron Avista Corporation

Bryan Diemer Sacramento Municipal Utility District

Jason Hall Puget Sound Energy, Inc.

James Hanson WECC

David Heffernan PacifiCorp

Gene Henneberg NV Energy

Donald Loftis Colorado Springs Utilities

Steven Merriman British Columbia Hydro and Power Authority

Bill Middaugh Tri-State Generation and Transmission—Reliability

Rafael Pineda Pacific Gas and Electric Company

Nick Podany U.S. Bureau of Reclamation

Cleo Rojas Los Angeles Department of Water and Power

Curtis Sanden Southern California Edison Company

Harjinder Sidhu AltaLink Management Ltd.

Stephen VanderZande Alberta Electric System Operator

### Members not in Attendance

David Beach Portland General Electric Company

Xing Chen British Columbia Hydro and Power Authority

Mehrdad Majidi San Diego Gas and Electric

Josh Moyers Western Area Power Administration

Luis Perez PacifiCorp

Jeff Sams Salt River Project

Tyler Smith Idaho Power Company

### Others in Attendance

Alexandro Castro El Paso Electric

Curtis Holland WECC

Tim Reynolds WECC

Marie Smith WECC

Jonathan Trejo El Paso Electric