## Welcome, Call to Order

Bill Middaugh, Relay Work Group (RWG) Chair, called the meeting to order at 8:00 a.m. on September 8, 2022. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

## 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.

## Approve Agenda

Mr. Middaugh introduced the proposed meeting agenda.

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

## Review and Approve Previous Meeting Minutes

Mr. Middaugh introduced the minutes from the meeting on June 8–9, 2022.

**On a motion by Gene Henneberg, the RWG approved the minutes from June 8–9, 2022.**

## Review of Previous Action Items

Nicole Lee, Administrative Assistant, reviewed action items carried over from the **RWG** meeting on June 9, 2022. Action items that are not closed and will be carried forward can be found [here](https://www.wecc.org/Administrative/RWG%20Action%20Item%20List.xlsx).

## Standing Committee Updates

Curtis Holland, Reliability Specialist, gave an update on the Event and Performance Analysis Subcommittee (EPAS). The EPAS reviewed events, and the next closed session will be October 5, 2022. The RWG discussed the requirements for EPAS closed sessions. A Closed Session Confidentiality Agreement (CSCA) needs to be signed and you do not need to be an EPAS member to attend.

Gene Henneberg, NV Energy, gave an update on the Remedial Action Scheme Reliability Subcommittee (RASRS). Schemes were reviewed. RC West was not able to attend. The charter was updated to show that the RASRS will be reporting to the Reliability Risk Committee (RRC).

Mr. Henneberg also gave an update on the Institute of Electrical and Electronics Engineers (IEEE) Power System Relaying Committee. The P-2800 standard was published in April 2022. It is available to use and is beneficial. The meetings are hybrid, and the next one will be next week in Nashville, Tennessee.

Bill Middaugh, Tri-State Generation and Transmission, gave an update on the Misoperation Information Data Analysis System (MIDAS) Work Group (MIDASWG). The RWG discussed the voltage class and the Severity Index. Adding nonconsequential load will be reviewed by NERC. Assumptions need to be made and the process still needs to be refined. The RWG will be notified when it is reviewed by NERC. The Severity Index will be emailed to the RWG for comment.

Mr. Middaugh gave an update on the System Protection and Control Working Group (SPCWG). The governance document was submitted and is waiting for approval. Mr. Middaugh encouraged the group to attend SPCWG meetings. The charter is being discussed to expand the roster. There will be a hybrid meeting on October 26–27, 2022, in Atlanta.

David Beach, Portland General Electric Company, gave an update on the Short Circuit Modeling Work Group (SCMWG). The last meeting was August 2022. The RWG discussed the Standard Authorization Request (SAR) Project.

## Review of 2021 Annual Misoperations Report

Mr. Hanson presented the 2021 Annual Misoperations Report. The RWG discussed sharing it with the Human Performance Work Group (HPWG) and developing seminars to assist with improvement. Modifications were made to the paper and additional edits will be added by the end of the day.

The report is posted to the [WECC website](https://www.wecc.org/Administrative/RWG%202021%20Misoperation%20Report.pdf).

## PRC-023 R2 revision

Mr. Henneberg presented the proposed revisions to NERC PRC-023 R2. Three issues were addressed. The requirement R2 is being retired. The compliance systems operations and the system disturbance regulated by R2 did not have a significant impact. After the first quarter, work will not need to be attached. It will go through the standards committee in two weeks and is expected to be posted in October 2022. Comments and feedback will be accepted through November. It is scheduled to be approved in April 2023.

The presentation is posted to the [WECC website](https://www.wecc.org/Administrative/NERC%20%20%20PRC-023-6.pdf).

## TPL-001-5.1, Footnote 13.d Presentation

Scott Hayes, Pacific Gas and Electric (PG&E), presented the TPL-001-5 Protection System Redundancy, Footnote 13d. The RWG discussed talking to the planners about what stability studies are being run annually and what percentage of the transmission system is being used.

The presentation is posted to the [WECC website](https://www.wecc.org/Administrative/RWG%20TPL-001%205.pdf).

## SCE MPLS Implementation

Jeremy Marotte, Southern California Edison (SCE), presented the Multiprotocol Label Switching (MPLS) implementation. It will take 10 years to move to the MPLS plan. Real paths were simulated for lab testing. The RWG discussed how to ensure that circuits will not be lost, and that the timing will run as expected.

Randy Spacek, Avista Corporation (AVA), presented the Wanapum Protection Circuit. It is difficult to use the MPLS network when there are a lot of networks being used. It might take entities longer to update their systems.

## Review Misoperations Section of State of Reliability

Mr. Hanson presented the misoperations section of the State of Reliability. The National Severity Index was finalized by NERC staff without reaching out to the industry. Because of this, it was decided not to include the index in this year’s report. The State of Reliability was published on the NERC website two months ago. The misoperations dropped within the last year. There will be a follow-up with NERC about severity factors and whether the State of Reliability is being used to improve the system. There will be a follow-up about the misoperations rate versus suggested Severity Index. The RWG would like to see the document when it is complete.

The presentation is posted to the [WECC calendar](https://www.wecc.org/Administrative/Severity%20Index.pdf).

## Closed Session

The RWG went into a closed session and reviewed 2022 Quarter Two Misoperations, then followed with a roundtable discussion.

## Public Comment

No comments were received.

## Review of New Action Items

* Share the misoperations report with the HPWG to help develop seminars.
  + Assigned To: James Hanson
  + Due Date: March 17, 2023
* Present what is needed in the misoperation event descriptions and the corrective action.
  + Assigned To: James Hanson
  + Due Date: December 8, 2022
* Develop a subgroup to review the misoperation unknowns and changes in categorizations from quarter to quarter before a final review.
  + Assigned To: Bill Middaugh and James Hanson
  + Due Date: December 8, 2022
* Follow up with (Rafael) NERC to see what is being done with the Severity Index data and how it is being used.
  + Assigned To: James Hanson
  + Due Date: December 8, 2022
* Follow up about the misoperations rate versus suggested Severity Index.
  + Assigned To: James Hanson
  + Due Date: March 17, 2023

## Upcoming Meetings

December 8–9, 2022 Salt Lake City, UT; Hybrid

## 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

James Hanson WECC

Gene Henneberg NV Energy

Curtis Sanden Southern California Edison Company

Donald Loftis Colorado Springs Utilities

Steven Merriman British Columbia Hydro and Power Authority

Bill Middaugh Tri-State Generation and Transmission—Reliability

Josh Moyers Western Area Power Administration

Rafael Pineda Pacific Gas and Electric Company

Nick Podany U.S. Bureau of Reclamation

Cleo Rojas Los Angeles Department of Water and Power

Tyler Smith Idaho Power Company

### Members not in Attendance

Dean Bender Bonneville Power Administration—Transmission

Xing Chen British Columbia Hydro and Power Authority

Bryan Diemer Sacramento Municipal Utility District

Mehrdad Majidi San Diego Gas and Electric

Mohamed Omer Public Service Company of Colorado (Xcel Energy)

Jeff Sams Salt River Project

Harjinder Sidhu AltaLink Management Ltd.

Stephen VanderZande Alberta Electric System Operator

**Others in Attendance**

Gianela Gozala Southern California Edison Company

Curtis Holland WECC

Nicole Lee WECC

Scott Hayes Pacific Gas and Electric

Curtic Holland WECC

Jeremy Marott Southern California Edison

Christopher Mclean California Energy Commission

Randy Spacek Avista Corporation

Thomas Teafatiller Reliability First