

1. Welcome, Call to Order

Dede Subakti, Reliability Risk Committee (RRC) Co-Chair, called the meeting to order at 9:02 a.m. MT on October 20, 2022. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

2. Review WECC Antitrust Policy

Vic Howell, Reliability Risk Director, read aloud the WECC Antitrust Policy statement. The meeting agenda included a link to the posted policy.

3. Approve Agenda

Mr. Subakti introduced the proposed meeting agenda.

On a motion by Meg Albright, the RRC approved the agenda.

4. Review and Approve Previous Meeting Minutes

Mr. Subakti introduced the minutes from the meeting on June 28, 2022.

On a motion by Gene Henneberg, the RRC approved the minutes from June 28, 2022.

5. Review Previous Action Items

Mr. Subakti reviewed action items carried over from the RRC meeting on June 28, 2022. Action items that are not closed and will be carried forward can be found [here](#).

6. RRC Co-chair Endorsement

Mr. Howell led the discussion on the RRC co-chair position. Jon Aust, RRC Co-Chair, will be stepping down in February 2023. Meg Albright, Bonneville Power Administration (BPA), offered to fill the position.

By consensus, the RRC endorsed Ms. Albright as the new RRC Co-Chair. It will be taken to the WECC Board for official approval.

7. 2022 RRC Goals Review

Mr. Howell presented the 2022 RRC goals. The RRC discussed the importance of having a representative from each organization participate in the committee. A suggestion was made for

the RRC to distribute the committee’s vision, strategy, and purpose to assist with understanding the importance of RRC and to increase the membership. The RRC leadership will work on creating an explanation and a communication plan. The RRC leadership encouraged organizations to provide specific examples on how the RRC can assist.

The presentation is posted to the [WECC website](#).

8. Cybersecurity Event Trends

John Graminski, Senior Cyber Security Specialist, and Lenin Maran, Cyber Security Work Group (CSWG) Chair, gave an update on cybersecurity challenges with the implementation of distributed energy resources (DER). A white paper is being drafted that will put cybersecurity into the DER. The goal across the Electric Reliability Organization (ERO) is to add physical and operational in the design phase. CSWG reviews cybersecurity reports to gain information about potential cybersecurity risks. Mr. Maran mentioned that there is a limit to what information can be requested versus what information is volunteered to share. He encouraged the RRC members to join the CSWG. The CSWG will look further into the cybersecurity reporting process to see whether there is a way to expand the information that is being reported.

The presentation is posted to the [WECC website](#).

9. Draft RRC Risk Management Process

The RRC Strike Team—Mr. Howell; Rich Hydzyk, Avista Corporation (AVA); Grace Anderson, California Energy Commission (CEC); and Tim Reynolds, Event Analysis Manager—presented the RRC Risk Management Process Draft. Risks will be listed as different levels throughout the process, and forms will be filled out to help determine the risk priority level. An evaluation on mitigating efforts will be added to Step 3.

The presentation is posted to the [WECC website](#).

Mr. Reynolds presented the risk process spreadsheet. Risks will be identified, ranked, and an impact level will be added along with the likelihood level. The RRC Steering Committee (RRCSC) will review and determine whether the action needs to be taken by the RRC. The RRC discussed adding exceptions to the risk assessment. If the risk is in the analysis phase beyond the normal time frame, then it will be reviewed and evaluated. Mr. Howell will send an email to the RRC requesting additional feedback.

The presentation is posted to the [WECC website](#).

10. Subgroup Updates and Approval Items

Alan Wahlstrom, Event and Performance Subcommittee (EPAS) Vice Chair, presented an update on the Subcommittee, along with the modified EPAS Charter. The charter follows the



new Joint Guidance Committee (JGC) template requirements, which requires one-third of the membership to make quorum. The membership list will be updated annually to assist with the quorum requirements.

On a motion by Ken Silverman, the RRC approved the EPAS Charter modifications.

The charter is posted to the [WECC website](#).

Mr. Wahlstrom presented several modified Relay Work Group (RWG) documents for approval:

- [WECC RAS Design Guide](#);
- [EHV Transmission Line Protection](#);
- [Model Power System Testing](#);
- [Installing and Maintaining Protective Relay Systems](#); and
- [Communications Systems Performance Guide for Electric Protection Systems](#).

The documents are posted to the WECC website.

By consensus, the RRC approved the following documents:

- **WECC RAS Design Guide**;
- **White Paper on EHV Transmission Line Protection**;
- **White Paper on Model Power System Testing**;
- **White Paper on Installing and Maintaining Protective Relay Systems**; and
- **Communications Systems Performance Guide for Electric Protection Systems**.

Mr. Wahlstrom and Mr. Hanson presented the Relaying Current Transformer Application, a white paper that the RWG would like to retire.

By consensus, the RRC approved to retire the white paper on Relaying Current Transformer Application.

The presentation is posted to the [WECC website](#).

Jon Fulkerson, Interchange Scheduling and Accounting Subcommittee (ISAS) Chair, gave an update on the subcommittee. Some in the ISAS membership are concerned about moving to a forum. The RRC discussed the importance of continued participation.

11. Committee Restructure

Shelli Nyland, Project Coordinator, presented the JGC committee restructure and process. Forum governance will need to be defined. Minutes will not be needed for forums, but notes can be taken. The JGC will consider the structure for approval in November. The RRC expressed concerns about the restructure not being an RRC approval item. Ms. Nyland shared that the committee questionnaire was used to request feedback. Feedback will be shared with the JGC before its approval.



The presentation is posted to the [WECC website](#).

12. RSTC Update

Stephen Crutchfield, Principal Technical Advisor for the Reliability and Security Technical Committee (RSTC), presented a committee update. The Board recently approved a revised charter and the RSTC recently appointed a chair and vice chair.

The presentation is posted to the [WECC website](#).

13. SAR Submittals

Steve Rueckert, Director of Standards, presented the Standard Authorization Request (SAR) submittals. The WECC Standards Committee guides and oversees the standards development process. To verify that SAR reports are fully filled out, the second section will only appear after the first section is filled out. The SAR form is located on the WECC website.

The presentation is posted to the [WECC website](#).

14. OC and MIC Transition to RRC

Steve Ashbaker, Reliability Initiative Director, presented an update on the Operating Committee (OC) and Market Interface Committee (MIC) transition to the RRC. A strike team was created to review items that will need to be evaluated by the RRC. The team identified 10 items that need to be reviewed to see whether the work will need to be carried forward.

Layne Brown, Reliability Risk Consultant, presented the market development process. The RRC discussed that it is difficult to determine reliability issues during the development process. A suggestion was made to ask the experts to discuss the issues that arise. The committee agreed that reliability issues is an important topic, and a focus structure needs to be developed.

The presentation is posted to the [WECC website](#).

15. Three-Year Work Plan Development

Mr. Subakti led the three-year work plan development discussion. The three top items for the work plan are to finish the risk management process, finalize the committee restructure, and review charters and scopes. Known risks will need to be assigned to working groups. The RRC discussed the importance of preventing reliability issues. The work plan is due in December 2022. The RRCSC will review the draft, and the RRC will hold an hour meeting on October 18 from 9:00 to 10:00 a.m. MT. to review the final draft. The RRC and Reliability Assessment Committee (RAC) will need to work together to develop the list of risks to focus on.



16. Public Comment

No comments were offered.

17. Review New Action Items

- Develop a communication plan for sharing the RRC's purpose with entities to help get more participation.
 - Assigned To: RRC Leadership
 - Due Date: June 1, 2023
- Create a process to review cybersecurity reports and what can be done to assist.
 - Assigned To: John Graminski and Lenin Maran
 - Due Date: February 23, 2023
- Email the RRC the link to the risk management process presentations and ask for feedback.
 - Assigned To: Vic Howell
 - Due Date: October 28, 2022
- Schedule an RRCSC meeting for November 1, 2022, at 4:00 p.m. MT and an RRC meeting for November 18, 2022, at 9:00 a.m. MT to work on the three-year work plan.
 - Assigned To: Vic Howell and Nicole Lee
 - Due Date: October 21, 2022
- Complete the three-year work plan. Email it to the RRC and present it during the February 2023 RRC meeting.
 - Assigned To: Vic Howell (EPAS) Greg Park, James Hanson, and Tim Reynolds
 - Due Date: February 28, 2023.

18. Upcoming Meetings

November 18, 2022Virtual

February 28–March 3, 2023Salt Lake City, UT; Hybrid

19. Adjourn

Mr. Subakti adjourned the meeting without objection at 4:49 p.m.



Exhibit A: Attendance List

Members in Attendance

Margaret Albright.....Bonneville Power Administration—Transmission
Rachel Allen Tacoma Power
Grace Anderson California Energy Commission
Hamid AtighechiPacifiCorp
Jonathan Aust.....Western Area Power Administration
Eric Baran..... Western Interstate Energy Board
Toxie Burriss..... Modesto Irrigation District
Kevin Cardoza Eugene Water & Electric Board
Stephanie Conn.....Salt River Project
Kevin Conway.....Pend Oreille County PUD #1
Alexis CortezTransmission Agency of Northern California
Cory Danson.....Western Area Power Administration
Lisa DeCarlo..... California Energy Commission
Gordon Dobson-Mack.....Powerex, Inc.
Kathee Downey.....PacifiCorp
John FulkersonPortland General Electric Company
Angela Hall.....Pend Oreille County PUD #1
Gene HennebergNV Energy
Mark Hesters California Energy Commission
Chris HofmannSalt River Project
Michael Houglum..... Tri-State Generation and Transmission—Reliability
Raj Hundal.....Powerex, Inc.
Richard Hydzik.....Avista Corporation
Tim Kedis..... Southern California Edison Company
Matthew Kura Arizona Public Service Company
Adam Labuga..... Turlock Irrigation District



Lenin Maran Sacramento Municipal Utility District
Chris Mclean California Energy Commission
Russell A. Noble Public Utility District No. 1 of Cowlitz County
LeRoy Patterson.....Public Utility District No. 2 of Grant County
Kenneth Silver.....Avantus
Danielle Smith..... Sacramento Municipal Utility District
Evan SorrellPuget Sound Energy, Inc.
Dede SubaktiCalifornia Independent System Operator
Chifong Thomas Thomas Grid Advisor
Jessica Zamonis.....Western Power Pool (formerly Northwest Power Pool Corporation)

Member Organizations not in Attendance

Alberta Electric System Operator; AltaLink Management Ltd.; Arizona Electric Power Cooperative, Inc. (Arizona G&T Cooperatives); British Columbia Hydro and Power Authority; British Columbia Ministry of Energy and Mines; British Columbia Utilities Commission; California Department of Water Resources; Cambridge Energy Solutions; Cascade Renewable Transmission, LLC; Cat Creek Energy, LLC; City of Pasadena; City of Riverside; Clearway Energy Operating, LLC (NRG); Colorado Springs Utilities; Copia Power DevCo, LLC; CP Energy Marketing (U.S.) Inc.; DataCapable Inc.; Delta-Montrose Electric Association; DesertLink, LLC; Electric Power Research Institute; Farmington Electric Utility System; FortisBC, Inc.; Grid Numerics; Grid Subject Matter Experts; Gridforce Energy Management, LLC; Guy Van Uytven; Guzman Power Markets, LLC; Hetch Hetchy Water and Power; Idaho Power Company; Imperial Irrigation District; Los Angeles Department of Water and Power; MATL Canada L.P.; MCE; NextEra Energy Resources, LLC; Open Access Technology International; Oregon Public Utility Commission; Pacific Gas and Electric Company; Pacific Northwest National Laboratory; PacifiCorp Merchant Function; Public Service Company of Colorado (Xcel Energy); Public Utility District No. 1 of Snohomish County; Quanta Technology, LLC; Regime LLC; Renewable Northwest; San Diego Gas and Electric; Seattle City Light; TransCo Energy, LLC; Tri-State Generation & Transmission–Power Management Division; Tucson Electric Power; Utah Division of Public Utilities; Utilicast LLC; Utility Services, Inc.; Wyoming Office of Consumer Advocate.

Others in Attendance

Steve AshbakerWECC
Layne BrownWECC
Lorissa Cardoza Bonneville Power Administration



Stephen Crutchfield..... NERC
John Graminski.....WECC
James Hanson.....WECC
Vic Howell.....WECC
Nicole Lee.....WECC
Nathan Powell..... Deseret Generation Transmission Cooperative
Tim Reynolds.....WECC
Katie Rogers.....WECC
Alan Wahlstrom.....Southwest Power Pool

