

1. Welcome, Call to Order

Robby Anderst, Underfrequency Load Shedding Work Group (UFLSWG) Chair, called the meeting to order at 2:02 p.m. MT on November 1, 2022. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

2. Review WECC Antitrust Policy

Kent Bolton, Senior Staff Engineer, read aloud the WECC Antitrust Policy statement. The meeting agenda included a link to the posted policy.

3. Approve Agenda

Mr. Anderst introduced the proposed meeting agenda.

By consensus, the UFLSWG approved the agenda.

4. Review and Approve Previous Meeting Minutes

Mr. Anderst introduced the minutes from the meeting on October 4, 2022.

By consensus, the UFLSWG approved the minutes from October 4, 2022.

5. Review Previous Action Items

Nicole Lee, Administrative Coordinator, reviewed action items carried over from the UFLSWG meeting on October 18, 2022. Action items that are not closed and will be carried forward can be found [here](#).

6. Assessment Report

Mr. Bolton presented the assessment report. There were three islands that had imbalance of 10%, 20% and 25%. There were issues with 25% imbalance cases for the WECC and North Island simulations. The North and South Islands were reviewed during the assessment, but other Islands can be included in future assessments. The WECC Island simulations that were ran on the 2020 heavy summer (HS) case were higher than the target. The 25% imbalance failed at 47 seconds. The 2024 light spring (LS) results did not show any issues. The v/Hz performance for PRC-006-5 25% simulations were ran to see if there were exceedances or v/Hz violations. Mr. Bolton will investigate reactive issues in the assessment report. The UFLSWG discussed

removing the 25% imbalance for the 2021 HS case and changing it to 20%. The Planning Coordinator's (PC) will need to evaluate what is on the list and notify if the information is correct or not. The V/Hz violations will be listed in the report. The UFLSWG will follow up with British Columbia (BC) Hydro about the process to include remedial action scheme (RAS) in future assessments. The UFLSWG agreed to add recommendations to the executive summary. The UFLSWG was encouraged to provide feedback on the purpose section of the assessment report.

On a motion made by, Christopher Lamb, the UFLSWG approved the 2022 Assessment Report.

Southwest Power Pool (SPP) abstained from the motion due to the issues with 25% imbalance cases for the WECC and North Island simulations.

7. Public Comment

No comments were offered.

8. Review New Action Items

- Follow up with BC Hydro about including RAS in future assessments.
 - Assigned To: UFLSWG
 - Due Date: November 30, 2022
- Look into reactive issues in the assessment report.
 - Assigned To: Kent Bolton
 - Due Date: November 30, 2022
- Rework tables 3-4 for future assessments.
 - Assigned To: Kent Bolton
 - Due Date: November 30, 2022

9. Upcoming Meetings

November 29, 2022Virtual

10. Adjourn

Mr. Anderst adjourned the meeting without objection at 3:34 p.m.



Exhibit A: Attendance List

Members in Attendance

Robby Anderst Puget Sound Energy, Inc.
 Daniel Cervantes..... Los Angeles Department of Water and Power
 Fangfang Du PacifiCorp
 Gary Farmer Western Area Power Administration
 Curt Feinberg Tri-State Generation and Transmission—Reliability
 Alex Ford NV Energy
 Mensur Haskovic..... Western Area Power Administration
 Tyler Pearce Arizona Electric Power Cooperative, Inc. (Arizona G&T Cooperatives)
 Patrick Perry Idaho Power Company
 David Quashie Public Utility District No. 1 of Snohomish County
 Karen Reedy Public Service Company of New Mexico
 Milton Savier Pacific Gas and Electric Company
 GuiHua Wang British Columbia Hydro and Power Authority
 Nathan Wilson PacifiCorp
 Han Yu British Columbia Hydro and Power Authority

Members not in Attendance

Scott Beyer Western Power Pool (formerly Northwest Power Pool Corporation)
 Desmond Chan Seattle City Light
 Dennis Chesnakov Public Utility District No. 2 of Grant County
 Christopher Fuchs California Independent System Operator
 Jennifer Galaway Portland General Electric Company
 Matthew Gomez Southern California Edison Company
 Richard Hydzik..... Avista Corporation
 Jay Largo Bonneville Power Administration
 Todd Lichtas..... Tucson Electric Power
 Ralph Liu Alberta Electric System Operator



Daniel McGuire.....Salt River Project
Nik MikelsonsPortland General Electric Company
Danny Miranda.....Arizona Public Service Company
Atique RahmanLos Angeles Department of Water and Power
Hari Singh.....Public Service Company of Colorado (Xcel Energy)
Prabal Singh.....Sacramento Municipal Utility District
Dwane SmallPublic Utility District No. 1 of Snohomish County
Dede SubaktiCalifornia Independent System Operator
Gary Trent.....Tucson Electric Power
Janice Zewe.....Sacramento Municipal Utility District
Songzhe Zhu.....GridBright, Inc.

Others in Attendance

Marcos Ayala.....Bonneville Power Administration
Nathan Bean.....Southwest Power Pool
Ian Beil.....Pacific Gas and Electric Company
Kent Bolton.....WECC
Kevin BrooksSouthern California Edison Company
Ken Che.....Public Utility District No. 1 of Snohomish County
Tuan DangPublic Utility District No. 1 of Snohomish County
Scott JordanSouthwest Power Pool
Anne KronshagePublic Utility District No. 1 of Chelan County
Christopher Lamb.....Public Utility District No. 1 of Chelan County
Nicole LeeWECC
Andrew McNaughton.....Public Service Company of New Mexico
Tyson Niemann.....WECC
Mark Pigman.....Tacoma Power
Andrew RendonSalt River Project
Jim Smith.....Bonneville Power Administration



UFLSWG Meeting Minutes—November 1, 2022

Spencer Tacke.....Auriga Corporation
Dang Tuan Public Utility District No. 1 of Snohomish County
Ohad WandBC Hyrdo

