

1. Welcome, Call to Order

Jamie Austin, Production Cost Data Subcommittee (PCDS) Chair, called the meeting to order at 10:09 a.m. MT on November 9, 2022. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

2. Review WECC Antitrust Policy

Tyler Butikofer, System Adequacy Engineer, read aloud the WECC Antitrust Policy statement. The meeting agenda included a link to the posted policy.

3. Approve Agenda

Ms. Austin introduced the proposed meeting agenda.

On a motion by Kevin Harris, the PCDS approved the agenda.

4. Review and Approve Previous Meeting Minutes

Nicole Lee, Administrative Coordinator, introduced the minutes from September 28, October 12, October 26, and November 2, 2022.

On a motion by Chelsea Loomis, the PCDS approved the minutes from September 28, October 12, October 26, and November 2, 2022.

5. Review Capacity Differences Between Resources in the 2032 ADS and the L&R

Steven Wallace, Comprehensive Power Solutions (CPS), presented the capacity differences between resources in the 2032 Anchor Data Set (ADS) and the Loads and Resources (L&R). He created a workbook that uses L&R data that references the power flow (PF) and the production cost model (PCM). Mr. Wallace encouraged the members to review the workbook and provide feedback.

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

Mr. Wallace also presented the cross-platform for generator reconciliation. The PCDS discussed addressing max capacities if the difference is greater than the lesser of 5% or 25 MW and ignoring the differences less than or equal to 1 MW. Retired dates need to be added to help with

counting generators. A discussion was held about keeping Colstrip Unit 4 turned on with the retirement of Unit 3 in the year 2025. Mr. Wallace mentioned that there are Pmax discrepancies with some generators. The PCDS discussed that there could be a discrepancy with how accounting of capacity is being done. There are multiple generators in the L&R represented by one unit in the PCM and PF, and vice versa. More generators and a bigger capacity are being seen in the reference PF. Pacific Northwest National Laboratory (PNNL) is assigning the load side. Generating mapping and counting should be avoided in the future by submitting accurate information. The PCDS would like this to be an approval item during the upcoming PCDS meeting.

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

6. Added Changes from Version 2.1 to Version 2.2

Mr. Butikofer gave an update on the differences between ADS version 2.1 to version 2.2. He indicated that there is not better data for storage duration of generic pump storage from California Independent System Operator (CAISO). What is in the model will be used for generic pump storage from CAISO. San Diego Gas and Electric's (SDGE) Big Rock Solar generators will be moved and included in the next release of the case.

Kevin Harris presented on modeling hybrid batteries and how to set up linear constants (two nomograms). A hybrid for battery storage will be available to use going forward.

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

Ms. Austin, presented on adding Boardman to Hemingway (B2H) transmission project data in the 2032 ADS. The PCDS discussed adding the data and that Bonneville Power Administration (BPA) has not wanted it added during past ADS cases. The PCDS did not dispute the modification, but it will need to be verified internally with WECC, and BPA will need to confirm they agree with the project being included in the ADS.

Note: In a follow-up email, dated 2022-11-9, Anders Johnson from BPA wrote, "I believe it is reasonable to include B2H in the 2032 ADS PCM case with an increase to the Idaho–Northwest path limit, given the permitting milestones that it has met, provided that IPC and PAC also agree with its inclusion." Tyler Butikofer was copied on the email. IPC and PAC do concur.

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

7. Phase Shifter Operation and Settings

Ms. Austin presented the phase shifter operation settings and committees to contact with questions. She expressed that nothing needs to be done with it in the ADS.

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



8. 2032 ADS V2.2 Release

Jon Jensen, System Adequacy Engineer, presented an update for the 2032 ADS v2.2 release. The changes include updates for SDGE Big Rock Solar location and the DC Intertie. The PCDS discussed Pmax discrepancies; there will be an offline meeting to decide how to proceed.

9. Public Comment

No comments were offered.

10. Review New Action Items

- Hold offline call to discuss the PCM vs. L&R capacity differences.
 - Assigned To: Tyler Butikofer, Jamie Austin, Steven Wallace, and Chelsea Loomis
 - Due Date: November 16, 2022
- Verify adding B2H to the 2032 v2.2 ADS with BPA.
 - Assigned To: Jamie Austin
 - Due Date: November 16, 2022
- Determine how to handle Colstrip 3 and 4.
 - Assigned To: Jamie Austin, Steven Wallace, Jon Jensen, and Chelsea Loomis.
 - Due Date: November 16, 2022

11. Upcoming Meetings

November 16, 2022Virtual

November 30, 2022Virtual

December 7, 2022Virtual

12. Adjourn

Ms. Austin adjourned the meeting without objection at 11:35 a.m.



Exhibit A: Attendance List

Members in Attendance

Jamie Austin.....PacifiCorp
 Michael Granados..... Los Angeles Department of Water and Power
 Kevin Harris Pacific Northwest National Laboratory
 Chelsea LoomisWestern Power Pool (formerly Northwest Power Pool Corporation)
 Steven Wallace Comprehensive Power Solutions, LLC
 Yi Zhang.....California Independent System Operator

Members not in Attendance

Lee Alter..... Tucson Electric Power
 Hazel Aragon California Energy Commission
 Jose Diaz..... Los Angeles Department of Water and Power
 Christopher Fecke-Stoudt..... Arizona Public Service Company
 Jonathon Flores Los Angeles Department of Water and Power
 Monica Garcia El Paso Electric Company
 Manuel Gomez..... El Paso Electric Company
 Chris Hagman American Transmission Company
 Bill Hosie..... PSI Power System Innovation Corp.
 Eliana IbarraImperial Irrigation District
 Tito Inga-Rojas British Columbia Hydro and Power Authority
 Anders Johnson.....Bonneville Power Administration—Transmission
 Harris LeeSalt River Project
 Amy Li..... Southern California Edison Company
 John Liang..... Public Utility District No. 1 of Snohomish County
 Peter Mackin..... GridBright, Inc.
 Akhil Mandadi..... Arizona Public Service Company
 John D. Martinsen..... Public Utility District No. 1 of Snohomish County
 Kimberly McClaffertyNorthWestern Energy



Hank McIntosh San Diego Gas and Electric
Effat Moussa..... San Diego Gas and Electric
Ahlmahz Negash Tacoma Power
Daniel Ramirez..... Energy Strategies
Matthew StajcarNorthWestern Energy
Sirisha TanneeruPublic Service Company of Colorado (Xcel Energy)
Chifong Thomas Thomas Grid Advisor
Emily TozierSalt River Project
Xiaobo WangCalifornia Independent System Operator
Stan WilliamsBonneville Power Administration—Transmission
Di Xiao..... Southern California Edison Company

Others in Attendance

Tyler ButikoferWECC
Arkadeep Das.....WECC
Jon Jensen.....WECC
Nicole LeeWECC
Katie RogersWECC
Byron WoertzWECC

