

1. Welcome, Call to Order

Steven Wallace, Production Cost Data Subcommittee (PCDS) Member, called the meeting to order at 9:02 a.m. MT on August 10, 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

Mr. Wallace introduced the proposed meeting agenda.

By consensus, the PCDS approved the agenda.

4. Review and Approve Previous Meeting Minutes

Mr. Wallace introduced the meeting minutes from June 28, 2022, July 5, 2022, and July 13, 2022.

On a motion by Chifong Thomas, the PCDS approved the minutes from June 28, 2022, July 5, 2022, and July 13, 2022.

5. Status of Addressing Discrepancies in Balance Authority Area (BAA) Level Generation by Technology, L&R Versus 2032 Anchor Data Set (ADS)

Jon Jensen, System Adequacy Engineer, presented the British Columbia (BC) and Bonneville Power Administration (BPA) hydro information and discrepancies. The PCDS discussed questions and concerns about the hydro data. The power flow had a higher capacity than the loads and resources (L&R).

The PCDS agreed that hydro data will be kept as is but should be looked at in the future. The subcommittee also agreed to create a parking lot of changes that should be made and updated periodically.

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

Mr. Wallace explained that thermal units could go either way, meaning L&R capacity could be higher than in the production cost model (PCM) or vice versa. Those generators are being addressed, but it is slow due to the number of thermal units.

There was a concern that if the capacities are lowered too much, there will be more unserved load in the case. The PCDS discussed concerns about being able to address unserved load. L&R is supposed to provide the peak and energy values, and the power flow is supposed to provide the topology. Capacity discrepancies need to be added to the parking lot issues.

Mr. Wallace presented an overview of the coal retirements for Montana. This has not been fixed between the L&R and PCM processes. A revision in the L&R process was to ask everyone to submit the data for shared projects, such as Colstrip Unit 3, which is shared between five entities.

The PCDS should determine how to handle shared plants and those owned by independent power producers. This should be added as a parking lot item. For Colstrip Units 3 & 4, one option is to provide a change file to turn one unit off and the other on. Another option is to change the retirement date.

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

6. Discuss Alberta, Oregon, and Washington Emission Issues

Mr. Wallace analyzed cutting Alberta's emission tariff in half, which showed changes to the flows on the transmission paths in and out of Alberta. The model is sensitive to this in the Canadian provinces. However, it still caused overflow from the United States, as the CO₂ cost in Alberta is very high, more than double the cost in California. This issue of importing external high-emission power to displace internal high-emission generation has been worked on in the California Independent System Operator (CAISO), where import tariffs are used to avoid preferential import of unwanted resources.

The PCDS discussed that there are challenges in getting GridView to simulate achievement of carbon free in certain states by 2032. For now, WECC staff will use the British Columbia CO₂ price for Alberta Electric System Operator (AESO).

7. Addressing Unserved BAA Loads: Public Service Company of Colorado (PSCO), Western Area Power Administration (WACM), and Comisión Federal de Electricidad (CFE)

Mr. Butikofer and Yi Zhang, CAISO, presented general information about the unserved loads. Loads were higher in 2021 than they have been in the past. There have been peak and energy increases from the 2030 case to the 2032 case. While this analysis is a good foundation, there could be further analysis for the source of the issue.



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

8. Addressing sustained Congestion on Transmission Paths and Branches

This topic was moved to a future meeting.

9. Develop and summarize an “Observation/Issues List” of pending issues with assignments and timeline

This topic was moved to a future meeting.

10. Packaging Results for Stakeholder Review

This topic was moved to a future meeting.

11. Consider approval of 2032 ADS PCM V1.0 without Beta

This topic was moved to a future meeting.

12. Public Comment

No comments were offered.

13. Review of Old and New Action Items

The PCDS did not review action items carried over from the meeting on August 3, 2022. Action items that are not closed and will be carried forward can be found [here](#).

14. Upcoming Meetings

August 17, 2022.....Virtual

August 24, 2022.....Virtual

Canceled - August 31, 2022Virtual

15. Adjourn

Mr. Wallace adjourned the meeting without objection at 11:04 a.m.



Exhibit A: Attendance List

Members in Attendance

Jamie Austin PacifiCorp
Anders Johnson.....Bonneville Power Administration—Transmission
Chelsea Loomis Western Power Pool (formerly Northwest Power Pool Corporation)
Hank McIntosh San Diego Gas and Electric
Chifong Thomas Thomas Grid Advisor
Steven Wallace Comprehensive Power Solutions, LLC
Stan WilliamsBonneville Power Administration—Transmission
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
Michael Granados..... Los Angeles Department of Water and Power
Chris Hagman American Transmission Company
Kevin Harris Pacific Northwest National Laboratory
Bill Hosie..... PSI Power System Innovation Corp.
Tito Inga-Rojas British Columbia Hydro and Power Authority
Harris Lee Salt 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
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)
Emily TozierSalt River Project
Xiaobo Wang.....California Independent System Operator
Di Xiao..... Southern California Edison Company

Others in Attendance

Tyler ButikoferWECC
Maddy Eberhard.....WECC
Stan Holland.....WECC
Ben Hutchins..... Power System Consultants
Jenson JonWECC
Bhavana Katyal.....WECC
BK Ketineni.....WECC
Luba Kravchuk.....California Independent System Operator
Saad MalikWECC
Katy RogersWECC
Byron WoertzWECC
Jin Zhu.....Hitachi Energy USA

