

1. Welcome, Call to Order

Jamie Austin, Production Cost Data Subcommittee (PCDS) Chair, called the meeting to order at 10:34 a.m. MT May 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 Planning 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 Chifong Thomas, the PCDS approved the agenda.

4. Review and Approve Previous Meeting Minutes

Approval of the minutes from the meeting on May 3, 2022, has been postponed until the next meeting.

5. Review Summary of “Resources” at the “Area” level, for all three sources: 2032HS, L&R, 2032 ADS Reference Case—comparing Capacity and Technology

Mr. Butikofer presented the review summary of resources at the area levels for the 2032 heavy summer (HS), loads and resources (L&R), and the 2032 Anchor Data Set (ADS) Reference Case. The PCDS needs to ensure that all the L&R residuals are reflected. The PCDS discussed that all PCDS members needs to review their respective areas to help resolve the issues. Concern was expressed about what the process will be if the differences cannot be found, and how long it might take.

The spreadsheet will be posted to the PCDS team site and emailed to the PCDS to allow members to add comments.

6. Validating NREL iteration #4 Wind and Solar data—Follow up on pending questions

Ms. Austin presented validation of National Renewable Energy Laboratory's (NREL) iteration #4 for wind and solar. NREL recently provided behind the meter (BTM) data and the PCDS had questions addressed in the presentation.

Anthony Lopez, NREL, presented the locations for 10-20% capacity factors, and the location with lower than 10% capacity factors.

Ms. Austin presented on behind-the-meter (BTM) photovoltaic (PV). NREL submitted the dGen data needed for the PCDS approval item last week. The PCDS discussed using the dGen data unless the U.S. Energy Information Administration (EIA) numbers do not match. The PCDS would like an EIA number demonstration if there are changes and to verify that the numbers are validated. The PCDS requested a spreadsheet that shows the comparison of the dGen values to the EIA numbers. The comparison will be presented after the data is available.

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

7. NREL Data—adding EIA numbers to Wind and Solar plant identifier

Ms. Austin gave an update on the NREL data and adding EIA numbers to the wind and solar plant identifiers. The data that NREL posted has a unique name for the generator showing the voltage, bus number, and the geo coordinates. The California Energy Commission (CEC) verified that they would use the data in their modeling and would like the EIA number. There is not stability in the bus number, or plant name which caused issues with mapping. The EIA number is necessary but will cause a problem in a year or two if the EIA is not fixed.

Mr. Butikofer presented the wind shapes versus low-capacity factor spreadsheet showing that the EIA numbers can be added to the dataset if the unique names are added.

The PCDS discussed that the EIA number needs to be added as soon as possible because it is covered under the Department of Energy (DOE) grant and an agreement with the CEC.

NREL verified that they will be able to create the new naming profile and upload it to one drive for WECC to upload to the WECC website.

8. Review of Old Action Items

Nicole Lee, Administrative Assistant reviewed action items carried over from the PCDS meeting on May 3, 2022. Action items that are not closed and will be carried forward can be found [here](#).



9. Public Comment

No comments were offered.

10. Review New Action Items

- Post the spreadsheet showing the differences in the 2032 ADS reference case to allow the PCDS to add comments and help resolve the issues within their area. Post to the PCDS team site and send an email to the PCDS with the link.
 - Assigned To: Tyler Butikofer, and Nicole Lee
 - Due Date: May 12, 2022
- Review and help with the differences in the 2032 HS, L&R, and 2032 ADS reference case.
 - Assigned To: PCDS
 - Due Date: May 17, 2022
- Let the PCDS know when the dGen and EIA comparison can be presented.
 - Assigned To: Tyler Butikofer
 - Due Date: May 17, 2022

11. Upcoming Meetings

May 10, 2022,Virtual
May 17, 2022,Virtual
May 24, 2022,Virtual

12. Adjourn

Ms. Austin adjourned the meeting without objection at 12:00 p.m.



Exhibit A: Attendance List

Members in Attendance

Jamie Austin PacifiCorp
 Michael Granados Los Angeles Department of Water and Power
 Kevin Harris Harris PCM
 Hank McIntosh San Diego Gas and Electric
 Effat Moussa San Diego Gas and Electric
 Chifong Thomas Thomas Grid Advisor
 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
 Ben Brownlee Energy Strategies
 Jose Diaz Los Angeles Department of Water and Power
 Christopher Fecke-Stoudt Arizona Public Service Company
 Monica Garcia El Paso Electric Company
 Manuel Gomez El Paso Electric Company
 Chris Hagman American Transmission Company
 Bill Hosie PSI Power System Innovation Corp.
 Tito Inga-Rojas British Columbia Hydro and Power Authority
 Anders Johnson Bonneville Power Administration—Transmission
 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
Ahlmahz Negash Tacoma Power
Daniel Ramirez.....Energy Strategies
Matthew StajcarNorthWestern Energy
Sirisha TanneeruPublic Service Company of Colorado (Xcel Energy)
Xiaobo WangCalifornia Independent System Operator
Stan WilliamsBonneville Power Administration—Transmission
Di Xiao..... Southern California Edison Company

Others in Attendance

Dave Angell.....Western Power Pool
Tyler ButikoferWECC
Candice Gimbel.....Salt River Project
Jon Jensen.....WECC
Richard Jensen..... California Energy Commission
Bhavana KatyalWECC
BK Ketineni.....WECC
Nicole LeeWECC
Anthony LopezNational Renewable Energy Laboratory
Justin Radl..... EDF Renewable Energy
Abe RiasWECC
Nader Samaan..... Pacific Northwest National Laboratory
Alyssa TavaresNational Renewable Energy Laboratory
Emily TozierSalt River Project
Byron WoertzWECC

