## Welcome, Call to Order

Jamie Austin, Production Cost Data Subcommittee (PCDS) Chair, called the meeting to order at 10:30 a.m. MT on June 14, 2022. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

## 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.

## Approve Agenda

Ms. Austin introduced the proposed meeting agenda.

**On a motion by Chifong Thomas, the PCDS approved the agenda.**

## Review and Approve Previous Meeting Minutes

Ms. Austin introduced the minutes from the meeting on June 7, 2022.

**On a motion by Chifong Thomas, the PCDS approved the minutes from June 7, 2022.**

## Status and inventory of data compiled in the 2032 ADS PCM

Mr. Butikofer gave an update on the status and inventory of the data compiled in the 2032 Anchor Data Set (ADS) production cost model (PCM). There are a few wind and solar shapes that did not align with the proper resources. The case is ready to run for the year and will be reviewed to see if there are any issues with hydro data.

## Addressing Hydro Data Issues Running 2032 ADS

Jin Zhu, Hitachi-ABB, gave an update on addressing hydro data issues while running the 2032 ADS. The system crashed during the simulation. Follow up review led to the need of having Pmin and Pmax within the specified limit to avoid system crashes. It was discovered that some plants capacity values were changed to zero, causing the simulation to crash. The initial run continued through the end of May, and will be left to run through the year. In addition, there is a run time issue that is being addressed. There needs to be enough resources for the case to run. The PCDS discussed the issues that were found.

## Status of capacity gap between L&R and PF

Mr. Butikofer gave an update on the status of capacity gaps between the loads and resources (L&R) and the power flow (PF). WECC staff is reviewing it to ensure that all the resources from the L&R are in the PCM and verifying that the remote generators that were causing issues are in the table. The PCDS discussed issues with the PF case having more capacity than the L&R. There were several batteries that were updated in the PCM to resolve issues. Concern was expressed about making sure that it is consistent with the 2022 submission. There will be an update after the work is complete.

## Fixing Identified Issues

Mr. Butikofer gave an update on the summary of the monthly dispatch, which is not complete. The month of June crashed and had a significant amount of unserved load. The overall energy between the 2030 case and the hourly load profiles in the 2032 case is being reviewed. The resources need to be realigned and the new typology uploaded. Concern was expressed about the hydro in British Columbia not being changed to match the load and it could be the cause of imbalance.

Ms. Austin presented the identified issues in the 2032 ADS and led the discussion on how to correct them. The PCDS discussed proposed curtailment and dispatch costs PCDS discussed that Bonneville Power Administration (BPA) hydro dispatch should use: Load-0% wind-100% solar; whereas other areas use: Load-100% wind-100% solar. The zero % for BPA wind is driven by wind approaching hydro for some of the time, requiring the reservation of head room.

WECC staff will follow up with non-Independent System Operators (ISO) Balance Authorities (BA) in California to see if hydro can be spilled and if it should be considered or curtailed before or after wind and solar. The full year dispatch will be reported during the next PCDS meeting.

The presentation is posted to the [WECC website](https://www.wecc.org/Administrative/2022-06-14_Status%20of%20Fixing%20Identified%20Issues.pdf).

## Public Comment

No comments were offered.

## Review New Action Items

* Ask BPA and PAC if hydro dispatch should accommodate wind in the ADS PCM.
  + Assigned To: Steven Wallace and Jamie Austin
  + Due Date: June 21, 2022
* Follow-up with non-ISO BAs in California to see if hydro can be spilled and if should it be considered before or after wind and solar.
  + Assigned To: Tyler Butikofer
  + Due Date: June 21, 2022
* See if the BA name and hydro should be curtailed and if it curtails before or after wind and solar.
  + Assigned To: Tyler Butikofer
  + Due Date: June 21, 2022

## Upcoming Meetings

June 21, 2022, Virtual

June 28, 2022, Virtual

July 12, 2022, Virtual

## Adjourn

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

## **Exhibit A: Attendance List**

### Members in Attendance

Jamie Austin PacifiCorp

Kevin Harris Pacific Northwest National Laboratory

Hank McIntosh San Diego Gas and Electric

Chifong Thomas Thomas Grid Advisor

Steven Wallace Comprehensive Power Solutions, LLC

Stan Williams Bonneville Power Administration—Transmission

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

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

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 McClafferty NorthWestern Energy

Effat Moussa San Diego Gas and Electric

Ahlmahz Negash Tacoma Power

Daniel Ramirez Energy Strategies

Matthew Stajcar NorthWestern Energy

Sirisha Tanneeru Public Service Company of Colorado (Xcel Energy)

Emily Tozier Salt River Project

Xiaobo Wang California Independent System Operator

Di Xiao Southern California Edison Company

**Others in Attendance**

Brittany Andrus WECC

Tyler Butikofer WECC

Jon Jensen WECC

Richard Jensen California Energy Commission

Bhavana Katyal WECC

BK Keteni WECC

Mark Kootstra California Energy Commission

Nicole Lee WECC

Chelsea Loomis Western Power Pool

Byrom Woertz WECC

Jin Zhu Hitachi-ABB