

**1. Welcome, Call to Order**

Jamie Austin, Production Cost Data Subcommittee (PCDS) Chair, called the meeting to order at 2:05 p.m. MT on July 5, 2022. A quorum was present to conduct business. A list of attendees is attached as Exhibit A.

**2. Review WECC Antitrust Policy**

Jon Jensen, 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 Chifong Thomas, the PCDS approved the agenda.**

**4. Review and Approve Previous Meeting Minutes**

The minutes will be approved during a future meeting.

**5. Status of data implementation in the 2032 ADS**

Mr. Jensen gave an update the data implementation in the 2032 Anchor Data Set (ADS) case and the data fixes that were identified during the June 28, 2022, PCDS meeting. The bus loads and the CO<sub>2</sub> costs were updated. The auto calculation was turned on. The case was run and failed on July 1, 2022. It likely failed because the case was being run in different version of GridView. The case is being rerun in the new version and was sent to Hitachi-ABB to help research the error.

The PCDS discussed posting the case to the team site. The PCDS discussed issues with shapes occurring in Canada along with British Columbia (BC) hydro generation with 5,000 MW of dumped energy. The issues might have been resolved and will be discussed further.

**6. Identifying Hydro Data Issues Running 2032 ADS**

Ms. Austin presented the ADS initial dispatch results, showing excessive power flow on path 3 from US to British Columbia (BC)) in the first half of the year, and reverses in the second half. The pattern is inconsistent with actual flows from the preceding three years.

Bhavana Katyal, System Adequacy Engineer, and Kevin Harris, Pacific Northwest National Laboratory (PNNL), presented an update on the BC hydro data. There was a spreadsheet created allowing to model load, hydro, and solar. The operating range is estimated by month and then the system needs to be balanced. The BC hydro has been fixed and needs to be rerun. The purpose is to balance the hydro to serve the load. The PCDS discussed that a branch being open can restrict the flow.

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

Ms. Austin presented the BC hydro compared to historical amounts. There is zero import from the United States the second half of the year in the 2032 ADS. The PCDS discussed that the problem occurs on July 1, 2022, the same day on which the model is failing. The same monthly profiles have been used for the last six years. The PCDS discussed looking into the data operating range.

Yi Zhang, California System Operator (CAISO), presented the data issues that were found in the ADS Production Cost Model (PCM). Mr. Zhang stated that Arizona did not report behind the meter (BTM). The PCDS discussed that the BTM photovoltaic (PV) needs to be updated since there are still old profiles being used. It was also mentioned that the fuel type needs to be modified for thermal generators. The PCDS discussed modifying the generator profiles and researching the missing generators. Another comparison needs to be done between the loads and resources (L&R) and the power flow along with the data from two years ago. WECC is going to review the changes made, the summary for the load shapes will be verified, and the current PCM will be compared to the L&R and will be presented at the next meeting.

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

## **7. Discuss Future Meeting Times**

The PCDS agreed to change the PCDS meeting time to 9:00-10:30 MT on Wednesdays.

## **8. Public Comment**

No comments were offered.

## **9. Review New Action Items**

- Post the 2032 ADS case to the PCDS Team Site.
  - Assigned To: Jon Jensen
  - Due Date: July 12, 2022
- Research the missing generator profiles.
  - Assigned To: Steven Wallace and Jon Jensen
  - Due Date: July 12, 2022



- Compare the PCM to the L&R during the 7/12/22 PCDS meeting.
  - Assigned To: Jon Jensen
  - Due Date: July 12, 2022
- Reach out to the L&R data submitters to see why the load forecast is different for 2030 versus the 2032.
  - Assigned To: Jon Jensen
  - Due Date: July 12, 2022
- Ask Amanda Sargent to present what was found and send her a link to Jamie's presentation from June 28, 2022.
  - Assigned To: Jon Jensen
  - Due Date: July 12, 2022
- Address items from the BC hydro and the data issues presented today. Report the findings during the next PCDS meeting.
  - Assigned To: WECC Staff
  - Due Date: July 12, 2022

## 10. Upcoming Meetings

July 12, 2022.....Virtual  
July 19, 2022.....Virtual  
July 26, 2022.....Virtual

## 11. Adjourn

Ms. Austin adjourned the meeting without objection at 3:43 p.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  
 John Liang..... Public Utility District No. 1 of Snohomish County  
 Chelsea Loomis .....Western Power Pool  
 Hank McIntosh ..... San Diego Gas and Electric  
 Effat Moussa..... San Diego Gas and Electric  
 Matthew Stajcar .....NorthWestern Energy  
 Chifong Thomas ..... Thomas Grid Advisor  
 Emily Tozier .....Salt River Project  
 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  
 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.  
 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  
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  
Ahlmahz Negash ..... Tacoma Power  
Daniel Ramirez..... Energy Strategies  
Sirisha Tanneeru .....Public Service Company of Colorado (Xcel Energy)  
Xiaobo Wang .....California Independent System Operator  
Di Xiao..... Southern California Edison Company

**Others in Attendance**

Stan Holland.....WECC  
Jon Jensen.....WECC  
Richard Jensen..... California Energy Commission  
Bahavana Katyal .....WECC  
BK Ketineni.....WECC  
Nicole Lee .....WECC  
Alyssa Tavares ..... California Energy Commission  
Louis Vigil..... El Paso Electric Company  
Nathalie Voisen..... Pacific Northwest National Laboratory  
Byron Woertz .....WECC  
Jin Zhu..... Hitachi-ABB

