

**1. Welcome, Call to Order**

Jamie Austin, Production Cost Data Subcommittee (PCDS) Chair, called the meeting to order at 9:05 a.m. MT on July 20, 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 Chifong Thomas, the PCDS approved the agenda.**

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

The minutes will be approved during a future meeting.

**5. High level summary**

Ms. Austin presented a high-level summary of the 2032 Anchor Data Set (ADS). There was an offline discussion about the hydro validation. Key issues were identified including missing plants and differences between the monthly to daily and weekly to daily. The Northwest historic uploads do not match the model. The PCDS discussed that British Columbia Hydro (BCHA) does not provide data anymore and that might be causing issues. There were unserved loads, area generation versus loads loss, paths and branches that are congested many hours of the year. The issues need to be corrected and validated.

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

**6. Review Latest Load Forecast, peak and energy**

Mr. Butikofer presented a review of the load forecast for peak and energy. There are discrepancies with load factors compared to historic for Idaho Power Company (IPCO), Los Angeles Department of Water and Power (LDWP). LDWP has not provided a reason for the shapes. To correct the load factors and to capture the shapes, the Southern California Edison

behind-the-meter (BTM) peak contribution data will be used for LDWP. The PCDS discussed the load discrepancies and the importance of correcting the issues identified.

**On a motion by Yi Zhang, the PCDS approved to use the 2032 hourly load profiles developed using the Loads and Resources (L&R) monthly peak and energy and historic 2018 shape with the exception that LDWP may be modified with recent findings.**

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

## **7. Comparison of BAA level Generators by technology, L&R versus 2032 ADS**

Mr. Butikofer presented the capacity differences between the L&R and the 2032 ADS. The L&R is lower than what is in the Production Cost Model (PCM). The overall capacity when comparing the L&R is higher. Hydro is showing discrepancies. The issues identified will need to be researched and will be discussed offline.

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

## **8. Addressing BC Hydro Data Issues**

Mr. Butikofer presented the British Columbia (BC) hydro data. The PCDS discussed the discrepancies. Concern was expressed about being consistent with the historic flows and the importance of capturing the power flow in and out of the West. The load forecast is higher than the previous load forecast and could be causing an issue. It was recommended to use the data submitted by BC seven years ago. The previous BC hydro data from the spreadsheet in the dataset will be added to see if it resolves discrepancies.

**On a motion by Kevin Harris, the PCDS approved modeling BC Hydro with 75% proportional load following (PLF) Allocation for major projects: Gordon Shrum, Mica, Revelstoke and 100% PLF Allocation for all other projects.**

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

## **9. Consider approval of the 2032 ADS PCM as version 1.0**

The approval of the 2032 ADS PCM version 1.0 will be postponed until a future meeting due to the minimum five-day posting requirement.

## **10. Public Comment**

No comments were offered.



**11. Review New Action Items**

- Present hydro validation and BPA weekly to daily operating.
  - Assigned To: Jon Jensen and Tyler Butikofer
  - Due Date: July 27, 2022
- Research possible bus overloads.
  - Assigned To: Chelsea Loomis and Tyler Butikofer
  - Due Date: July 27, 2022
- Post the BC hydro that hasn't matched in the last seven years.
  - Assigned To: Tyler Butikofer
  - Due Date: July 27, 2022
- Resolve capacity differences with an offline meeting.
  - Assigned To: Tyler Butikofer
  - Due Date: July 24, 2022
- Hold an offline meeting to discuss LDWP's load factors.
  - Assigned To: Yi Zhang and Tyler Butikofer
  - Due Date: July 27, 2022

**12. Upcoming Meetings**

July 27, 2022.....Virtual

August 3, 2022.....Virtual

August 10, 2022.....Virtual

**13. Adjourn**

Ms. Austin adjourned the meeting without objection at 10:48 a.m.



## Exhibit A: Attendance List

### Members in Attendance

Jamie Austin.....PacifiCorp  
Kevin Harris..... Pacific Northwest National Laboratory  
John Liang..... Public Utility District No. 1 of Snohomish County  
Chelsea Loomis.....Western Power Pool  
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  
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  
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  
Hank McIntosh ..... 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  
Stan Williams .....Bonneville Power Administration—Transmission  
Di Xiao..... Southern California Edison Company

**Others in Attendance**

Tyler Butikofer .....WECC  
Stan Holland.....WECC  
Richard Jensen..... California Energy Commission  
Bhavana Katyal .....WECC  
BK Ketineni.....WECC  
Lyubov Kravchuk..... California Energy Commission  
Aaron Ramsdell ..... Basin Electric Power Cooperative  
Louis Vigil..... El Paso Electric Company  
Byron Woertz .....WECC  
Jin Zhu..... Hitachi-ABB

