Exh. RJM-8 Docket UE-25\_\_\_\_ Witness: Ramon J. Mitchell

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant,	Docket UE-25
v.	
PACIFICORP dba PACIFIC POWER & LIGHT COMPANY	
Respondent.	

## PACIFICORP EXHIBIT OF RAMON J. MITCHELL DA/RT Volume Component Correction

1 AGNwResourceTableContracts (C).xlsx"; tab "tp x", rows 99-1054, column D. This 2 is the original data. 3 Please also refer to the confidential workpapers provided with this testimony, 4 specifically confidential file "230172-PAC-RJM-AGNwResourceTableContracts 5 (C).xlsx"; tab "tp x", rows 99-1058, Column D. This is the corrected data. 6 Q. What is the NPC impact of this correction? 7 A. The impact of this correction in isolation is an increase to Washington NPC of \$3.9 8 million. 9 2. DA/RT Volume Component – Correction 10 Q. Please briefly summarize this correction. 11 A. The Company corrected an error in the DA/RT adjustment by removing unsupported 12 artificial arbitrage revenue from the DA/RT volume component. The arbitrage 13 revenue present in the direct testimony was above the levels supported by the 14 historical data and showed a substantial and illogical decrease to power costs 15 resulting from *inefficiencies* in actual power trading, as compared to the actual 16 increase in power costs that result from inefficiencies in actual power trading. 17 Q. What is the DA/RT volume component? 18 A. In actual operations, the Company continually balances its market position—first 19 with monthly products, then with daily products, and finally with hourly products. 20 The products used to balance the Company's forward position in the wholesale 21 market are primarily available in flat 25 megawatt (MW), 16-hour or 8-hour blocks. 22 The Company's load and resource balance, however, varies continuously each hour in 23 quantities that may vary widely from those multi-hour, flat 25 MW block products.

Thus, in real world operations, the Company must continuously purchase or sell additional volumes to keep the system in balance.

In contrast, Aurora has no segregation of trading horizons, and has perfect foresight and perfect efficiency, and models wholesale market transactions at the hourly granularity at whatever volume is necessary (within fractions of a MW) to balance the system. Because of these unrealistic modeling efficiencies, Aurora balances the system with far fewer transactions (and far lower costs) than would be the case in actual operations.

The DA/RT volume component adds additional volumes and associated cost to the NPC forecast to reflect the *inefficiencies* and associated *costs* of that operational practice of transacting on a monthly basis using, as an example, standard 25-MW increment, 16-hour block products, rebalancing on a daily basis using standard 25-MW increment, eight-hour block products, and finally closing the remaining position on an hourly basis in real-time markets.

- Q. What was the NPC impact of the DA/RT volume component in direct testimony and how was it erroneous?
- 17 A. The NPC impact of the DA/RT volume component in direct testimony was a

  18 reduction (*revenue*) to NPC of \$102 million total-Company. However, the DA/RT

  19 volume component adjusts system balancing transaction volumes to reflect the

  20 *inefficiencies* and associated *costs* incurred in actual operations. A calculation that is

  21 designed to simulate *costs* associated with real-world trading *inefficiencies* but

  22 produces substantial (\$102 million) and unrealistic (artificial) arbitrage *revenue* is

  23 producing an erroneous result.

## Q. What is artificial arbitrage revenue?

A. Artificial arbitrage revenue is revenue from the DA/RT volume component that is in excess of any reasonable metric of real arbitrage revenue and not achievable in the test period. Real arbitrage revenue is synonymous with the historical gain present in the four-year historical market transaction data that is a part of the DA/RT volume component. This historical gain is the combination of actual arbitrage transactions that create revenue and the historical revenue calculated when the Company buys below the official price forward curve (OFPC) and sells above the OFPC. In the past four years, this real arbitrage revenue has been between \$6.2 million per year and \$9.3 million per year.

## Q. With this as context, please explain how the error in the DA/RT volume component was corrected.

A. Please refer to the confidential work papers supporting the direct testimony of Company witness Mitchell, specifically confidential file "230172-PAC-RJM-Aurora2024NPCMasterBaseWA1 (C).xlsm"; tab "STF DA-RT", rows 211-222, Columns C-P. This is the original data.

Please refer to the confidential work papers provided with this testimony, specifically confidential file "230172-PAC-RJM-NPC-Reb01TC (C).xlsm"; tab "STF DA-RT", rows 208-219, Columns C-P. This is the corrected data.

Whenever the monthly sales revenue from a volume adjustment at a trading hub shows arbitrage revenue by exceeding the monthly purchase cost for the same amount of volume in the same time period at the same trading hub, the formulaic pricing of the DA/RT volumes was corrected such that: (1) both the monthly sales revenue and the

1 monthly purchase cost offset for no net impact to the NPC forecast; and then (2) the 2 monthly sales revenue is adjusted upwards to re-introduce real arbitrage revenues from 3 the historical data into the NPC forecast. 4 0. What is the NPC impact of this correction? 5 The impact of this correction in isolation is an increase to Washington NPC of \$5.2 A. 6 million. 7 **B.** Routine Updates 8 Q. What routine updates have been incorporated into this illustrative NPC update? 9 A. The precedential updates last ordered by the Commission and implemented in the 2022 PCORC<sup>55</sup> have been incorporated into this illustrative NPC update. 10 11 First, forward prices for natural gas and electricity will be updated in Aurora itself. In addition, hedge positions for power and gas will be 12 13 updated based on the most recent month-end hedge positions available, 14 and any mark-to-market values will be updated to reflect the use of the same OFPC that was described in the first step. Any new power 15 16 purchase agreements and Qualifying Facility contracts will be included 17 in the model, and any required updates to contracts that were previously 18 included will be made. Finally, Energy Imbalance Market (EIM) 19 transfer and greenhouse gas (GHG) benefits will be reforecast, also 20 based on the same OFPC, in order to synchronize the model inputs for the most accurate output.<sup>56</sup> 21 22 Q. What other major changes were incorporated? 23 A. The other major changes that were incorporated include: 24 The OTR has been removed in its entirety due to a recent litigation outcome as explained in the testimony of Company witness Rao.<sup>57</sup> The impact of this change 25 26 in isolation, after updating the OTR modeling to account for the filed rule, is a 27 decrease to Washington NPC of \$2.2 million.

<sup>&</sup>lt;sup>55</sup> WUTC v. PacifiCorp d/b/a Pacific Power & Light Co., Docket No. UE-210402, Order 06 at ¶109 (Mar. 29, 2022).

<sup>&</sup>lt;sup>56</sup> *Id.*, Staples, Exh. DRS-6T, at 2:7-15 (Dec. 13, 2021).

<sup>&</sup>lt;sup>57</sup> Rao, Exh. EVRR-1T.