

**Exh. JDW-10
Dockets UE-230172 and UE-210852
Witness: John D. Wilson**

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**PACIFICORP d/b/a PACIFIC POWER
AND LIGHT COMPANY,**

Respondent.

**DOCKETS UE-230172 and
UE-210852 (Consolidated)**

In the Matter of

**ALLIANCE OF WESTERN ENERGY
CONSUMERS'**

**Petition for Order Approving Deferral of
Increased Fly Ash Revenues**

EXHIBIT TO TESTIMONY OF

JOHN D. WILSON

**ON BEHALF OF STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

PacifiCorp Response to UTC Staff Data Request No. 142

September 14, 2023

UE-230172 / PacifiCorp
August 28, 2023
WUTC Data Request 142

WUTC Data Request 142

Power Costs – Please provide an amended response to PacifiCorp’s response to WUTC DR 127. Please provide a written explanation for the EIM transfer benefit model provided as an R script. In your response:

- (a) Please define each variable to the extent it is not already defined in the response to WUTC DR 96(a);
- (b) Please explain whether the forecast variable MOL is used in the model since its coefficient does not appear to be determined using the historical data; and
- (c) Please clarify whether the gas price in the PACW export model should be Sumas (as referenced on line 90) or Stanfield (as referenced on line 105) and explain the reason for the choice.

Response to WUTC Data Request 142

(a) The below variables are used in the R script as inputs to the forecasting model:

- **Power_Price**: energy hub prices at Mona for the PacifiCorp East (PACE) balancing authority area (BAA) and Mid-Columbia (Mid-C) for the PacifiCorp West BAA (PACW).
- **Gas_Price**: natural gas prices at Opal (PACE export) and Stanfield (PACW export).
- **Bilateral_{EIM}**: dummy variable to represent the period when it was only PacifiCorp and the California Independent System Operator (CAISO) in the energy imbalance market (EIM), the period January 2015 through November 1, 2015.
- **Enbridge**: dummy variable to represent the period when gas supply was affected by the Enbridge pipeline explosion, the period October 1, 2018, through January 1, 2019.
- **TTC**: total transmission capacity available on energy transfer system resources (ETSR) to move spring oversupply from California into the PACW BAA or the PACE BAA.
- **Spring_Increasing**: total installed solar capacity in California.

(b) The forecast variable “MOL” is not currently used in the model for forecasting EIM benefits.

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- (c) The referenced comment on line 90 is a typo. The model is using the Stanfield gas price. This is consistent with line 104. PacifiCorp uses the Stanfield hub as the proxy for PACW gas price movement because: (1) it is used to deliver gas to PACW; (2) it is correlated with the Sumas hub; and (3) the Enbridge pipeline explosion sets a large part of historical Sumas gas price movement as outliers. PACW only uses Stanfield and Sumas to provide physical deliveries to PACW gas resources.

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