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,	DOCKETS UE-230172 and UE-210852 (Consolidated)
Complainant,	
v.	
PACIFICORP d/b/a PACIFIC POWER AND LIGHT COMPANY,	
Respondent.	

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.

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

(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.

PREPARER: Vijay Singh

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