

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON
UE 296**

In the Matter of)

PACIFICORP, dba PACIFIC POWER's)

2016 Transition Adjustment Mechanism)

**OPENING TESTIMONY
OF THE
CITIZENS' UTILITY BOARD OF OREGON**

June 29, 2015



2016 Transition Adjustment Mechanism

¹ UE 296/PAC/401/Ridenour.

1 CUB will also address PacifiCorp's inclusion of EIM benefits in the 2016 TAM. CUB
2 also believes that forecasting EIM benefits with such little data is problematic. CUB
3 provides its reasoning for these two concerns below.

4 **II. PacifiCorp's Modeling Changes**

5 The Company introduces a series of modeling changes to its TAM in this filing.
6 PacifiCorp's witness Brian Dickman states the following in his testimony:

7 The Company made various modifications to the GRID inputs to
8 improve the accuracy of forecast NPC, including changes to reflect:
9

- 10 • Previously unrecognized costs related to day-ahead and real-time
11 balancing transactions;
- 12 • Thermal plant forced outage events (heat rate and minimum capacity
13 derate);
- 14 • Natural gas unit start-up costs and energy;
- 15 • Hourly regulation reserve requirements;
- 16 • Compliance curtailment of certain Company-owned wind facilities for
17 avian protection; and
- 18 • Actual performance of wind PPAs.²

19 **A. The Role of the TAM and the Role of the PCAM.**

20 ***i. The TAM***

21 The TAM was put in place in 2005 (UE 170). It was designed to forecast power
22 costs on a weather normalized basis. It was not intended to reflect the actual prices
23 incurred under actual weather conditions. In fact, the TAM began in docket UE 170 as a
24 very discrete mechanism designed to facilitate direct access:

25 Q. Please summarize PacifiCorp's proposed Transition Adjustment
26 calculation.

27 A. At the highest level, PacifiCorp's proposed Transition Adjustment is
28 the difference between the weighted market value of the energy previously

² UE 296/PAC/100/Dickman/21.

1 used to serve Direct Access customers and the cost of service rate under
2 the customers' specific, energy-only tariff schedules.³

3 In UE 170, the Company was clear that it was using its power cost model, GRID,
4 to forecast net variable power costs on a weather normalized-basis:

5 Q. Please explain how the Company calculated net power costs.

6 A. Net power costs were calculated for a future test period based on
7 projected data using the GRID model. For each hour in the forecast period
8 the model simulates the operation of the power supply portion of the
9 Company under a variety of stream flow conditions. The results obtained
10 from the various stream flow conditions are averaged and the appropriate
11 cost data is applied to determine *an expected net power cost under normal*
12 *stream flow and weather conditions for the test period* [emphasis CUB's].⁴

13 While the TAM is concerned with net power costs under normal stream flow and
14 weather conditions, the PCAM is a mechanism that is concerned with actual power costs,
15 under actual stream flow and actual weather.

16 **ii. The PCAM**

17 PacifiCorp proposed a PCAM in UE 246. In that docket, it argued that actual
18 costs varied from the TAM forecast, but this variation had to do with the variability of the
19 actual system, particularly its wind resources, and not by the inability to accurately
20 forecast power costs:

21 Q. Does the Company believe that using a different dispatch model or
22 changing the model's input assumptions would allow it to more accurately
23 forecast
24 NPC?

25 A. No. The inputs the Company uses for the NPC study from its
26 Generation and Regulation Initiative Decision ("GRID") model are based
27 on the best information the Company has at the time it creates a forecast of
28 NPC. GRID reasonably simulates the operation of the Company's system
29 consistent with this information and the optimization logic that is built into
30 GRID. However, there is simply no way to perfectly forecast the changing

³ UE 170/PPL/700/Omohundro/3.

⁴ UE 170/PPL/600/Widmer/4.

1 variables and constraints that the Company experiences on a real-time
2 basis, especially after the introduction of large amounts of wind resources
3 into the Company's resource portfolio. This problem would exist
4 regardless of which dispatch model the Company used to forecast NPC.⁵

5 In arguing for the PCAM, the Company claimed that it was necessary because of the
6 wind investment the Company had made since passage of the RPS. In both the current
7 case⁶ and in UE 246,⁷ the Company used the under-recovery of net power costs in 2011
8 as evidence to support its need to change the regulatory system. In UE 246, the cause was
9 wind:

10 NPC are subject to a high degree of volatility largely outside of the
11 Company's control; this volatility is increasing due to the high volume of
12 wind generation on the Company's system.⁸

13 In the current docket, the Company cites a different reason for this 2011 variation:

14 A likely reason is that system planning models used to forecast NPC costs
15 do not reflect the extent and cost of realized volatility in prices and
16 demand, nor can they readily capture the way unexpected demands and
17 short-term price changes tend to be correlated, thereby leading to a net
18 adjustment (balancing) cost that is not reflected in the modeling results.
19 These limitations arise because no system planning model can include all
20 of the uncertain factors that affect actual market operations.⁹

21 In UE 246, wind-induced variation was outside of the Company's control and was
22 not related to the ability to accurately forecast NPC. Today, the same variation is due to
23 in the inability of the NPC modeling to accurately reflect the volatility of prices and
24 demands.

⁵ UE 246/PAC/900/Duvall/18.

⁶ UE 296/PAC/200/Graves/3.

⁷ UE 246/PAC/900/Duvall/16.

⁸ UE 246/PAC/900/Duvall/15.

⁹ UE 296/PAC/200/Graves/3.

1 **iii. Role of TAM and PCAM**

2 The TAM is a forecast of net power costs, and the PCAM is a true-up that
3 compares actual net power costs to the forecast. In UE 246, the PUC rejected the
4 Company's proposal for a PCAM with no deadband and sharing, finding that the
5 Company should absorb the normal variation of power costs.¹⁰

6 It seems to CUB that PacifiCorp may be unhappy with that decision, so it is
7 proposing here to adjust its weather normalized forecast to include the normal variation
8 of power costs, including weather-related variation. This will not improve the forecast,
9 but it will allow the Company to get recovery for the normal variation that the
10 Commission's PCAM order said should not be recovered from customers.

11 **B. Including the "Previously Unrecognized Costs" in the TAM**

12 The Company admits that it is asking for the current changes because it did not
13 get the dollar-for-dollar recovery that it requested in the PCAM. Specifically, PacifiCorp
14 states that it has consistently under-recovered power costs "because of the restrictions on
15 NPC recovery in the PCAM design."¹¹ The Company is thus introducing modeling
16 changes in order to avoid under-recovery of actual NPC in future years. In order to do
17 this, the Company adjusts its forward market prices "to reflect historical variations from
18 average actual market prices for purchases and sales."¹² CUB does not agree that this is
19 the proper solution for ameliorating what the Company claims is GRID's consistent and
20 systemic under-forecasting of NPC. CUB is concerned that incorporating "historical
21 variations" into a weather normalized power cost forecast will lead to a forecast that is
22 less accurate and could put ratepayers at risk of overpaying power costs. The TAM is not

¹⁰ OPUC Order No. 12-493, pages 13-15.

¹¹ UE 296/PAC/100/Dickman/22.

¹² UE 296/PAC/100/Dickman/23.

1 designed to forecast actual power costs—it is designed to dispatch PacifiCorp’s system in
2 a weather normalized manner to establish a forecast of power costs. Because it is
3 weather normalized, it is not expected to accurately account for actual costs.

4 The Company’s testimony makes clear that this modeling change is designed to
5 recover costs associated with abnormal weather:

6 For instance, it is extremely unusual for power systems models to include
7 possible transmission system disruptions, nonstandard generation outages,
8 or load variances *due to multi-day persistent abnormal weather*. In
9 principle, virtually any one of these kinds of risk factors could be
10 simulated in a Monte Carlo fashion, but doing so would require statistical
11 evidence on their distributions that would be very hard to obtain and
12 verify, and because there are so many such factors, it would be impossible
13 to span all possible combinations of all of them [emphasis CUB’s].¹³

14 The Company’s load and wind, *which are affected by weather*, are
15 correlated with market prices. For instance, *during the hottest week in*
16 *July for the Company’s load areas*, other market participants are also
17 likely to be experiencing hotter-than-average temperatures and higher-
18 than-average loads. As a result, the marginal cost of the resources other
19 market participants have available is higher than in the coolest week in
20 July, when the Company would likely have extra resources available to
21 sell. The day-ahead and real-time prices the Company experiences during
22 these periods reflect those differences [emphasis CUB’s].¹⁴

23 Changes in power costs caused by weather deviating from the norm are not legitimate
24 costs to add to a weather normalized power cost forecast. In CUB’s opinion, this
25 fundamentally changes the nature of the TAM, and CUB objects to this modification.
26 CUB also believes this change would conflict with the PCAM principle that normal risk
27 be retained by the Company. This kind of change in risk allocations could impact return
28 on equity (ROE), thereby shifting the context of the Company’s proposal into more of a
29 rate case issue.

¹³ UE 296/PAC/200/Graves/4.

¹⁴ UE 296/PAC/100/Dickman/27.

C. The Mechanics of PacifiCorp's Proposal Would Recover Costs that the Commission Said Were Subject to the PCAM Deadband.

The Company's proposal is to adjust the TAM forecast of prices and volumes of sales and purchases to reflect recent historic experience.¹⁵ But this means that weather-related power cost variances, part of the normal business risk that falls into the PCAM deadband, will be recovered from customers over time. PacifiCorp proposes adjusting monthly forecasted prices for historical deviation.¹⁶

If the Company's ongoing practice with this adjustment is to look back at a rolling average of 3 years of actual costs and adjust for those actual costs, then a weather related price and load event that falls into the deadband will be recovered over the next 3 years (1/3rd of it will be recovered each year for 3 years before it rolls off). This is inconsistent with the PCAM, which places these costs into the deadband.

In addition, if costs are significant enough to eclipse the deadband in the PCAM and are recovered through that mechanism, they would then be recovered a second time with this adjustment, leading to double recovery.

Finally, CUB notes that in its original PCAM request, the Company argued that these costs were associated with wind, and the Company still has a request for dollar-for-dollar recovery of wind-related costs.¹⁷ If PacifiCorp is granted that mechanism, this would also allow for double recovery.

The Commission should reject the Company's proposal to adjust the NPC forecast for previously unrecognized costs related to day-ahead and real-time balancing transactions.

¹⁵ UE 296/PAC/100/Dickman/28-29.

¹⁶ UE 296/PAC/100/Dickman/28-29.

¹⁷ See UM 1662.

III. EIM Benefits

In its testimony, PacifiCorp lists EIM costs as being \$5.1 million and EIM benefits as \$9.4 million.¹⁸ However, the Company is basing its numbers on only two months of data. CUB recognizes that the Company is still fleshing out the details of EIM's impacts on the system and appreciates that the Company has supplied data so far. However, CUB is not convinced that this is enough data on which to base current TAM projections.

CUB is concerned with forecasting benefits from EIM with such little data. There is little basis to believe that these two months represent a reasonable foundation to make a forecast. Power markets have seasonal differences. In summer months, when California's power market is under the stress of summer peak load, the value of EIM could increase.

While with time there will be more data and parties to future TAMs will have a basis for forecasting EIM benefits, such is not the case here. The dilemma is what to do in this docket where there is not enough data to make a reasonable forecast. CUB sees three primary options:

1. Accept the Company's forecast in this docket, recognizing that the difference between the forecast and the actual EIM results will flow into the PCAM, but are unlikely to be larger than the deadband that represents normal risk.
2. Adjust the Company's forecast upward to reflect that the benefits of EIM over a full year are likely to be greater than the Company's forecast, recognizing that

¹⁸ UE 296/PAC/100/Dickman/9.

1 the difference between the forecast and actual EIM results will flow into the
2 PCAM.

- 3 3. Accept the Company's forecast or another forecast and defer the difference
4 between that forecast and the actual results for future recovery/refund. This
5 would mean that these costs would be removed from the PCAM.

6 Although CUB would generally oppose the third option as there are too many
7 discrete items that have their own ratemaking treatment, this case is different because
8 there is so little basis for forecasting the cost. As such, CUB would support the third
9 option in the circumstances of this docket.

10 CUB anticipates, however, that other parties will likely propose alternative forecasts.
11 Because there is little evidence in the record to support a particular forecast, choosing one
12 will be somewhat arbitrary. Allowing the difference between the forecast and actual to
13 flow through the PCAM is problematic.

14 The PCAM was originally designed under the assumption that there would be a
15 basis for forecasting, and CUB does not feel that the data provided so far (which does not
16 even include benefits of the EIM in summer months) is robust enough to provide a
17 reasonable basis for future filings. The normal business risk associated with forecasting
18 costs and revenues, which rightly belongs in the PCAM deadband, assumes that there is a
19 basis for the forecast that can be verified by evidence. CUB suggests using the
20 Company's forecast, even though that forecast is unreliable, and requiring the Company
21 to defer the difference between this forecast and its actual benefits outside of the PCAM
22 for a single year. Next year, the Company will have approximately 14 months of data on
23 which to base its filing, which will provide a more robust—albeit very limited—data set

1 to make a reasonable forecast. In this case, without enough data to make a reasonable
2 forecast, creating a deferral is a fair option that balances the interests of customers and
3 shareholders.

4 It should be noted that the Company's forecasts will change with its participation
5 in EIM. The Company's reality is changing. How they operate will change. As energy
6 markets expand, the Company will adapt to the changes and this will be reflected in the
7 data as time progresses. CUB feels that waiting another year is a more prudent approach
8 to project the affects of EIM on NPC.

9 **IV. Conclusion**

10 CUB feels that it is inappropriate to incorporate historical variation data into the
11 structure of the TAM because the TAM is not supposed to be designed to recover
12 historical deviations from normal conditions. CUB recommends that the Commission
13 reject this adjustment. Furthermore, while CUB understands that there are many details
14 yet to be fleshed out with EIM, we believe that it is reasonable to wait one more year
15 before deciding that there is enough data to produce a reasonable forecast of EIM benefits
16 in its TAM filings. Two months of data does not suffice as a basis for future cost
17 recovery filings, and as such, CUB proposes that the Company's forecast be used as the
18 basis for setting NPC rates, but that the difference between this unreliable forecast and
19 the actual costs be deferred.

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EXPERIENCE: Provided testimony or comments in a variety of OPUC dockets, including UE 88, UE 92, UM 903, UM 918, UE 102, UP 168, UT 125, UT 141, UE 115, UE 116, UE 137, UE 139, UE 161, UE 165, UE 167, UE 170, UE 172, UE 173, UE 207, UE 208, UE 210, UE 233, UE 246, UE 283, UG 152, UM 995, UM 1050, UM 1071, UM 1147, UM 1121, UM 1206, UM 1209, UM 1355, UM 1635, UM 1633, UM 1654, and UM 1662. Participated in the development of a variety of Least Cost Plans and PUC Settlement Conferences. Provided testimony to Oregon Legislative Committees on consumer issues relating to energy and telecommunications. Lobbied the Oregon Congressional delegation on behalf of CUB and the National Association of State Utility Consumer Advocates.

Between 1982 and 1991, worked for the Oregon State Public Interest Research Group, the Massachusetts Public Interest Research Group, and the Fund for Public Interest Research on a variety of public policy issues.

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