

Application No. 24-08-____
Exhibit No. PAC/100
Witness: Eshwar Rao

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP 2025 ECAC

Direct Testimony of Eshwar Rao

Net Power Costs

[PUBLIC VERSION]

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ATTACHED EXHIBITS

Exhibit PAC [REDACTED] – Projected 2025 NPC

Exhibit PAC/102 – Prior ECAC’s Projected 2024 NPC

Confidential Exhibit PAC/103-C – Projected NPC Comparison to Prior

ECAC Exhibit PAC/104 – 2025 California-Allocated NPC

Confidential Exhibit PAC/105-C – Coal Cycling Scenarios

Confidential Exhibit PAC/106 -C – Coal Volumes

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name, business address, and present position with PacifiCorp**
3 **d/b/a Pacific Power (PacifiCorp or Company).**

4 A. My name is Eshwar Vyakarna Rajshekar Rao (Eshwar Rao) and my business address
5 is 825 NE Multnomah Street, Suite 600, Portland, Oregon 97232. I am currently
6 employed as a Net Power Cost Specialist at the Company.

7 **Q. Briefly describe your education and business experience.**

8 A. I received a Master of Electric Power System Engineering degree from North Carolina
9 State University and a Bachelor of Electrical Engineering degree from Bangalore
10 Institute of Technology, India. I was previously employed as an Energy Market Analyst
11 at Energy Exemplar. I have been employed by PacifiCorp since 2021. In my current
12 role, I am responsible for providing technical modeling expertise associated with the
13 Company's regulatory net power costs (NPC) filings.

14 **Q. Have you testified in previous regulatory proceedings?**

15 A. Yes. I have previously provided testimony to the California Public Utilities
16 Commission (Commission) and the Washington Utilities and Transportation
17 Commission.

18 **II. PURPOSE OF TESTIMONY**

19 **Q. What is the purpose of your testimony in this proceeding.**

20 A. I present an overview of the Company's proposed Energy Cost Adjustment Clause
21 (ECAC) for calendar year 2025 (2025 ECAC). Specifically, my testimony:

- 22
 - Presents an overview of the ECAC and the relevant time periods associated
23 with the ECAC's Offset and Balancing rates;

- 1 • Describes how the Company calculates 2025 Projected Net Power Costs
- 2 (NPC) using the Company’s production cost model, Aurora;
- 3 • Presents the 2025 Projected NPC, which are used to develop the 2025 Offset
- 4 Rate;
- 5 • Compares the 2025 Projected NPC to the 2024 Projected NPC from the 2024
- 6 ECAC;
- 7 • Provides supplemental analyses on three coal cycling scenarios and additional
- 8 fuel source and generation information; and
- 9 • Discusses benefits from the Company’s participation in the energy imbalance
- 10 market (EIM) with the California Independent System Operator (CAISO) and
- 11 that are passed through to customers in each ECAC.

12 **III. OVERVIEW OF PACIFICORP’S ECAC**

13 **Q. What is the purpose of the Company’s ECAC?**

14 A. Generally, PacifiCorp’s ECAC tariff provides dollar-for-dollar recovery of NPC and
15 fuel stock carrying charges, and is trued-up monthly for actual NPC compared to
16 forecasted NPC that are reflected in current ECAC rates. The ECAC provides
17 PacifiCorp the opportunity to recover NPC in a timely and efficient manner, which
18 allows PacifiCorp to continue to provide adequate, safe, and reliable service to its
19 California customers.

20 **Q. What are the main components of the ECAC?**

21 A. PacifiCorp’s ECAC includes two primary billing determinants, the ECAC Offset Rate
22 and the ECAC Balancing Rate, based on three time periods: the Offset Period, the
23 Balancing Period, and the Intermediate Period. I discuss each billing determinant and

1 time period below.

2 **A. ECAC Offset Rate**

3 **Q. What is the purpose of the ECAC Offset Rate?**

4 A. The Offset Rate accounts for forecasted NPC and fuel stock carrying charges that are
5 anticipated for the upcoming ECAC period. The Offset Rate is an unbundled rate that
6 is established either during the most recent California general rate case, or between
7 general rate cases if the new Offset Rate changes by more than 5 percent from current
8 rates. The Offset Rate is equal to the Offset Period's California-allocated Projected
9 NPC plus Other Costs for Recovery, all divided by California projected sales and
10 adjusted for the ECAC billing factor (which is the adjustment rate for franchise fees
11 and uncollectible accounts expenses from the most recent general rate case).

12 **Q. What is Projected NPC?**

13 A. Projected NPC is the total-company sum of forecasted NPC components that are
14 calculated by the Company's power cost model. The Projected NPC spans the
15 entirety of the Intermediate and Offset Periods.

16 **Q. Can you describe what costs are included in Other Costs for Recovery?**

17 A. Other Costs for Recovery are costs other than NPC that the Commission has
18 permitted the Company to recover through the ECAC. These include, on a California
19 allocated basis as necessary: payments (or bill credits) for net surplus compensation
20 expenses; renewable energy production tax credits; California Air Resources Board
21 (CARB) implementation fees; fuel stock carrying charges; purchases of renewable
22 energy certificates for renewables portfolio standard compliance; start-up fuel costs;

1 mandatory reporting and verification costs associated with the annual greenhouse gas
2 emissions report(s) submitted to CARB.

3 **B. ECAC Balancing Rate**

4 **Q. What is the purpose of the ECAC Balancing Rate?**

5 A. The ECAC Balancing Rate either returns to, or recovers from, customers the
6 difference between the actual NPC and the forecasted NPC reflected in PacifiCorp's
7 ECAC balancing account from the previous tracking period. Specifically, the
8 Balancing Rate is the Balancing Period's California-allocated share of the difference
9 between prior ECACs' Projected NPC and Adjusted Actual/Projected NPC, plus
10 Other Costs for Recovery (all adjusted by California actual sales) and divided by
11 California projected sales and adjusted for the ECAC billing factor.

12 **Q. What is Adjusted Actual NPC?**

13 A. NPC are defined as the sum of the Company's fuel expenses, wholesale purchase
14 power expenses, allowances, and wheeling expenses, less wholesale sales revenue.
15 Adjusted Actual NPC are the sum of total-company amounts recorded in Federal
16 Energy Regulatory Commission Accounts 501, 503 and 547 (Steam Production Fuel
17 Expense) for the Company's coal, geothermal, and natural gas resources; 555
18 (Purchased Power); and 565 (Wheeling); less Account 447 (Sales for Resale).
19 Additionally, in the ECAC, the Company proposes to expand the ECAC to include
20 the recovery of future costs from FERC Account 509 (Allowances), as further
21 explained in the testimony of Company witness Jack Painter. These Adjusted Actual
22 NPC amounts are adjusted to: (1) align booked NPC in those accounts with NPC used
23 in the rate setting process, ensuring only comparable costs are used in the deferral

1 calculation; and (2) remove prior-period accounting entries, if any, recorded during
2 the deferral period that are not applicable to the current period.

3 **Q. What is Adjusted Actual/Projected NPC?**

4 A. Adjusted Actual/Projected NPC is the combination of Adjusted Actual NPC for the
5 portion of the Balancing Period for which Adjusted Actual NPC has been recorded
6 and the Projected NPC for the remainder of the Balancing Period (this remainder is
7 the Intermediate Period).

8 **C. ECAC Time Periods**

9 **Q. What are the relevant time periods for PacifiCorp's ECAC?**

10 A. PacifiCorp's ECAC includes three relevant time periods: the Offset Period, the
11 Balancing Period, and the Intermediate Period. Each time period establishes the
12 relevant period to determine the Company's Offset or Balancing Rates.

13 **Q. In this filing, what time period does the Offset Period represent?**

14 A. The Offset Period includes the 12-month period beginning January 1, 2025, and
15 extending through December 31, 2025 (i.e., calendar year 2025). The Offset Period is
16 the rate effective period.

17 **Q. In this filing, what time period does the Balancing Period represent?**

18 A. The Balancing Period includes the 24-month period beginning January 1, 2023, and
19 extending through December 31, 2024 (i.e., calendar years 2023 and 2024).

20 **Q. In this filing, what time period does the Intermediate Period represent?**

21 A. The Intermediate Period includes the portion of the Balancing Period from June 1,
22 2024, through December 31, 2024.

23 **Q. What time periods are relevant to the ECAC Balancing Rate?**

1 A. The ECAC Balancing Rate is based on both the Balancing and Intermediate Periods,
2 which include January 1, 2023, to December 31, 2024.

3 **Q. Which NPC are compared in the January 1, 2023, to May 31, 2024 Balancing**
4 **Period for the ECAC Balancing Rate?**

5 A. The January 1, 2023 to May 31, 2024 Balancing Period includes (1) the 2023
6 Projected NPC from the 2023 ECAC which is compared to the 2023 Adjusted Actual
7 NPC, and (2) the 2024 Projected NPC from the 2024 ECAC which is compared to the
8 2024 Adjusted Actual NPC.

9 **Q. Which NPCs are compared in the Intermediate Period for the ECAC Balancing**
10 **Rate (June 1, 2024, to December 31, 2024)?**

11 A. The Intermediate Period, includes the 2024 Projected NPC from the 2024 ECAC
12 compared to the 2024 Projected NPC from this 2025 ECAC filing, for the time period
13 June 1, 2024 to December 31, 2024.

14 **Q. What are the benefits of a Balancing Rate that includes both the Balancing and**
15 **Intermediate Periods?**

16 A. As opposed to other states that have separate filings for offset and balancing rates
17 where each filing examines either the Offset Period or the first year of the Balancing
18 Period, California's approach that requires rebalancing and truing up rates within the
19 second year of the Balancing Period provides rate stability and avoids rate shock. For
20 example, if there are significant changes in market prices that impact NPC during the
21 second year of the Balancing period, PacifiCorp's combined re-balance and true-up of
22 rates provides for incremental rate recovery that smooths out the effects from this
23 market volatility. This avoids deferring intra-period rate changes to subsequent years,

1 and potentially avoids accumulation of the deferred balance.

2 **Q. Please briefly describe how these time periods change with each ECAC cycle.**

3 A. Each year, the three periods advance one period. This means that the Company’s: (1)
4 current application includes a new Offset Period that was not included in the previous
5 application; (2) the previous Offset Period becomes the second half of the Balancing
6 Period; and (3) the first half (last calendar year) of the previous Balancing Period is
7 no longer relevant to NPC in the current application. Please refer to Table 1 below for
8 a representation of how these time periods change with each ECAC cycle in relation
9 to each ECAC billing determinant.

Table 1 – Comparison of ECAC Billing Determinants and Time Periods

ECAC Rate:	Balancing Rate			Offset Rate
Time Period:	Calendar Year 2023	01/2024 – 05/2024	06/2024 – 12/2024	Calendar Year 2025
ECAC Period:	Balancing Period	Balancing Period	Balancing Period Intermediate Period	Offset Period
Prior ECAC Applications:	2023 Hybrid ¹ NPC (2023 ECAC)	2024 (Jan - May) Projected NPC (2024 ECAC)	2024 (Jun - Dec) Projected NPC (2024 ECAC)	N/A
Current ECAC Application:	2023 Adjusted Actual NPC	2024 (Jan - May) Adjusted Actual NPC	2024 (Jun - Dec) Projected NPC	2025 Projected NPC

¹The “2023 Hybrid NPC (2023 ECAC)” is the combination of the prior ECAC’s 2023 (Jan - May) Adjusted Actual NPC and the prior ECAC’s 2023 (Jun - Dec) Projected NPC.

10 **IV. OVERVIEW OF PROPOSED RATES**

11 **Q. Please provide an overview of the ECAC filing.**

12 A. In this 2025 ECAC filing, the Company is requesting to recover approximately
13 \$5.9 million through the Balancing Rate to true-up collection of actual NPC during
14 2023 and 2024. The change in the Balancing Rate results in a \$16 million decrease on
15 a California-allocated basis compared to rates that are expected to go into effect once

1 the 2024 ECAC settlement is accepted by the Commission.¹

2 As shown in further detail in the testimony of Company Witness Painter, the
3 Company also proposes to adjust the Offset Rate to \$45.76 per megawatt-hour
4 (MWh), which is an increase of 1.8 percent from the \$44.03 per MWh that will be the
5 effective Offset Rate, pending approval of the 2024 ECAC settlement by the
6 Commission. Since the expected Offset Rate increase is below the Commission
7 mandated five percent threshold, the Offset rates would remain the same from the last
8 ECAC proceeding.

9 Calculations of the Balancing Rate and Offset Rate are provided in the
10 testimony of Company Witness Painter (Exhibit PAC/200-C). If approved, the
11 proposed rates would take effect March 1, 2025. Company Witness Judith M.
12 Ridenour provides testimony describing the impact on customer rates (Exhibit
13 PAC/700).

14 V. 2025 PROJECTED NET POWER COSTS

15 **Q. How does the Company calculate its Projected NPC?**

16 A. Projected NPC are calculated for the Intermediate Period and the Offset Period based
17 on forecasted data using the Aurora model, which is a production cost model that
18 simulates the operation of the Company's power system on an hourly basis.

19 **Q. Is the Company's general approach to the calculation of NPC using the Aurora**
20 **model the same in this case as in the previous ECAC filing?**

21 A. Yes. The Company used the Aurora model in its prior ECAC filing.

¹ On June 28, 2024, PacifiCorp, Cal Advocates and the California Farm Bureau Federation filed a Joint Motion for Approval of Written Settlement in A.23-09-008. This Joint Motion was unopposed and PacifiCorp expects the rates proposed in that Settlement to go into effect following a Commission decision in the fall of 2024.

1 **Q. What Aurora inputs were updated for this filing?**

2 A. Aurora model inputs were updated to include:

- 3 • Updates to the Company's forward price curves for electricity and natural gas
4 prices with a vintage of June 28, 2024;
- 5 • New wholesale electricity sales and purchase transactions (including physical
6 and financial);
- 7 • New natural gas sales and purchase transactions (including physical and
8 financial);
- 9 • New wheeling contracts and updates to transmission paths and capacities,
10 including on Company-owned transmission;
- 11 • Updates to existing contracts for wholesale sales and purchases of electricity
12 and natural gas and for wheeling;
- 13 • New and updated coal supply and transportation contracts and costs;
- 14 • Updates to the capabilities of the Company's owned generation resources; and
- 15 • Updates to forecast load and reserve obligations.

16 **Q. What reports does the Aurora model produce?**

17 A. The major output from the Aurora model is the NPC report. The 2025 NPC report is
18 attached as Exhibit PAC/101.

19 **Q. Does the Aurora model appropriately reflect the Company's Projected NPC?**

20 A. Yes. The Aurora model reasonably simulates the operation of the Company's system
21 load and resource portfolio, consistent with the Company's system operation
22 constraints and requirements. Any variances from Projected NPC are handled through
23 the ECAC balancing account, where Projected NPC are trued up to Adjusted Actual

1 NPC on a monthly basis.

2 **Q. What is the Projected NPC for 2025?**

3 A. The Company's Projected NPC for calendar year 2025 is \$2.658 billion on a total-
4 company basis, \$38.2 million on a California-allocated basis. The Company's 2025
5 NPC study is provided as Exhibit PAC/101 and the California-allocated NPC is
6 provided as Exhibit PAC/104.

7 **VI. ECAC PROJECTED NPC COMPARISON**

8 **Q. Please summarize the major changes in Projected NPC between the 2024 ECAC**
9 **projection of calendar year 2024, and this filing's projection of calendar year**
10 **2025.**

11 A. Confidential Table 2 below details the differences between the calendar year 2024
12 Projected NPC from the prior filing, and the calendar year 2025 Projected NPC from
13 this filing in dollars, whereas Confidential Table 3 details the differences in MWh.

14 **[Begin Confidential]**



[End Confidential]

1 Compared to the total-company Projected NPC in the 2024 ECAC, total-
2 company Projected NPC in this 2025 ECAC are higher by 5.23 percent. There is a
3 decrease in forecasted wholesale sales revenue of **[Begin Confidential]** **[REDACTED]**
4 **[REDACTED]** **[End Confidential]** (which increases NPC), further aided by the increase in
5 purchased power expense of approximately **[Begin Confidential]** **[REDACTED]** **[End**
6 **Confidential]**. Coal fuel expense has increased by **[Begin Confidential]** **[REDACTED]**
7 **[REDACTED]** **[End Confidential]** and natural gas fuel expense has decreased by **[Begin**
8 **Confidential]** **[REDACTED]** **End Confidential]**. Finally, wheeling and other
9 expenses have increased by **[Begin Confidential]** **[REDACTED]** **[End Confidential]**.
10 The primary drivers of the NPC increase are increased coal fuel prices (\$/ton),
11 increased natural gas fuel prices (\$/MMBtu), and the increasing lack of liquidity in the
12 wholesale bilateral markets compounded by decreased electricity market prices which
13 result in reduced wholesale sales revenues which increase NPC. The increase is
14 slightly offset by relatively more economical purchased power, which replaces some
15 of the natural gas generation.

16 These comparisons on a line-by-line basis at the monthly granularity are
17 attached as Exhibit PAC/103-C and the prior ECAC's 2024 forecast is attached as
18 Exhibit PAC/102.

19 **VII. SUPPLEMENTAL ANALYSES AND INFORMATION**

- 20 **Q. Has the Commission ordered the Company to provide supplemental information**
21 **for future ECAC applications?**
- 22 **A.** Yes. In several recent Commission Decisions the Company was ordered to: (1)

1 provide additional information to increase transparency around the Company’s NPC
2 modeling²; (2) provide and explain different coal cycling scenarios when estimating
3 NPC, and consult with stakeholders to receive input on these studies prior to filing
4 with the Commission³; and (3) provide additional fuel source and coal generation
5 data.⁴ This section discusses these additional analyses and provides the supplemental
6 information.

7 In the Settlement submitted for approval with the Joint Motion for Approval
8 of Written Settlement, filed June 28, 2024 in the 2024 ECAC, the settling parties
9 agreed to request the removal of the requirement to submit an analysis of coal cycling
10 scenarios in future ECAC applications. The active parties in the last two ECAC
11 applications did not offer any input on cycling studies and support the elimination of
12 the requirement in the proposed Settlement. As that settlement has not yet been
13 approved by the Commission at the time of this filing, the Company has conducted an
14 analysis of coal plant cycling for the current proceeding.

15 **Q. Regarding the first requirement, please describe the information the**
16 **Commission required to increase transparency around the Company’s NPC**
17 **modeling?**

² D.20-12-004 required PacifiCorp to provide additional information about the minimum take provisions for each coal plant that were used to make adjustments in NPC calculations; D.21-11-001 required PacifiCorp to provide a model run for coal plant generation without “must run constraints.” D.22-11-008 required PacifiCorp to provide in each future ECAC application information about the minimum take provisions for each coal plant used in NPC modeling, as well as providing forecast generation for the plants; and the minimum take provisions and recorded generation for such plants over the previous three ECAC cycles.

³ D.22-11-008, Ordering Paragraphs 4–6, required PacifiCorp to provide a study in future ECAC proceedings of economic cycling of coal plants, and to obtain input on such studies from interested parties before preparing the studies.

⁴ D.22-11-008, Ordering Paragraphs 8–9, required PacifiCorp to provide in each future ECAC application information about the minimum take provisions for each coal plant used in NPC modeling, as well as the forecast generation for the plants; and the minimum take provisions and recorded generation for such plants over the previous three ECAC cycles.

1 A. Yes. The Commission directed the Company to produce the following information for
2 future ECAC applications: (a) information on the marginal fuel cost assumed for each
3 coal plant, the specific coal plants where adjustments were made to align forecasted
4 generation with minimum take provisions, and the magnitude of adjustments made;⁵
5 and (b) an Aurora model run that depicts the NPC when average fuel costs are
6 utilized to forecast unit dispatch.⁶

7 **Q. Have you provided the information requested by this first requirement?**

8 A. Yes. The Aurora model used by the Company in this Application provides greater
9 flexibility around the modeling of fuel consumption than the GRID model that the
10 Company formerly used. Aurora can model multiple tiered pricing contracts and
11 volumetric contract provisions, and has neither “dispatch tiers” nor “costing tiers”
12 that the GRID model utilized. Consequently, adjustments to marginal fuel cost
13 assumed for each coal plant were not made in the preparation for this ECAC.
14 Information on the marginal fuel cost assumed for each coal plant, as well as the
15 Company’s Aurora run that depicts NPC when average fuel costs are utilized to
16 forecast unit dispatch, are provided in supporting workpapers.⁷

17 **Q. Regarding the second requirement, please explain the coal cycling studies that**
18 **the Commission directed PacifiCorp to provide.**

19 A. For NPC purposes, the Commission directed the Company to provide studies that
20 analyze coal cycling: (1) for particular generating units; (2) during particular times of
21 the year; and (3) for all generating units during all times of the year.⁸

⁵ D.20-12-004, pp. 16-17.

⁶ *Ibid.*

⁷ “CA_ECAC_2025_Average Cost_NPC_Report CONF” Spreadsheet

⁸ D.22-11-008, Ordering Paragraph 4.

1 **Q. Did the Company consult with interested parties to receive input on any**
2 **additional supplemental coal cycling studies prior to filing?**

3 A. Yes. In July 2024, the Company contacted the active parties from the Company's last
4 two ECAC proceedings (including the Public Advocates Office and the California
5 Farm Bureau Federation), and both the parties indicated that they declined to provide
6 input on cycling studies and are supporting the elimination of this requirement in the
7 Settlement submitted to the Commission with the Joint Motion to Approve Written
8 Settlement addressing the remaining issues in the 2024 ECAC on June 28, 2024.

9 **Q. What does the cycling of coal resources refer to?**

10 A. The cycling of coal resources refers to providing the Company's production cost
11 modeling software (Aurora) with the flexibility to evaluate the economic startup or
12 shutdown of coal resources. When Aurora allows for cycling of coal-fired generation
13 resources, it will determine whether or not to startup or shutdown a resource based on
14 the economics of the plant compared to other alternatives. Specifically, Aurora will
15 analyze whether the costs of starting up a coal unit and generating power over the
16 unit's minimum up time is greater than the next best alternative (other sources of
17 generation or market transactions), while adhering to physical constraints for the
18 unit's operation such as ramp rate, minimum up time, and minimum down time.

19 **Q. Do you have definitions for minimum up and down times, and the ramp rate?**

20 A. Yes. Minimum up time is defined as the number of hours that a unit must remain online
21 after being turned on, and minimum down time is defined as the number of hours a unit
22 must stay offline after it has been shut down. Ramp rate is defined as the speed at which
23 a generator can increase generation within an hour.

1 **Q. Please explain the scenarios that were evaluated.**

2 A. Consistent with the directives of D.22-11-008, the Company evaluated the following
3 scenarios: (1) cycling of all coal units during particular times of the year; (2) cycling
4 of particular coal units during all times of the year; and (3) cycling of all coal units
5 during all times of the year.

6 **Q. Please provide a general overview of the results of each scenario.**

7 A. Similar to the results of the scenarios analyzed in the 2024 ECAC proceeding, the
8 Company's NPC would substantially increase if PacifiCorp pursued any of the three
9 coal cycling strategies.

10 For the first scenario, the Company analyzed economic cycling of three of the
11 Company's large coal units (Hunter 3, Huntington 1 and Huntington 2), for the entire
12 test period (2025). This resulted in a substantial increase in market purchases and, if
13 PacifiCorp pursued this strategy, would increase 2025 NPC by \$109.5 million.

14 In the second scenario, the Company analyzed economic cycling of all
15 Company-owned coal units between Spring (March-May) and Fall (October-
16 November) of the test period (2025). If PacifiCorp pursued this strategy, it would
17 result in more market purchases, increasing 2025 NPC by \$24.4 million.

18 In the third scenario, the Company analyzed economic cycling of all
19 Company-owned coal units for the entire test period (2025). If PacifiCorp pursued
20 this strategy, it would increase 2025 NPC by \$192 million.

21 Please see Confidential Exhibit PAC/105-C which elaborates on each
22 scenario, details the NPC impacts, provides an explanation of the results, and includes
23 an appendix that provides additional discussions on how economic cycling can

1 increase NPC in Aurora.




2 **Q. Regarding the third requirement, please explain the additional fuel source and**
3 **coal generation data that the Commission directed PacifiCorp to provide.**

4 A. In D.22-11-008 the Commission directed the Company to provide the following
5 information for each of the Company’s coal units: (1) “minimum take” or “fixed
6 production cost” volume used in the net power cost (NPC) model for the current
7 ECAC cycle year for each fuel source supplying the coal plant; (2) forecast
8 generation volume for coal plants for the current ECAC cycle year; (3) “minimum
9 take” or “fixed production cost” volume used in the net power cost (NPC) model for
10 the past three ECAC cycles for each fuel source supplying the coal plant; and (4)
11 actual generation volume for the coal plant for the three prior ECAC cycle years.⁹

12 This information is included in Confidential Exhibit PAC/106-C.

13 **VIII. ENERGY IMBALANCE MARKET (EIM)**

14 **Q. Are benefits from participating in the EIM with the California Independent**
15 **System Operator (CAISO) included in this ECAC?**

16 A. Yes. Participation in the EIM provides benefits to customers in the form of reduced
17 NPC. In this filing, the 2024 forecasted EIM benefits are **[Begin Confidential]** 
18  **[End Confidential]** and the 2025 forecasted EIM benefits are
19 **[Begin Confidential]**  **[Begin Confidential]**.

20 **Q. How does the Company calculate its actual EIM benefits?**

21 A. Using actual information from the EIM, including five- and 15-minute pricing, the
22 Company identifies the incremental resource that could have facilitated the transfer to

⁹ D.22-11-008, Ordering Paragraph 8.

1 an adjacent EIM area or the CAISO in each five-minute interval. The benefit is then
2 calculated as the difference between the revenue received less the expense of
3 generation assumed to supply the transfer. In the event of an import, the benefit is
4 equal to the cost of the import minus the avoided expense of the generation that
5 would have otherwise been dispatched.

6 **Q. Does this conclude your direct testimony?**

7 A. Yes.

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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP 2025 ECAC

Projected 2025 NPC

August 2024

Coal Fuel Burn Expense																										
Colstrip	\$	19,834,577	\$	1,850,914	\$	1,782,636	\$	1,877,604	\$	1,294,988	\$	534,394	\$	785,245	\$	2,131,220	\$	2,249,102	\$	1,747,317	\$	1,847,623	\$	1,780,368	\$	1,973,164
Craig	\$	20,395,099	\$	1,837,157	\$	1,644,633	\$	1,623,899	\$	1,399,904	\$	1,610,891	\$	1,787,299	\$	1,917,882	\$	1,950,832	\$	1,895,779	\$	1,801,763	\$	1,382,955	\$	1,639,105
Dave Johnston	\$	52,174,267	\$	4,863,803	\$	4,485,724	\$	3,953,077	\$	2,795,367	\$	4,653,729	\$	4,292,802	\$	4,848,057	\$	4,924,645	\$	5,245,080	\$	3,954,945	\$	3,987,320	\$	4,159,686
Hayden	\$	10,424,370	\$	912,420	\$	790,051	\$	845,314	\$	807,755	\$	824,885	\$	881,109	\$	970,364	\$	960,033	\$	849,972	\$	547,325	\$	777,033	\$	1,258,108
Hunter	\$	239,988,306	\$	20,171,538	\$	19,085,658	\$	17,328,276	\$	16,677,766	\$	21,721,895	\$	21,542,095	\$	22,886,919	\$	22,460,731	\$	21,408,837	\$	19,744,975	\$	18,623,855	\$	18,535,767
Huntington	\$	172,217,865	\$	12,660,861	\$	14,322,068	\$	16,553,426	\$	13,686,660	\$	13,151,042	\$	16,077,807	\$	16,430,083	\$	17,094,101	\$	16,511,840	\$	11,726,134	\$	13,294,949	\$	10,701,803
Jim Bridger	\$	106,238,535	\$	10,742,281	\$	10,041,723	\$	9,254,180	\$	3,803,263	\$	4,095,563	\$	8,165,622	\$	13,588,896	\$	13,488,195	\$	9,117,022	\$	8,067,815	\$	9,082,845	\$	6,811,131
Naughton	\$	43,411,730	\$	5,894,788	\$	5,480,428	\$	2,263,821	\$	1,044,213	\$	2,321,265	\$	2,683,651	\$	4,815,212	\$	4,543,630	\$	2,526,432	\$	2,179,567	\$	4,408,864	\$	5,347,677
Wendak	\$	21,672,896	\$	2,112,808	\$	2,043,319	\$	2,201,051	\$	1,903,109	\$	1,502,966	\$	1,604,187	\$	1,931,920	\$	1,478,863	\$	1,852,291	\$	1,302,607	\$	1,514,690	\$	2,064,129
Total Coal Fuel Burn Expense	\$	666,256,651	\$	61,146,669	\$	59,577,241	\$	55,901,149	\$	43,423,055	\$	50,476,660	\$	57,800,108	\$	69,120,553	\$	69,120,132	\$	61,166,561	\$	51,193,084	\$	54,852,870	\$	52,480,570
Gas Fuel Burn Expense																										
Chehalis	\$	115,944,167	\$	19,235,869	\$	14,838,357	\$	5,718,031	\$	5,798,373	\$	3,355,864	\$	2,896,513	\$	10,047,645	\$	10,061,139	\$	7,558,038	\$	9,240,070	\$	8,966,465	\$	16,427,803
Curran Creek	\$	54,772,537	\$	9,800,875	\$	7,185,461	\$	4,950,208	\$	2,998,892	\$	-	\$	2,554,011	\$	2,440,941	\$	3,019,093	\$	2,511,021	\$	981,584	\$	6,182,972	\$	12,147,478
Gadsby	\$	27,002,155	\$	3,341,059	\$	3,009,725	\$	1,923,773	\$	1,453,361	\$	1,306,458	\$	1,420,340	\$	2,498,557	\$	2,537,623	\$	1,416,077	\$	1,667,398	\$	2,453,919	\$	3,983,865
Gadsby CT	\$	17,056,133	\$	2,134,376	\$	1,526,483	\$	1,151,152	\$	1,021,383	\$	969,728	\$	1,007,179	\$	1,525,386	\$	1,486,377	\$	1,066,504	\$	1,065,522	\$	1,605,098	\$	2,107,855
Hermiston	\$	35,844,749	\$	4,801,251	\$	4,066,821	\$	2,269,223	\$	-	\$	1,635,153	\$	2,826,031	\$	3,094,478	\$	3,254,344	\$	3,386,393	\$	1,860,876	\$	2,889,184	\$	5,760,993
Jim Bridger - Gas	\$	90,911,274	\$	10,238,094	\$	8,608,690	\$	5,809,453	\$	4,223,896	\$	4,936,295	\$	8,227,324	\$	9,897,045	\$	10,652,548	\$	7,583,614	\$	5,937,662	\$	5,895,632	\$	8,940,718
Lake Side 1	\$	98,407,312	\$	14,174,147	\$	10,759,914	\$	6,827,959	\$	4,485,219	\$	4,965,069	\$	6,981,723	\$	7,346,237	\$	7,574,193	\$	7,246,295	\$	6,772,313	\$	7,991,762	\$	14,179,589
Lake Side 2	\$	94,830,624	\$	5,791,428	\$	4,980,022	\$	7,778,888	\$	4,880,038	\$	5,568,288	\$	6,557,124	\$	8,895,745	\$	8,777,305	\$	7,832,775	\$	7,275,407	\$	9,973,029	\$	16,540,575
Naughton - Gas	\$	16,646,292	\$	2,817,422	\$	2,526,663	\$	1,378,463	\$	139,953	\$	164,645	\$	1,081,300	\$	2,207,786	\$	3,270,387	\$	1,494,337	\$	1,225,357	\$	1,069,327	\$	1,272,635
Total Gas Fuel Burn																										
Gas Physical	\$	(2,703,952)	\$	(954,956)	\$	(612,012)	\$	(225,292)	\$	(36,995)	\$	(14,229)	\$	(63,112)	\$	(235,300)	\$	(251,896)	\$	(214,583)	\$	(95,477)	\$	-	\$	-
Gas Swaps	\$	14,920,825	\$	(8,918,429)	\$	(1,732,003)	\$	10,620,500	\$	4,371,337	\$	5,745,517	\$	4,387,487	\$	657,564	\$	132,021	\$	970,537	\$	2,624,460	\$	2,545,462	\$	(8,463,810)
Clay Basin Gas Storage	\$	(1,717,812)	\$	(640,744)	\$	(686,891)	\$	(128,180)	\$	51,739	\$	51,739	\$	51,739	\$	51,739	\$	51,739	\$	51,739	\$	51,739	\$	(234,932)	\$	(899,581)
Pipeline Reservation Fees	\$	47,436,235	\$	3,909,816	\$	3,843,865	\$	3,908,712	\$	3,957,052	\$	3,989,834	\$	3,957,524	\$	3,985,110	\$	3,985,525	\$	3,960,387	\$	3,989,685	\$	3,958,012	\$	3,990,508
Total Gas Fuel Burn Expense	\$	611,352,333	\$	65,700,214	\$	58,897,394	\$	51,882,883	\$	33,345,249	\$	32,681,460	\$	40,745,162	\$	52,402,934	\$	54,550,313	\$	44,855,226	\$	42,596,797	\$	53,296,071	\$	80,298,629
Other Generation Expense																										
Blundell	\$	5,415,246	\$	426,194	\$	262,756	\$	516,438	\$	417,519	\$	312,035	\$	492,113	\$	481,258	\$	506,730	\$	443,381	\$	508,536	\$	506,047	\$	542,238
Blundell Bottoming Cycle	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Cedar Springs Wind II	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Dunlap I Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Eliota Flats Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Footo Creek I Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Footo Creek II Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Footo Creek III Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Footo Creek IV Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Glenrock Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Glenrock III Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Goodnoe Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
High Plains Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Leaning Tower 1	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Marengo I Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Marengo II Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
McFadden Ridge Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Pryor Mountain Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Rolling Hills Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Seven Mile Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Seven Mile II Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Black Cap Solar	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
TB Flats Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Rock Creek 1	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Rock Creek 2	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Rock River 1	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Integration Charge	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Total Other Generation Expense	\$	5,415,246	\$	426,194	\$	262,756	\$	516,438	\$	417,519	\$	312,035	\$	492,113	\$	481,258	\$	506,730	\$	443,381	\$	508,536	\$	506,047	\$	542,238
Net Power Cost	\$	2,656,072,337	\$	235,920,535	\$	198,204,668	\$	190,806,157	\$	176,207,659	\$	168,688,987	\$	191,815,803	\$	303,434,517	\$	316,084,769	\$	210,811,927	\$	197,915,828	\$	209,456,422	\$	258,725,265

Application No. 24-08-____
Exhibit No. PAC/102
Witness: Eshwar Rao

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP 2025 ECAC

Prior ECAC's Projected 2024 NPC

August 2024

Exhibit PAC/102
PacifiCorp
Prior ECAC Projected 2024 NPC

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Exhibit PAC/102 Total 2024
Special Sales For Resale													
Long Term Firm Sales													
Black Hills	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Hurricane Sale	\$ 2,271	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,271
Leasing/Jump Revenue	\$ 21,989	\$ 21,007	\$ 21,312	\$ 16,985	\$ 16,681	\$ 22,511	\$ 50,838	\$ 54,348	\$ 35,959	\$ 20,405	\$ 18,100	\$ 24,970	\$ 324,744
PSC21_Sale	\$ 911,135	\$ 856,615	\$ 882,524	\$ 650,000	\$ 680,640	\$ 872,064	\$ 2,208,857	\$ 2,250,454	\$ 2,055,410	\$ 747,395	\$ 711,283	\$ 718,351	\$ 13,548,797
Total Long Term Firm Sales	\$ 935,355	\$ 877,621	\$ 903,836	\$ 666,925	\$ 697,321	\$ 894,575	\$ 2,259,495	\$ 2,304,812	\$ 2,095,368	\$ 767,800	\$ 729,383	\$ 743,321	\$ 13,875,811
Short Term Firm Sales													
Borah	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
COB	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Colorado	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Four Corners	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Idaho	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mead	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mid-Columbia	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
More	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NOB	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Palo Verde	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SP19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Utah	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Washington	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Main	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wyoming	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Short Term Firm Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
System Balancing Sales													
COB	\$ 6,329,676	\$ 4,507,181	\$ 3,120,144	\$ 2,993,237	\$ 3,087,230	\$ 5,647,622	\$ 7,294,814	\$ 8,844,333	\$ 17,629,571	\$ 7,739,318	\$ 6,993,849	\$ 5,989,998	\$ 80,176,973
Four Corners	\$ 12,838,766	\$ 6,162,336	\$ 4,266,112	\$ 3,078,959	\$ 3,229,509	\$ 5,466,030	\$ 4,298,716	\$ 3,235,142	\$ 9,925,699	\$ 4,326,354	\$ 7,348,700	\$ 15,691,728	\$ 80,396,051
Mead	\$ 161,306	\$ 65,848	\$ 43,913	\$ 57,646	\$ 79,819	\$ 213,438	\$ 306,624	\$ 161,622	\$ 433,055	\$ 959,263	\$ 67,352	\$ (351,269)	\$ 2,148,618
Mid-Columbia	\$ 23,112,048	\$ 12,423,395	\$ 7,320,024	\$ 8,711,119	\$ 5,476,957	\$ 6,671,889	\$ 21,551,454	\$ 26,481,618	\$ 16,956,632	\$ 11,945,817	\$ 12,963,419	\$ 16,366,679	\$ 169,991,111
More	\$ 3,050,307	\$ 2,919,193	\$ 950,969	\$ 686,004	\$ 775,631	\$ 1,487,277	\$ 2,055,776	\$ 2,055,707	\$ 3,934,739	\$ 1,357,441	\$ 1,226,935	\$ 2,469,356	\$ 29,991,052
NOB	\$ 4,847,012	\$ 3,823,220	\$ 2,394,455	\$ 1,334,061	\$ 1,632,566	\$ 2,474,522	\$ 4,217,112	\$ 5,717,518	\$ 4,933,438	\$ 2,282,290	\$ 2,854,507	\$ 3,574,293	\$ 40,084,994
Palo Verde	\$ 984,043	\$ 460,452	\$ 225,298	\$ 123,210	\$ -	\$ 616,364	\$ 1,386,037	\$ 1,373,089	\$ 817,919	\$ -	\$ 362,356	\$ -	\$ 7,689,309
Trapped Energy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total System Balancing Sales	\$ 51,363,158	\$ 30,081,625	\$ 18,360,884	\$ 17,766,736	\$ 14,430,963	\$ 22,577,142	\$ 41,110,564	\$ 47,879,030	\$ 56,631,073	\$ 29,020,281	\$ 31,816,118	\$ 44,352,574	\$ 403,390,149
Total Special Sales For Resale	\$ 52,298,513	\$ 30,969,247	\$ 19,264,720	\$ 18,433,661	\$ 15,128,284	\$ 23,471,716	\$ 43,370,099	\$ 50,183,842	\$ 56,726,442	\$ 29,788,081	\$ 32,545,501	\$ 45,095,894	\$ 417,265,960

Purchased Power & Net Interchange

Long Term Firm Purchases

Apposco 1A Solar	\$	562,535	\$	617,749	\$	910,879	\$	983,631	\$	1,151,796	\$	1,216,593	\$	1,065,782	\$	1,038,366	\$	979,390	\$	779,343	\$	579,150	\$	479,999	\$	10,365,204		
Apposco 1B Solar	\$	375,023	\$	411,832	\$	607,250	\$	655,754	\$	767,857	\$	811,062	\$	710,522	\$	692,244	\$	652,527	\$	519,562	\$	386,100	\$	319,999	\$	6,910,136		
Castle Solar USA	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Castle Solar IBC	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Cedar Springs Wind	\$	1,348,848	\$	1,136,654	\$	1,032,245	\$	838,625	\$	743,815	\$	638,625	\$	542,726	\$	457,488	\$	372,488	\$	300,000	\$	240,000	\$	196,000	\$	158,000	\$	11,764,722
Cedar Springs Wind III	\$	1,025,293	\$	883,560	\$	784,236	\$	712,111	\$	631,271	\$	565,347	\$	504,366	\$	445,199	\$	388,629	\$	329,668	\$	271,623	\$	223,623	\$	183,623	\$	8,039,587
Comaine Hills Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Cove Mountain Solar	\$	183,114	\$	199,253	\$	335,342	\$	385,062	\$	420,185	\$	451,894	\$	438,350	\$	414,770	\$	355,679	\$	286,222	\$	205,725	\$	169,135	\$	138,431	\$	3,824,831
Cove Mountain Solar II	\$	453,021	\$	492,928	\$	829,996	\$	903,121	\$	1,039,489	\$	1,117,832	\$	1,084,426	\$	1,028,092	\$	879,908	\$	708,320	\$	560,098	\$	414,084	\$	328,400	\$	4,547,003
Deseret Purchase	\$	3,228,408	\$	3,115,246	\$	2,944,098	\$	2,880,434	\$	2,774,340	\$	2,718,740	\$	2,529,408	\$	2,228,408	\$	1,914,459	\$	-	\$	-	\$	-	\$	-	\$	27,313,976
Eagle Mountain - UAMP/SLUMPA	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Electron Solar 20yr	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Electron Solar 25yr	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Gemstate	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Graphite Solar	\$	311,883	\$	365,922	\$	597,593	\$	612,332	\$	686,772	\$	704,723	\$	687,351	\$	642,989	\$	576,296	\$	490,478	\$	395,140	\$	285,666	\$	214,490	\$	6,247,490
Hemiston Purchase	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Honolulu Solar	\$	288,007	\$	344,622	\$	522,043	\$	588,995	\$	677,881	\$	787,557	\$	917,711	\$	1,069,000	\$	1,241,446	\$	1,437,187	\$	1,653,744	\$	1,920,279	\$	2,225,279	\$	6,116,081
Hurricane Solar	\$	369,331	\$	433,652	\$	637,866	\$	665,722	\$	759,120	\$	785,546	\$	746,797	\$	702,015	\$	654,578	\$	588,601	\$	386,190	\$	321,788	\$	261,788	\$	7,031,207
Hurricane Purchase	\$	46,925	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
MagCorp Buytru	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
MagCorp Reserves	\$	272,680	\$	264,660	\$	272,680	\$	272,680	\$	272,680	\$	272,680	\$	272,680	\$	272,680	\$	272,680	\$	272,680	\$	272,680	\$	272,680	\$	272,680	\$	3,264,140
Milcon Solar	\$	95,313	\$	150,647	\$	222,859	\$	280,511	\$	332,937	\$	382,395	\$	408,109	\$	360,617	\$	290,222	\$	190,032	\$	121,715	\$	83,523	\$	58,523	\$	2,898,880
Milcon Solar	\$	200,600	\$	418,190	\$	595,950	\$	692,860	\$	778,861	\$	821,177	\$	731,293	\$	704,005	\$	656,707	\$	520,625	\$	383,321	\$	303,612	\$	243,612	\$	6,937,492
Nucor	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	594,150	\$	7,128,800
Old Mill Solar	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Monsanto Reserves	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	1,716,667	\$	20,600,000
Pavant III Solar	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
POE Cove	\$	13,672	\$	103,415	\$	13,672	\$	13,672	\$	13,672	\$	13,672	\$	13,672	\$	13,672	\$	13,672	\$	13,672	\$	13,672	\$	13,672	\$	13,672	\$	164,066
Prineville Solar	\$	65,430	\$	103,415	\$	148,052	\$	186,364	\$	221,194	\$	240,766	\$	271,137	\$	230,594	\$	192,816	\$	126,252	\$	80,864	\$	55,491	\$	39,137	\$	1,931,376
Rooder Solar	\$	293,778	\$	369,445	\$	537,900	\$	609,687	\$	712,494	\$	800,701	\$	820,796	\$	742,700	\$	624,428	\$	474,844	\$	290,008	\$	179,725	\$	129,725	\$	6,190,690
Sage Solar	\$	309,000	\$	303,907	\$	296,200	\$	293,907	\$	293,907	\$	293,907	\$	293,907	\$	293,907	\$	293,907	\$	293,907	\$	293,907	\$	293,907	\$	293,907	\$	6,900,441
Skyed Solar	\$	322,157	\$	385,293	\$	530,598	\$	601,018	\$	670,578	\$	742,591	\$	802,576	\$	852,799	\$	884,197	\$	854,791	\$	785,081	\$	727,556	\$	677,556	\$	4,428,148
Small Purchases east	\$	5,531	\$	5,198	\$	6,394	\$	4,638	\$	3,899	\$	3,091	\$	2,403	\$	1,847	\$	1,428	\$	1,078	\$	814	\$	614	\$	464	\$	95,994
Small Purchases west	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Soda Lake Geothermal	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Three Rivers Wind	\$	2,782,869	\$	1,915,027	\$	1,219,777	\$	811,962	\$	4,423,643	\$	1,202,365	\$	803,345	\$	946,989	\$	1,181,835	\$	1,730,465	\$	2,345,165	\$	2,564,900	\$	2,824,900	\$	20,638,860
Top of the World Wind	\$	3,211,949	\$	3,004,727	\$	3,211,949	\$	3,108,338	\$	3,211,949	\$	3,108,338	\$	3,211,949	\$	3,108,338	\$	3,211,949	\$	3,108,338	\$	3,211,949	\$	3,108,338	\$	3,211,949	\$	37,921,748
Volcanee Creek Wind	\$	789,484	\$	937,544	\$	1,175,634	\$	1,081,742	\$	816,826	\$	677,518	\$	699,099	\$	601,199	\$	780,865	\$	899,564	\$	999,302	\$	1,003,367	\$	1,003,367	\$	10,676,106
Wen Canyon	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Wish Lake	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Yreka Solar	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Green River Energy Center	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Antelope Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Bonwell Springs Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Two River Wind LLC	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Cedar Creek	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
OR Schedule 126 CSP	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
UT Schedule Adjustment	\$	(1,680,691)	\$	(2,018,190)	\$	(3,360,173)	\$	(3,749,047)	\$	(4,450,727)	\$	(4,535,849)	\$	(4,239,494)	\$	(3,968,003)	\$	(3,437,166)	\$	(2,845,889)	\$	(1,819,486)	\$	(1,363,496)	\$	(977,866)	\$	(37,466,244)
Long Term Firm Purchases Total	\$	17,315,978	\$	16,178,007	\$	17,444,600	\$	16,931,058	\$	16,644,843	\$	16,868,771	\$	18,191,250	\$	17,418,206	\$	17,741,342	\$	15,705,000	\$	15,446,583	\$	15,866,512	\$	15,866,512	\$	201,742,209
Qualifying Facilities																												
QF California	\$	144,138	\$	144,080	\$	156,633	\$	157,919	\$	137,956	\$	134,286	\$	135,609	\$	134,441	\$	129,611	\$	135,806	\$	142,208	\$	139,098	\$	1,691,846		
QF Idaho	\$	652,201	\$	543,397	\$	628,698	\$	699,151	\$	756,864	\$	742,232	\$	683,778	\$	655,356	\$	520,800	\$	685,228	\$	559,512	\$	561,253	\$	7,384,439		
QF Oregon	\$	2,282,896	\$	2,731,056	\$	3,654,769	\$	4,549,011	\$	4,603,695	\$	4,747,221	\$	4,926,335	\$	3,536,881	\$	2,762,393	\$	1,960,706	\$	1,581,696	\$	1,158,975	\$	815,975	\$	41,585,976
QF Utah	\$	359,738	\$	403,638	\$	480,494	\$	577,328	\$	633,629	\$	651,580	\$	593,828	\$	598,393	\$	589,272	\$	510,766	\$	383,475	\$	307,746	\$	233,386	\$	6,089,886
QF Washington	\$	-	\$	-	\$	-	\$	22,909	\$	23,311	\$	44,799	\$	44,799	\$	44,799	\$	44,799	\$	44,799	\$	44,799	\$	44,799	\$	44,799	\$	231,338
QF Wyoming	\$	24,584	\$	18,617	\$	23,206	\$	19,704	\$	18,048	\$	6,756	\$	10,630	\$	17,488	\$	16,668	\$	18,738	\$	16,668	\$	13,678	\$	10,203	\$	200,103
Biomass One QF	\$	1,669,951	\$	1,603,089	\$	1,600,266	\$	1,609,336	\$	1,761,538	\$	1,692,832	\$	1,567,580	\$	1,622,548	\$	1,601,616	\$	1,636,336	\$	1,646,000	\$	1,646,000	\$	1,646,000	\$	18,728,743
Chopra Wind QF	\$	193,044	\$	216,789	\$	199,229	\$	188,793	\$	167,939	\$	177,693	\$	192,397	\$	166,810	\$	133,330	\$	156,661	\$	177,436	\$	169,528	\$	169,528	\$	2,052,812
DCPF QF	\$	3,722	\$	1,487	\$	1,273	\$	2,265</																				

Total Wheeling & U. of F. Expense	\$	12,562,868	\$	13,088,528	\$	13,917,340	\$	14,107,262	\$	13,399,866	\$	14,261,250	\$	15,977,547	\$	15,618,228	\$	14,847,862	\$	13,803,665	\$	14,564,997	\$	15,295,300	\$	171,444,115
Coal Fuel Burn Expense																										
Colstrip	\$	1,296,581	\$	1,601,139	\$	1,697,432	\$	1,541,416	\$	1,488,294	\$	1,434,960	\$	1,899,416	\$	1,887,285	\$	1,929,987	\$	1,354,687	\$	1,601,970	\$	1,548,448	\$	19,281,905
Craig	\$	2,158,487	\$	1,856,817	\$	1,793,861	\$	1,617,501	\$	1,893,341	\$	1,889,930	\$	2,150,306	\$	2,336,219	\$	2,014,428	\$	1,902,788	\$	2,042,946	\$	2,350,369	\$	23,970,051
Dave Johnston	\$	4,412,716	\$	4,355,380	\$	3,638,115	\$	4,375,601	\$	5,593,787	\$	5,301,547	\$	4,861,055	\$	5,030,646	\$	4,473,637	\$	5,148,188	\$	4,636,845	\$	5,846,448	\$	58,273,965
Hayden	\$	820,063	\$	982,109	\$	907,990	\$	872,856	\$	801,337	\$	940,638	\$	1,038,132	\$	1,070,203	\$	840,843	\$	817,615	\$	1,202,556	\$	1,080,686	\$	16,988,845
Hunter	\$	22,211,585	\$	17,743,750	\$	9,234,133	\$	7,419,788	\$	7,599,417	\$	9,172,441	\$	19,724,512	\$	16,020,428	\$	11,369,437	\$	13,440,951	\$	11,157,274	\$	11,157,274	\$	13,896,190
Huntington	\$	12,147,430	\$	8,720,400	\$	5,168,132	\$	4,691,856	\$	4,054,815	\$	4,671,193	\$	9,780,155	\$	7,960,513	\$	4,989,434	\$	4,991,012	\$	4,754,778	\$	7,157,863	\$	79,887,282
Jim Bridger	\$	10,059,534	\$	10,391,164	\$	10,984,626	\$	7,289,377	\$	8,630,636	\$	10,883,936	\$	13,626,147	\$	13,646,113	\$	11,757,339	\$	11,686,765	\$	10,990,795	\$	11,305,212	\$	130,853,621
Naughton	\$	3,598,079	\$	3,386,975	\$	3,372,230	\$	2,649,687	\$	2,950,775	\$	2,339,114	\$	4,007,630	\$	4,475,028	\$	2,266,766	\$	2,549,088	\$	2,235,831	\$	3,102,076	\$	36,833,277
Wyotak	\$	2,203,136	\$	2,056,603	\$	1,661,419	\$	2,199,411	\$	1,616,016	\$	1,732,790	\$	2,023,341	\$	2,092,274	\$	2,408,261	\$	1,743,371	\$	2,534,985	\$	2,534,985	\$	24,504,672
Total Coal Fuel Burn Expense	\$	58,931,622	\$	51,100,328	\$	37,984,917	\$	32,537,301	\$	34,628,410	\$	38,366,549	\$	59,118,754	\$	55,359,812	\$	41,534,146	\$	43,928,483	\$	40,366,365	\$	48,808,276	\$	542,654,961
Gas Fuel Burn Expense																										
Cethalos	\$	26,314,723	\$	17,644,291	\$	12,506,954	\$	11,703,091	\$	9,948,011	\$	5,638,290	\$	13,109,856	\$	12,929,796	\$	11,044,330	\$	11,414,289	\$	14,085,298	\$	15,887,118	\$	166,026,046
Current Creek	\$	14,162,447	\$	13,007,931	\$	8,878,068	\$	7,083,462	\$	6,434,738	\$	6,932,451	\$	7,671,735	\$	7,486,469	\$	6,324,061	\$	1,789,323	\$	8,231,376	\$	12,126,425	\$	101,188,427
Gadby	\$	3,516,065	\$	3,528,678	\$	2,281,038	\$	1,777,091	\$	1,262,181	\$	1,899,538	\$	2,007,207	\$	2,445,785	\$	2,083,642	\$	2,578,617	\$	2,578,617	\$	3,395,258	\$	28,608,869
Gadby CT	\$	2,194,111	\$	2,136,484	\$	1,472,078	\$	1,248,474	\$	1,286,331	\$	1,503,739	\$	1,297,976	\$	1,622,646	\$	1,353,290	\$	1,329,016	\$	1,541,001	\$	2,150,100	\$	19,048,826
Hermiston	\$	5,730,053	\$	4,938,624	\$	2,683,875	\$	2,741,146	\$	1,231,901	\$	1,748,215	\$	3,323,511	\$	3,636,697	\$	3,450,577	\$	3,672,168	\$	4,238,055	\$	4,238,055	\$	40,034,484
Jim Bridger - Gas	\$	-	\$	-	\$	4,533,264	\$	3,443,600	\$	6,127,207	\$	11,288,132	\$	12,598,300	\$	8,127,667	\$	11,029,667	\$	11,210,888	\$	11,443,216	\$	15,960,235	\$	103,534,197
Lake Side 1	\$	14,233,681	\$	14,050,694	\$	8,405,234	\$	7,303,303	\$	7,285,202	\$	7,255,199	\$	8,570,665	\$	8,912,488	\$	6,616,058	\$	5,732,869	\$	9,872,676	\$	13,386,767	\$	113,530,474
Lake Side 2	\$	17,445,834	\$	15,786,427	\$	11,369,229	\$	3,478,407	\$	3,688,623	\$	8,836,000	\$	10,472,567	\$	10,937,025	\$	10,123,546	\$	9,239,846	\$	12,405,537	\$	16,130,205	\$	129,913,247
Naughton - Gas	\$	2,801,384	\$	2,710,121	\$	3,136,882	\$	1,973,797	\$	2,819,345	\$	3,761,594	\$	2,737,633	\$	3,289,413	\$	1,189,104	\$	-	\$	2,056,798	\$	-	\$	29,374,091
Total Gas Fuel Burn	\$	86,418,277	\$	73,773,230	\$	54,646,722	\$	40,732,071	\$	42,064,539	\$	47,963,157	\$	61,133,450	\$	64,430,909	\$	58,712,148	\$	47,641,114	\$	64,416,226	\$	89,323,778	\$	731,255,621
Gas Physical	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Gas Swaps	\$	(11,212,855)	\$	(7,609,528)	\$	5,974,475	\$	1,206,750	\$	2,136,985	\$	1,984,750	\$	814,254	\$	468,000	\$	1,095,150	\$	3,252,365	\$	3,429,863	\$	(3,310,529)	\$	(2,173,320)
Clay Basin Gas Storage	\$	(775,564)	\$	(893,929)	\$	(179,000)	\$	52,342	\$	52,342	\$	52,342	\$	52,342	\$	52,342	\$	52,342	\$	(169,614)	\$	(87,495)	\$	(67,495)	\$	(2,019,808)
Pipeline Reservation Fees	\$	3,789,732	\$	3,715,752	\$	3,788,190	\$	3,751,314	\$	3,789,132	\$	3,748,246	\$	3,787,147	\$	3,750,979	\$	3,785,910	\$	3,750,790	\$	3,788,427	\$	3,788,427	\$	45,229,317
Total Gas Fuel Burn Expense	\$	78,219,591	\$	69,185,529	\$	64,230,379	\$	45,742,377	\$	48,042,898	\$	53,348,396	\$	65,787,093	\$	68,731,848	\$	63,610,519	\$	54,731,632	\$	71,427,264	\$	89,234,181	\$	772,291,709
Other Generation Expense																										
Blundell	\$	443,392	\$	228,935	\$	88,076	\$	414,890	\$	208,315	\$	391,298	\$	418,061	\$	430,310	\$	413,742	\$	401,326	\$	431,972	\$	453,273	\$	4,323,390
Blundell Bottoming Cycle	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Cedar Springs Wind II	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Dunlap I Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Elkole Flats Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Foots Creek I Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Foots Creek II Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Foots Creek III Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Foots Creek IV Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Glenrock Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Glenrock II Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Glenrock III Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Goobee Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
High Plains Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Leaning Juniper I	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Marengo I Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Marengo II Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
McFadden Ridge Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Phyls Mountain Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Rolling Hills Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Seven Mile Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Seven Mile II Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Black Cap Solar	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
TB Flats Wind	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
TB Flats Wind II	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Rook Creek I	\$	-	\$	-																						

Application No. 24-08-____
Exhibit No. PAC/103
Witness: Eshwar Rao

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP 2025 ECAC

Projected NPC Comparison to Prior ECAC

[PUBLIC VERSION]

August 2024

THIS DOCUMENT IS CONFIDENTIAL IN ITS ENTIRETY

Application No. 24-08-____
Exhibit No. PAC/104
Witness: Eshwar Rao

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP 2025 ECAC

2025 California-Allocated NPC

August 2024

Period Ending	Study Results				
	MERGED PEAKENERGY SPLIT				
Dec-25	(\$)				
	Merged	Pre-Merger	Pre-Merger	Non-Firm	Post-Merger
	1/2025 - 12/2025	Demand	Energy		
Special Sales For Resale					
Pacific Pre Merger		-	-	-	-
Post Merger	289,541,919	-	-	-	289,541,919
Utah Pre Merger	-	-	-	-	-
Non-Firm Sub Total					
Total Special Sales For Resale	289,541,919	-	-	-	289,541,919
Purchased Power & Net Interchange					
BPA Peak Purchase					
Pacific Capacity					
Mid Columbia	113,879,307	34,163,792	79,715,515		
Miso-Pacific	164,065	34,021	130,044		
O.E. Contracts/PPL	131,583,014	-	-		131,583,014
Small Purchases west	-	-	-	17.03%	82.97%
Pacific Sub Total	245,626,387	34,197,813	79,845,559		131,583,014
Genstate	-	-	-		
GSLM	-	-	-		
QF by State UPL	177,781,808	299,752	111,322	177,410,733	70.00%
IPP Layoff	-	-	-		
Small Purchases east	-	-	-		
UPL in 2025					
Utah Sub Total	177,781,808	299,752	111,322		177,410,733
Appalosa 1A Solar	10,285,897	-	-	10,285,897	Post Merger
Appalosa 1B Solar	6,861,455	-	-	6,861,455	Post Merger
Castle Solar Ltd	-	-	-	-	Post Merger
Castle Solar LLC	-	-	-	-	Post Merger
Cedar Springs Wind	11,723,272	-	-	11,723,272	Post Merger
Cedar Springs Wind III	8,908,094	-	-	8,908,094	Post Merger
Cedar Springs Wind IV	36,181,067	-	-	36,181,067	Post Merger
Combine Hills Wind	-	-	-	-	Post Merger
Core Mountain Solar	3,802,638	-	-	3,802,638	Post Merger
Core Mountain Solar II	9,387,257	-	-	9,387,257	Post Merger
Deseret Purchase	-	-	-	-	Post Merger
Eagle Mountain - LUMPS/LUMPA	-	-	-	-	Post Merger
Electron Solar 20yr	-	-	-	-	Post Merger
Electron Solar 25yr	-	-	-	-	Post Merger
Graphite Solar	6,197,453	-	-	6,197,453	Post Merger
Herndon Purchase	-	-	-	-	Post Merger
Horseshoe Solar	6,072,682	-	-	6,072,682	Post Merger
Hunter Solar	6,980,561	-	-	6,980,561	Post Merger
Hurricane Purchase	-	-	-	-	Post Merger
Mag-Cop Buythrough	-	-	-	-	Post Merger
Mag-Cop Reserves	-	-	-	-	Post Merger
Milcan Solar	2,973,753	-	-	2,973,753	Post Merger
Milner Solar	6,870,872	-	-	6,870,872	Post Merger
Nucor	7,129,800	-	-	7,129,800	Post Merger
Old Mill Solar	-	-	-	-	Post Merger
Monsanto Reserves	20,600,000	-	-	20,600,000	Post Merger
Pavant II Solar	-	-	-	-	Post Merger
PGE Cove	164,065	-	-	164,065	Miso-Pacific
Prineville Solar	1,981,288	-	-	1,981,288	Post Merger
Rocket Solar	6,473,420	-	-	6,473,420	Post Merger
Sigurd Solar	5,858,273	-	-	5,858,273	Post Merger
Soda Lake Geothermal	-	-	-	-	Post Merger
Three Bulbs Wind	20,533,980	-	-	20,533,980	Post Merger
Top of the World Wind	36,016,304	-	-	36,016,304	Post Merger
Waverne Creek Wind	10,646,051	-	-	10,646,051	Post Merger
Faraday II Solar	7,312,704	-	-	7,312,704	Post Merger
Homestead II Solar	4,724,279	-	-	4,724,279	Post Merger
Homestead III Solar	9,451,800	-	-	9,451,800	Post Merger
Green River Energy Center	-	-	-	-	Post Merger
Arctique Wind	17,957,893	-	-	17,957,893	Post Merger
Bowwell Springs Wind	33,509,492	-	-	33,509,492	Post Merger
Ten River Wind LLC	-	-	-	-	Post Merger
Cedar Creek	20,759,802	-	-	20,759,802	Post Merger
UT Schedule Adjustment	-	-	-	-	Post Merger
OR Schedule 126 CSP	(41,923,685)	-	-	(41,923,685)	Post Merger
Rush lake_BESS	-	-	-	-	Post Merger
Freemont Solar_BESS	-	-	-	-	Post Merger
Green River Energy Center_BESS	-	-	-	-	Post Merger
Uniqeo Storage Resevoir	-	-	-	-	Post Merger
Total Short Term Firm Purchases & Total System I	751,180,604	-	-	751,180,604	
New Firm Sub Total	1,027,621,092	-	-	1,027,621,092	
Non Firm Sub Total	-	-	-	-	
Total Purchased Power & Net Interchange	1,450,865,221	34,497,565	79,956,882	-	1,336,450,774
Wheeling & U. of F. Expense					
Pacific Firm Wheeling and Use of Facilities	18,876,347	18,876,347	-	-	-
Utah Firm Wheeling and Use of Facilities	-	-	-	-	-
Post Merger	160,572,270	-	-	160,572,270	
Nonfirm Wheeling	14,274,189	-	-	14,274,189	
Total Wheeling & U. of F. Expense	193,722,805	18,876,347	-	14,274,189	160,572,270
Thermal Fuel Burn Expense					
Colstrip	19,834,577	-	-	19,834,577	TC
Craig	20,396,099	-	-	20,396,099	TC
Dave Johnston	62,174,267	-	-	62,174,267	TC
Hayden	10,424,370	-	-	10,424,370	TC
Hunter	239,988,306	-	-	239,988,306	TC
Huntington	172,217,865	-	-	172,217,865	TC
Jim Bridger	106,238,535	-	-	106,238,535	TC
Naughton	43,411,735	-	-	43,411,735	TC
Wyodak	21,572,898	-	-	21,572,898	TC
Chehalis	115,944,167	-	-	115,944,167	OG
Current Creek	54,772,537	-	-	54,772,537	OG
Gadsby	27,002,155	-	-	27,002,155	TG
Gadsby CT	17,056,133	-	-	17,056,133	CT
Herndon	35,844,749	-	-	35,844,749	OG
Jim Bridger - Gas	90,311,274	-	-	90,311,274	OG
Lake Side 1	98,407,312	-	-	98,407,312	OG
Lake Side 2	94,830,624	-	-	94,830,624	OG
Naughton - Gas	18,648,292	-	-	18,648,292	OG
Gas Physical	(2,703,952)	-	-	(2,703,952)	OG
Gas Swaps	14,920,625	-	-	14,920,625	OG
Clay Basin Gas Storage	(1,717,812)	-	-	(1,717,812)	OG
Pipeline Reservation Fees	47,436,230	-	-	47,436,230	OG
Total Fuel Burn Expense	1,297,610,983	-	-	1,297,610,983	
Other Generation Expense					
Blended	5,415,246	-	-	5,415,246	BL
Total Other Generation Expense	5,415,246	-	-	5,415,246	
Net Power Cost	2,658,072,237	53,333,912	79,956,882	1,317,550,418	1,207,481,126

	Pre-Merger PPL	Test Year
		12/1/2025
Post-Merger PPL	100.00%	40,406,477
Pre-Merger UPL	2.89%	371,074
Post-Merger UPL	97.11%	12,485,761

40,406,477	QF by State PPL
-	QF PPL Pre Merger
91,176,537	QF PPL Post Merger
12,856,835	QF by State UPL
-	QF UPL Pre Merger
164,924,973	QF UPL Post Merger

Wheeling costs for reporting period

Pre Mgr PPL	18,876,347
Pre Mgr UPL	0
Post Mgr Whi	143,816,878
Post Mgr Whi CB	3,793,546
NF Whi	14,274,189
SIF	14,015,747

Plant	Category	Key	Category	Expense Total	FERC
Colstrip	TC		Thermal Coal	695,252,651	501
Dave Johnston	TC		Thermal Gas	27,002,155	503
Hayden	TC		Other Gas	567,284,045	547
Hunter	TC	OG	Simple Cycle	17,056,133	547
Huntington	TC	CH	Cholla	-	501
Jim Bridger	TC			1,297,610,983	
Naughton	TC			-	
Wyodak	TC			-	
Chehalis	OG		Ch to PrePost	-	
Current Creek	OG		Steam from Other	-	
Gadsby	TG	BL		5,415,246	501
Gadsby CT	CT		Ch to PrePost	-	
Herndon	OG			-	
Jim Bridger - Gas	OG			-	
Lake Side 1	OG			-	
Lake Side 2	OG			-	
Naughton - Gas	OG			-	
Gas Physical	OG			-	
Gas Swaps	OG			-	
Clay Basin Gas Storage	OG			-	
Pipeline Reservation Fees	OG			-	
Blended	BL			-	

Application No. 24-08-____
Exhibit No. PAC/105
Witness: Eshwar Rao

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP 2025 ECAC

Coal Cycling Scenarios

[PUBLIC VERSION]

August 2024

THIS DOCUMENT IS CONFIDENTIAL IN ITS ENTIRETY

Application No. 24-08-____
Exhibit No. PAC/106
Witness: Eshwar Rao

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP 2025 ECAC

Coal Volumes

[PUBLIC VERSION]

August 2024

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