Exhibit No. JP-1CT Docket UE-24\_\_\_\_\_ Witness: Jack Painter

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	Docket UE-24
Complainant,	Docket OE-24
v.	
PACIFICORP dba PACIFIC POWER & LIGHT COMPANY	
Respondent.	

#### **PACIFICORP**

# REDACTED DIRECT TESTIMONY OF JACK PAINTER

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## ATTACHED EXHIBITS

Exhibit No. JP-2—2023 PCAM Deferral Calculation

Exhibit No. JP-3—2023 PTC Tracker Calculation

1	Q.	Please state your name, business address, and present position with PacifiCorp
2		dba Pacific Power & Light Company (PacifiCorp or Company).
3	A.	My name is Jack Painter and my business address is 825 NE Multnomah Street, Suite
4		600, Portland, Oregon 97232. My title is Net Power Cost Adviser.
5		QUALIFICATIONS
6	Q.	Briefly describe your education and professional experience.
7	A.	I received a Bachelor of Arts degree in Business Administration with a Finance major
8		from Washington State University in 2007. I have been employed by PacifiCorp since
9		2008 and have held positions in the regulation and jurisdictional load departments,
10		joining the regulatory net power costs (NPC) group in 2019. As a Net Power Cost
11		Adviser, my responsibilities include various regulatory functions across PacifiCorp's
12		jurisdictions including NPC and general rate case filings.
13	Q.	Have you testified in previous regulatory proceedings?
14	A.	Yes. I have previously provided testimony to the public utility commissions in
15		Washington, Oregon, California, Utah, Wyoming, and Idaho.
16		PURPOSE OF TESTIMONY
17	Q.	What is the purpose of your testimony in this proceeding?
18	A.	My testimony presents and supports the Company's calculation of the Power Cost
19		Adjustment Mechanism (PCAM) for the 12-month period from January 1, 2023,
20		through December 31, 2023 (Deferral Period). More specifically, I provide the
21		following:
22 23		<ul> <li>Background on the PCAM and an accounting of how the PCAM balance was calculated for the Deferral Period;</li> </ul>
24 25		<ul> <li>Discussion of the main differences between adjusted actual net power costs (Actual NPC) and net power costs in rates (Base NPC), both</li> </ul>

2		(WIJAM) basis; <sup>1</sup>
3 4 5 6		• Discussion of the Company's participation in the Western Energy Imbalance Market (WEIM) with the California Independent System Operator (CAISO) and the benefits from the WEIM that are passed through to customers; and,
7 8 9		<ul> <li>Background on the Production Tax Credit (PTC) Tracker and an accounting of how the PTC balance was calculated for the Deferral Period.</li> </ul>
10	Q.	Are you proposing a rate change to Schedule 97 as part of this proceeding?
11	A.	Yes. If the cumulative PCAM deferred balancing account meets the surcharge or
12		credit threshold of \$17 million, there would be a proposed change to Tariff
13		Schedule 97. Because the ending balance in the 2023 PCAM deferred balancing
14		account is a \$81.0 million surcharge, the Company proposes to change Tariff
15		Schedule 97 using a 12-month amortization period beginning October 1, 2024. Over
16		the course of the amortization period, the Company expects to recover a total of \$84.5
17		million, which includes interest through the 12-month amortization period, as shown
18		in workpaper 4.2 Any difference between the amount the Company expects to collect
19		and actual customer collections at the end of the amortization period will be included
20		in the 2026 PCAM deferred balancing account to be filed in June 2027.
21		SUMMARY OF THE PCAM DEFERRAL CALCULATION
22	Q.	Please briefly describe the Company's PCAM authorized by the Commission.
23	A.	The Commission's Order 09 in Docket No. UE-140762 approved the PCAM to allow
24		the Company to track unexpected variations in power costs in the PCAM deferral
25		account. In most years, if the cumulative positive or negative balance in the PCAM

<sup>&</sup>lt;sup>1</sup> The WIJAM was approved in the Company's general rate case in Docket No. UE-191024 and became effective beginning January 1, 2021.

<sup>2</sup> NEW-PAC-PCAM-WP4-6-14-24.xlsx

1		deferral account, including monthly interest, exceeds \$17 million, either a surcharge
2		or sur-credit is triggered.
3	Q.	Please summarize the Company's calculation of the PCAM deferral for the
4		Deferral Period.
5	A.	For the Deferral Period, the cumulative PCAM variance was \$87.5 million more than
6		the base PCAM costs established in Docket No. UE-210402 (2022 PCORC). After
7		application of the deadband and asymmetrical sharing bands, the filing results in a
8		deferral charge of \$72.7 million. Including interest, the total PCAM recovery for the
9		Deferral Period is \$81.0 million.
10	Q.	Do you provide detailed support for the calculation of the PCAM balance with
11		your testimony?
12	A.	Yes. Exhibit No. JP-2 includes a detailed calculation of the Company's 2023 PCAM
13		deferral on a monthly basis. I separately provide detailed confidential workpapers
14		supporting Exhibit No. JP-2.
15		2023 PCAM CALCULATION
16	Q.	Please describe the Company's calculation of the PCAM deferral for the
17		Deferral Period.
18	A.	As previously noted, the PCAM deferral is calculated on a monthly basis and
19		represents the difference between Base NPC, collected through general rates, and
20		Actual NPC. The accrued PCAM variance is subject to the following parameters:
21 22		<ul> <li>Symmetrical Deadband: Any PCAM variance between negative \$4 million and positive \$4 million will be absorbed by the Company.</li> </ul>
23 24		<ul> <li>Asymmetrical Sharing Bands: The PCAM includes sharing of the PCAM variance as follows:</li> </ul>

1 2	<ul> <li>Between \$4 million and \$10 million; shared 50 percent by customers and 50 percent by the Company;</li> </ul>
3 4	<ul> <li>Greater than \$10 million; shared 90 percent by customers and 10 percent by the Company;</li> </ul>
5 6	<ul> <li>Between -\$4 million and -\$10 million; shared 75 percent by customers and 25 percent by the Company; and,</li> </ul>
7 8	<ul> <li>Less than -\$10 million; shared 90 percent by customers and 10 percent by the Company.</li> </ul>
9 10 11	• Amortization of Deferral: The amortization of PCAM variances are deferred until the balance of the deferral balancing account results in either a surcharge or credit greater than \$17 million.
12	For the Deferral Period, the PCAM variance was an \$87.5 million charge.
13	After application of the deadband and asymmetrical sharing bands, the Company
14	seeks approval to charge the PCAM balancing account with \$81.0 million, including
15	interest. A summary of the deferral calculation is shown in Table 1.

Table 1 **Summary of PCAM Account Balance** 

Actual PCAM Costs (\$/MWh)	\$	58.30
Base PCAM Costs (\$/MWh)	Ψ	11.86
PCAM Cost Differential (\$/MWh)		46.44
Washington Sales (MWh)		3,850,048
Total PCAM Differential*		\$ 87,484,705
Total Deferrable ABOVE Deadband		-
Total Deferrable BELOW Deadband		83,484,705
Washington Deferral after Sharing		72,736,234
Interest Accrued through December 31, 2023		3,293,317
Interest Accrued January 1, 2024 through September 30, 2024		4,986,506
Requested PCAM Recovery		\$ 81,016,057

#### 1 Q. How is the PCAM variance calculated on a monthly basis?

- 2 The PCAM variance is calculated by subtracting the NPC collected in base rates from A.
- 3 the PCAM Adjusted Actual Costs as shown in the formula below:
- $PCAMC (Base NPC_{\$/MWh} \times Actual Sales) = PCAM Variance$ 4
- 5 Where:

11 12

-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
6	PCAMC:	Adjusted actual WIJAM NPC costs allocated to Washington
7		using allocation factors calculated with actual jurisdictional

load. 8

9 Base NPC<sub>\$/MWh</sub>: Base NPC unit cost; calculated by dividing Washington-

10 allocated NPC as established in a rate proceeding by the

Washington sales-at-meter used to set rates in the rate

proceeding.

1		Actual Sales:	Actual Washington retail sales at the meter.
2		The cumulati	ve PCAM variance is first compared against the symmetrical
3		deadband. Cumulativ	ve amounts in excess of the symmetrical deadband are then
4		subject to the sharing	g bands. The customer portion of the PCAM variance is tracked
5		in the deferral balance	cing account, and monthly balances accrue interest at the current
6		Federal Energy Regu	ulatory Commission (FERC) interest rate. A rate change is
7		triggered when the c	ustomer surcharge or credit exceeds \$17 million.
8	Q.	What were the WIJ	AM-adjusted Actual NPC for the Deferral Period and how
9		were they determin	ed?
10	A.	The WIJAM-adjuste	d Actual NPC in the Deferral Period were approximately
11		\$224 million. This as	mount captures all components of NPC as defined in the
12		Company's general i	rate case and power cost only rate case (PCORC) proceedings and
13		modeled by the Com	apany's Aurora model respectively. Booked NPC are adjusted to
14		reflect a balanced W	IJAM consistent with the methodology used in the 2022 PCORC.
15		Specifically, it includes	des amounts booked to the following FERC accounts:
16		Account 447 -	Sales for resale;
17 18 19		Account 501 -	Fuel, steam generation; excluding fuel handling, start-up fuel (gas and diesel fuel, residual disposal) and other costs that are not modeled in Aurora;
20		Account 503 -	Steam from other sources;
21		Account 547 -	Fuel, other generation;
22		Account 555 -	Purchased power; and,
23		Account 565 -	Transmission of electricity by others.

1	Q.	What adjustments are made to Actual NPC and why are they needed?
2	A.	The Company adjusts Actual NPC to reflect the ratemaking treatment of several
3		items, including:
4 5		<ul> <li>Out-of-period accounting entries booked in the Deferral Period that relate to operations before implementation of the PCAM on April 1, 2015;</li> </ul>
6		<ul> <li>Reductions to coal costs for legal fees related to fines and citations;</li> </ul>
7		• Revenue from a contract related to the Leaning Juniper wind resource;
8 9		<ul> <li>An adjustment for costs related to participation in the Western Power Pool's (WPP) <sup>3</sup> Western Resource Adequacy Program (WRAP); and,</li> </ul>
10 11		<ul> <li>An adjustment for costs of the WEIM Body of State Regulators (BOSR) fees charged for commission related work as a participant in the WEIM.</li> </ul>
12	Q.	Please state the amount of the adjusted Actual NPC that were allocated to
13		Washington and describe how the amount was calculated.
14	A.	Washington-allocated Actual NPC were approximately \$224.4 million during the
15		Deferral Period. To arrive at this value, the Company applied the allocation
16		methodology approved by the Commission using actual allocation factors from
17		calendar year 2023.
18	Q.	How much of base PCAM costs did the Company collect from Washington
19		customers during the Deferral Period?
20	A.	During the Deferral Period, the Company received \$137.0 million in base PCAM
21		revenue from Washington customers, \$87.5 million less than Washington-allocated
22		Actual NPC.

<sup>&</sup>lt;sup>3</sup> Western Power Pool was formerly known as Northwest Power Pool.

1	Q.	What was the total amount of the deferral over the Deferral Period?

- 2 A. After application of the deadband and asymmetrical sharing bands to the NPC
- 3 variance, the deferral was a \$81.0 million charge including interest, as shown in
- 4 Table 1.
- 5 Q. Please describe how the interest on the PCAM deferral balance was determined.
- 6 A. Interest is accrued monthly on the PCAM deferral balance during the Deferral Period
- and from the end of the Deferral Period until Schedule 97 rates become effective
- 8 October 1, 2024, at the FERC interest rates that are published quarterly. As shown in
- 9 Table 1, the 2023 PCAM accrued \$8.3 million of interest. Additionally, interest
- accrues through the amortization period while rates are being collected. The
- 11 Company expects to collect \$3.5 million throughout the amortization period.
- 12 Q. Are costs related to WPP's WRAP and the CAISO WEIM BOSR included in the
- 13 **PCAM?**
- 14 A. Yes. Costs have been included related to the participation in the WRAP and the
- WEIM BOSR. Both costs were included in the 2023 General Rate Case in Docket
- No. UE-230172 for rates effective on April 3, 2024. Because this PCAM filing covers
- the 2023 Deferral Period, calendar year 2023 costs have been included in this filing,
- but costs will not be included in the 2024 PCAM filing. Washington-allocated costs
- are \$5,281 for participation in the WEIM BOSR and \$134,620 for participation in the
- WPP WRAP.
- 21 Q. Is the Company requesting a rate change with this filing?
- 22 A. Yes. The PCAM balancing account exceeds the customer surcharge or credit
- 23 threshold of \$17 million and the Company is requesting a rate change to schedule 97,

- 1 with a 12-month amortization period, beginning October 1, 2024. Please refer to
- 2 Table 2 below for a summary of the deferred balancing account.

Table 2
Deferred Balancing Account

	Washington Customers	
Balancing Account Activity		
Beginning Deferral Balance	\$	-
2023 PCAM Deferral	72	,736,234
Interest	3	,293,317
Activity Through December 31, 2023	76	,029,551
Interest Accrued January 1, 2024 through September 30, 2024	4	,986,506
September 30, 2024 Ending Balance	\$ 81	,016,057

3 DIFFERENCES IN NPC

- 4 Q. Please describe the Base WIJAM NPC PacifiCorp used to calculate the NPC
- 5 component of the PCAM deferral.
- 6 A. The Base WIJAM NPC of \$146 million for the 2023 PCAM was set in PCORC
- 7 Docket No. UE-210402. Base rates became effective May 1, 2022.
- 8 Q. How does the WIJAM function to calculate WIJAM-allocated NPC?
- 9 A. First, total-Company NPC are allocated to Washington customers based upon the
- system resources that Washington customers subscribe to. Next, the net short or long
- position is calculated by comparing total-Washington load against Washington's
- system-allocated resources. Lastly, an open (short) position is filled by first reducing
- wholesale market sales volumes to the extent available followed by increasing market
- power purchase volumes at the average \$/MWh price incurred by the Company. If

1		Washington's net position is long, the opposite occurs and market power purchases
2		are decreased followed by increasing wholesale sales volumes if necessary, also at the
3		average \$/MWh price incurred by the Company, which reflects the Company's power
4		hedges.
5	Q.	On a WIJAM basis, what was the difference between Actual NPC and Base NPC
6		for the Deferral Period?
7	A.	Actual NPC for the Deferral Period were \$224 million, which was \$78 million more
8		than Base NPC for the Deferral Period. Table 3 below provides a high-level summary
9		of the difference between the Base NPC and Actual NPC by category on a WIJAM
10		basis. The differences by category in Table 3 result from comparing Actual WIJAM
11		NPC to the Base WIJAM NPC effective during the Deferral Period. Actual WIJAM
12		NPC were higher than Base NPC due to a \$70 million increase in purchased power
13		expense, a \$9 million increase in natural gas expense, a \$1 million increase in
14		wheeling and other expenses—which were partially offset by a \$2 million increase in
15		wholesale sales revenue (which decreases NPC)—and a \$1 million decrease in coal
16		fuel expense.

Table 3
Net Power Cost Reconciliation (\$millions)

Base NPC	\$ 146
Increase/(Decrease) to NPC:	
Wholesale Sales Revenue	(2)
Purchased Power Expense	70
Coal Fuel Expense	(1)
Natural Gas Expense	9
Wheeling and Other Expense	 1_
<b>Total Increase/(Decrease)</b>	78
Total Company NPC Difference	\$ 78
Adjusted Actual NPC	\$ 224

### 1 Q. What are the main drivers of increased NPC in 2023?

- A. For 2023, the main drivers for increased NPC compared to Base NPC were increased market power prices, a coal supply shortage at the Company's Jim Bridger plant, and increased volumes of market purchases. Coal supply constraints cause the coal generation in Base NPC to be replaced by natural gas generation and market purchases.
- Q. Has the Company added resources for Washington customers since 2021 that
   reduced Washington's open (short) position?
- 9 A. Yes. PacifiCorp has added and continues to add renewable resources to its system that
  10 benefit Washington customers, and has reduced Washington's open position through
  11 the WIJAM in each year since 2021. Table 4 below shows the year-by-year reduction.

Table 4
WIJAM Open Position (MWh)

Year	Open Position
2021	(1,093,847)
2022	(948,614)
2023	(646,317)

## 1 Q. Can you provide examples of renewable resources that PacifiCorp will add to its

- 2 system?
- 3 A. Yes. As shown in Table 5, across 2024 and 2025, the Company is adding multiple
- 4 renewable resources to its system that will benefit Washington customers for a total of
- 5 1,864.5 MW of new system-wide capacity.

Table 5
New System Renewable Resources

Resource	Capacity (MW)
Anticline Wind	100.5
Boswell Springs Wind	320
Cedar Creek Wind	151.8
Cedar Springs Wind IV	350.4
Foote Creek II Wind	1.8
Hornshadow Solar	100
Hornshadow Solar II	200
Rock Creek I Wind	190
Rock Creek II Wind	400
Rock River I Wind	50
Total	1864.5

## 6 Q. Does the WIJAM provide Washington customers with power hedging benefits?

- 7 A. Yes. Through the WIJAM net position balancing, Washington customers receive the
- 8 full benefit of the Company's overall holistic system hedging approach. The \$/MWh

1		calculation used to fill the WIJAM open position is mostly comprised of hedges and
2		spot market power purchases conducted by the Company's Energy Supply
3		Management traders. This same percentage of hedges are therefore passed through to
4		Washington customers in the WIJAM open position and filled at the same prices as
5		the total-Company hedges, with the added benefit that these prices for Washington
6		customers are lower in the WIJAM than otherwise, due to the use of lower sales
7		prices as a first step in filling any open position, as described above.
8	Q.	Is it necessary for PacifiCorp to separately hedge for Washington customers?
9	A.	No. As explained above, the WIJAM passes through the full benefits of the
10		Company's total system hedging program and the WIJAM calculation for
11		Washington's open position is self-hedged and at a lower price than would be
12		otherwise incurred had PacifiCorp separately hedged for Washington outside of the
13		WIJAM.
14	Q.	Would Washington customers benefit if PacifiCorp were to separately hedge for
15		Washington's open position in the WIJAM?
16	A.	No. As described above, the WIJAM is self-hedging, and at a lower overall price.
17		Separately hedging for Washington customers outside of the WIJAM would increase
18		NPC. For 2023, Washington customers would pay an additional \$5.5 million in
19		WIJAM-allocated NPC.
20	Q.	Please explain the changes in wholesale sales revenue.
21	A.	Wholesale sales revenue increased by \$2 million relative to Base NPC because actual
22		wholesale market volumes were 34 gigawatt-hours (GWh), or 353 percent higher than
23		Base NPC, but the average price of actual wholesale sales market transactions

- 1 (represented in Aurora as short-term firm and system balancing sales) was
- 2 \$55.42/MWh, or 31 percent lower than Base NPC.

A.

## Q. Please explain the changes in purchased power expense.

Overall, actual purchased power expense increased \$70 million over Base NPC because the average price of actual market purchase transactions and actual market purchase volumes, represented in Aurora as short-term firm and system balancing purchases, increased, which were primarily a result of decreased coal generation volumes. Actual market purchase volumes increased by 283 GWh, or 30 percent compared to Base NPC, and the average price of actual market purchase transactions was \$102.14/MWh, or 82 percent higher than Base NPC.

It is also important to note for context, that the average monthly price of market transactions at the Mid-Columbia and Four Corners market hubs has risen significantly since 2021. Between 2016 and 2020, the average monthly Heavy Load Hour (HLH) market price at the Mid-Columbia market hub was \$29.27/MWh and \$35.11/MWh at the Four Corners market hub, while the average monthly HLH market price in 2023 was \$85.51/MWh and \$81.12/MWh respectively. Table 6 and Figure 1 illustrate the impact of these significant market price increases on 2023 NPC.

Table 6
Average HLH Mid-Columbia & Four Corners Market Price

Year	Mid-C HLH Average	Four-C HLH Average
2016-2020	\$29.27	\$35.11
2021	\$58.36	\$65.42
2022	\$92.75	\$102.59
2023	\$85.51	\$81.12

Average HLH Mid-Columbia & Four Corners Market Price \$300.00 \$250.00 \$200.00 \$150.00 \$100.00 \$50.00 \$0.00 Jul 2018 Oct 2019 Aug 2020 lan 2016 Apr 2017 Apr 2022 Sep 2022 Feb 2023 Dec 2023 un 2016 Jov 2016 Feb 2018 Dec 2018 Aay 2019 Jul 2023 Sep 2017 **Jar 2020** Jov 2021 lan 2021 un 2021 Mid-Columbia HLH Four Corners HLH

# Figure 1

#### Q. Please explain the changes in coal fuel expense.

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A.

As discussed in my testimony above, a coal supply shortage at the Jim Bridger plant occurred in early 2023. Due to the lower coal fuel availability, the Company had to adjust its overall system operations through increased natural gas resource output and increased purchased power. Total coal fuel expense decreased because coal generation volume was 401 GWh, or 22 percent lower than Base NPC. The coal supply shortage also increased the average cost of coal generation from \$25.68/MWh in Base NPC to \$32.17/MWh in the Deferral Period. Overall, the lower generation volume results in a decrease of \$1 million in coal fuel expense, but the coal supply limitation impacted other aspects of the Company's system operations and NPC in 2023.

#### Q. Please explain the changes in natural gas fuel expense.

With a reduction in coal generating resource output in 2023, the Company increased output at its natural gas generating resources as compared to previous years. Overall, the total natural gas fuel expense in Actual NPC increased by \$47 million compared to Base NPC due to an increase in natural gas generating volumes in the Deferral Period of 198 GWh, or 35 percent higher than Base NPC, and an increase in the

average cost of natural gas generation from \$43.03/MWh in Base NPC to \$44.20/MWh. Even with higher natural gas prices in 2023, Company-owned gasgenerating plants were still least-cost dispatch resources, on average, and more economic than market purchases.

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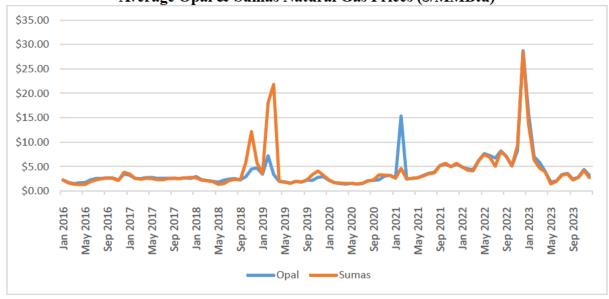
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Like the significant increase in the average price of market power purchases discussed above, average natural gas prices have also seen a significant increase as compared to 2016 through 2020. Table 7 and Figure 2 below illustrate these increases that impacted 2023 NPC.

Table 7
Average Opal & Sumas Natural Gas Prices (\$/MMBtu)

riverage oparea		(+/
Year	Opal Average	Sumas Average
2016-2020	\$2.51	\$3.19
2021	\$4.80	\$3.91
2022	\$8.27	\$8.09
2023	\$4.70	\$4.22

Figure 2
Average Opal & Sumas Natural Gas Prices (\$/MMBtu)



# 9 Q. Please describe how extreme weather events have impacted NPC.

10 A. Ongoing drought in the West, which began in the summer of 2020, has continued to

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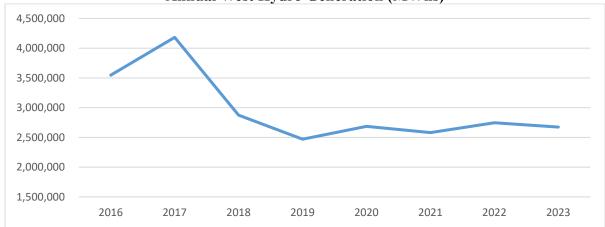
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impact Actual NPC because it reduced the availability of the Company's hydro
resources. In 2023, actual generation from the Company's hydro resources was 36
GWh, or 13 percent lower than forecasted generation in Base NPC and needed to be
replaced to meet customer demand.

The estimated impact of decreased hydro MWhs caused by drought on WIJAM NPC in 2023 is \$3.6 million. In the four years preceding the drought (2016-2019), average west total-Company hydro resource generation was 3.3 million MWhs while the average west total-Company hydro resource generation during the drought (2020-2023) was 2.7 million MWhs, a difference of 600 thousand MWhs, on average. Figure 3 below shows the decline over time.

Figure 3
Annual West Hydro Generation (MWhs)



Additionally, in December 2022, a historic winter cyclone event occurred across the majority of the United States, impacting both market prices and natural gas prices, along with an increase in demand. The impacts of this event on both natural gas prices across the Company's delivery points and market power purchase prices were not only significant and elevated, but also carried over into January 2023.

Table 8 and Table 9 below show the large variance between average January prices

and the remaining average prices over the rest of the year between February and

December at the Opal and Sumas natural gas hubs and at the Mid-Columbia and Four

Corners market purchase power hubs.

Table 8
Opal and Sumas Average Monthly Price (\$/MMBtu)

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Month	Opal	Sumas
Jan	\$15.85	\$13.58
Feb - Dec	\$3.68	\$3.37

Table 9
Mid-Columbia and Four Corners Average Monthly Price (\$/MWh)

Month	Mid-C HLH	Four-C HLH
Jan	\$146.06	\$152.35
Feb - Dec	\$80.01	\$74.64

#### **COAL SUPPLY CONTRAINTS**

- Q. Please describe the challenges the Company faced in fueling its Jim Bridger coal
   generating facility in 2023.
- A. Some Wyoming mines experienced significant production difficulties and challenges in 2023 due to geological, logistical, and financial challenges. In 2023, a major coal supplier to Jim Bridger, Lighthouse Resources' local Black Butte mine (Black Butte), operated under a *force majeure* declaration that resulted in significant delivery shortfalls of PacifiCorp's contracted coal supply.
  - Q. What did the Company do to acquire additional coal supply for 2023?
- A. PacifiCorp issued a request for proposals and procured coal from the North Antelope
  Rochelle Mine (NARM) in Wyoming's Powder River Basin for the first time for the
  Jim Bridger plant. Historically, Jim Bridger's coal has been supplied by the
  Company's captive Bridger Coal Company mine and the Black Butte mine.
- PacifiCorp's deliveries from Black Butte were 0.88 million tons or

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1		than contracted in 2023. The shortfall occurred due to Black Butte's
2		. Black
3		Butte declared <i>force majeure</i> in October 2023
4		2023, once the Black Butte delivery shortfall became apparent, PacifiCorp took steps
5		to mitigate the shortfall. First, dispatch of the Jim Bridger plant was adjusted to
6		account for the shortfall. Second, PacifiCorp contracted for the delivery of NARM
7		coal which also required PacifiCorp to lease railcars. PacifiCorp received 0.33 million
8		tons from NARM in 2023 to partially offset the reduction in Black Butte mine
9		deliveries.
10	Q.	How have the coal supply limitations impacted the Company's dispatch of its
11		coal generating resources?
12	A.	As a result of the <i>force majeure</i> declaration and resulting coal delivery shortfalls at
13		the Black Butte mine, the dispatch price of the Jim Bridger plant was adjusted for
14		three months in early 2023 to match the coal deliveries and assure system reliability
15		throughout 2023. In other words, the dispatch of plant was adjusted to ensure the
16		Company had sufficient coal to serve load during high-demand periods.
17		IMPACT OF PARTICIPATING IN THE WEIM
18	Q.	What is the CAISO Western Energy Imbalance Market?
19	A.	The CAISO WEIM is an advanced real-time energy market that automatically finds
20		low-cost energy to serve real-time consumer demand across the west by allowing
21		participants to buy and sell power close to the time electricity is consumed. Since its
22		launch in 2014, the WEIM has enhanced grid reliability, improved the integration of

1		renewable resources, lowered carbon emissions, and generated significant cost
2		savings for its participants.
3	Q.	Are the actual benefits from participating in the WEIM included in the PCAM
4		deferral?
5	A.	Yes. Participation in the WEIM provides significant benefits to customers in the form
6		of reduced Actual NPC. The benefits are embedded in Actual NPC through lower fuel
7		costs, lower purchased power costs, and higher wholesale sales revenue.
8	Q.	What are the actual WEIM benefits included in the PCAM deferral?
9	A.	CAISO's WEIM benefits report indicates that PacifiCorp received \$154 million in
10		benefits in 2023. Since inception of the WEIM, PacifiCorp has received \$746 million
11		in total benefits.
12		PTC TRACKER
13	Q.	What are PTCs?
14	A.	Renewable electricity PTCs are tax credits derived from the generation at certain
15		
		eligible company-owned facilities. For each kilowatt-hour of energy generated, the
16		eligible company-owned facilities. For each kilowatt-hour of energy generated, the Company receives a credit for a duration of 10 years beginning on the date when the
16 17		
		Company receives a credit for a duration of 10 years beginning on the date when the
17		Company receives a credit for a duration of 10 years beginning on the date when the facility became commercially operational. The credit is included as an offset to the
17 18	Q.	Company receives a credit for a duration of 10 years beginning on the date when the facility became commercially operational. The credit is included as an offset to the Company's federal income taxes and is credited to customers for rate-making
17 18 19	Q. A.	Company receives a credit for a duration of 10 years beginning on the date when the facility became commercially operational. The credit is included as an offset to the Company's federal income taxes and is credited to customers for rate-making purposes.
17 18 19 20		Company receives a credit for a duration of 10 years beginning on the date when the facility became commercially operational. The credit is included as an offset to the Company's federal income taxes and is credited to customers for rate-making purposes.  What is the PTC Tracker?

1		and Actual PTCs will receive separate accounting treatment and be trued-up on an
2		annual basis. The PTC Tracker will return or recover the variance in Base PTCs as
3		compared to Actual PTCs on an annual basis, consistent with the structure of the
4		PCAM.
5	Q.	Please summarize the Company's calculation of the PTC Tracker for the
6		Deferral Period.
7	A.	For the Deferral Period, the cumulative PTC variance was a \$1.1 million charge.
8		Including interest, the total PTC recovery for the Deferral Period is \$1.2 million. In
9		the Company's limited-issue rate case, Docket No. UE-210532, the Parties agreed
10		that a one-time refund be issued to customers to update for the delayed in-service
11		dates for these plants, but did not address the variance to the related PTCs at that
12		time, because the PTC Tracker existed and was intended to address these
13		discrepancies. A summary of the PTC Tracker calculation is shown in Table 10.
14	Q.	Have you provided detailed support for the calculation of the PTC balance with
15		your testimony?
16	A.	Yes. Exhibit No. JP-3 includes a detailed calculation of the Company's 2023 PTC
17		deferral on a monthly basis. Detailed confidential workpapers supporting Exhibit No

JP-3 are provided separately.

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Table 10 Summary of PTC Tracker Deferral

Calendar Year 2023 PTC Tracker	
Actual PTCs (\$/MWh) Base PTCs (\$/MWh) PTC Differential (\$/MWh)	\$ 4.59 4.87 (0.28)
Washington Sales (MWh)	3,850,048
Total PTC Differential*	\$ 1,076,140
Interest Accrued through December 31, 2023	22,985
Interest Accrued January 1, 2024 through September 30, 2024	72,088
Requested PTC Recovery	\$ 1,171,212
* Calculated monthly	

1 CONCLUSION

- 2 Q. Please summarize your testimony.
- 3 A. The PCAM deferral of \$81.0 million, including interest for the calendar year 2023
- 4 Deferral Period, was accurately calculated in compliance with the PCAM tariff and
- 5 previous Commission orders. The increase is driven by both higher market prices and
- 6 natural gas prices, a coal supply limitation, and extreme weather events.
- 7 Q. Does this conclude your direct testimony?
- 8 A. Yes.