PACIFIC POWER
A DIVISION OF PACIFICORP

825 NE Multnomah, Suite 2000
Portland, Oregon 97232

May 15, 2020

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street SE, Suite 100
Salem, OR 97301-3398

RE: UE 379—PacifiCorp's 2019 Power Cost Adjustment Mechanism

PacifiCorp d/b/a Pacific Power (PacifiCorp or Company) encloses for electronic filing its 2019 Power Cost Adjustment Mechanism (PCAM) filing.

In Order No. 12-493, the Public Utility Commission of Oregon (Commission) approved a PCAM to allow PacifiCorp to recover the difference between actual net power costs (NPC) incurred to serve customers and the base NPC established in PacifiCorp's annual transition adjustment mechanism (TAM) filing. The amount recovered from or refunded to customers for a given year is subject to the following parameters:

- Asymmetrical Deadband. Any variance between negative $15 million and positive $30 million will be absorbed by the Company.
- Sharing Band. Any variance above or below the deadband will be shared 90 percent by customers and 10 percent by the Company.
- Earnings Test. If PacifiCorp's earned return on equity (ROE) is within plus or minus 100 basis points of the allowed ROE, there will be no recovery from or refund to customers.
- Amortization Cap. The amortization of deferred amounts are capped at six percent of the revenue for the preceding calendar year.

On an Oregon-allocated basis, actual PCAM costs were $45.1 million more than base PCAM costs established in the 2019 TAM (docket UE 339). While the amounts exceed the established deadband by $15.1 million, PacifiCorp's earned ROE for 2019 is 9.34 percent which is within 100 basis points of PacifiCorp's authorized ROE of 9.8 percent. Therefore PacifiCorp is not requesting a rate change. Because Schedule 206, Power Cost Adjustment Mechanism – Adjustment, is currently set at zero cents per kilowatt hour for all schedules, no tariff change is required at this time.

In compliance with Order No. 17-524, PacifiCorp includes supporting direct testimony of David G. Webb that includes a discussion of any unusual expenses incurred over the course of the 2019 PCAM year and large deviations of actual NPC from forecasted NPC. A differential worksheet indicating actual minus base power costs for each separate cost category in the PCAM on a gross cost and per megawatt-hour unit basis is included in the confidential workpapers accompanying this filing.

Confidential material supporting this filing is provided under Order No. 20-162.

PacifiCorp respectfully requests that all communications related to this filing be addressed to:

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Ajay Kumar
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Additionally, PacifiCorp requests that all formal information requests regarding this matter be addressed to:

By email (preferred): datarequest@pacificorp.com

By regular mail: Data Request Response Center
PacifiCorp
825 NE Multnomah, Suite 2000
Portland, OR 97232

Informal inquiries may be directed to Cathie Allen at (503) 813-5934.

Sincerely,

Michael Wilding
Director of Net Power Costs and Regulation

cc: Service List UE 374
Service List UE 361

CERTIFICATE OF SERVICE

I certify that I delivered a true and correct copy of PacifiCorp's **2019 Power Cost Adjustment Mechanism** on the parties listed below via electronic mail in compliance with OAR 860-001-0180.

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Dated this 15th day of May, 2020.

Katie Savarin

Katie Savarin
Coordinator, Regulatory Operations

CERTIFICATE OF SERVICE

I certify that I served a true and correct copy of PacifiCorp's **2019 Power Cost Adjustment Mechanism** on the parties listed below via electronic mail in compliance with OAR 860-001-0180.

Service List
UE 361

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Dated May 15, 2020.

Katie Savarin

Katie Savarin
Coordinator, Regulatory Operations

Docket No. UE 379
Exhibit PAC/100
Witness: David G. Webb

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

PACIFICORP

Direct Testimony of David G. Webb

May 2020

DIRECT TESTIMONY OF DAVID G. WEBB

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ATTACHED EXHIBITS

Exhibit PAC/101—2019 PCAM Calculation

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

A. My name is David G. Webb and my business address is 825 NE Multnomah Street, Suite 600, Portland, Oregon 97232. My title is Manager, Net Power Costs.

I. QUALIFICATIONS

Q. Briefly describe your education and professional experience.

A. I received a Master of Accountancy degree from Southern Utah University in 1999 and a Bachelor of Science degree in Business Management from Brigham Young University in 1994. I am a Certified Public Accountant licensed in the state of Nevada. I have been employed by PacifiCorp since 2005 and have held various positions in the regulation, finance, fuels, and mining departments. I assumed my current role managing the regulatory net power cost group in 2019.

Q. Have you testified in previous regulatory proceedings?

A. Yes. I have previously provided testimony to the public utility commissions in Utah, Wyoming, Idaho, and Oregon.

II. PURPOSE OF TESTIMONY

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

A. My testimony presents and supports PacifiCorp's calculation of the Power Cost Adjustment Mechanism (PCAM) costs for the 12-month period of January 1, 2019, through December 31, 2019 (Deferral Period). More specifically, I provide the following:

- Background on the PCAM and an accounting of how the PCAM balance was calculated for the Deferral Period;

- Discussion of the main differences between adjusted actual net power costs (Actual NPC) and net power costs in rates (Base NPC); and,
- Discussion about PacifiCorp's participation in the energy imbalance market (EIM) with the California Independent System Operator (CAISO) and the benefits from EIM that are passed through to customers.

Q. Are additional witnesses presenting testimony specifically for the PCAM and Rate Schedule 206 in this case?

A. No.

III. SUMMARY OF THE PCAM DEFERRAL CALCULATION

Q. Please briefly describe PacifiCorp's PCAM authorized by the Public Utility Commission of Oregon (Commission).

A. Commission Order No. 12-493 approved a PCAM to allow PacifiCorp to recover the difference between actual PCAM costs incurred to serve customers and the base PCAM costs established in PacifiCorp's annual transition adjustment mechanism (TAM) filing.[1] PCAM costs include NPC, non-NPC EIM costs, other revenues, and Production Tax Credits (PTC).

Q. Please summarize the calculation of the PCAM deferral included in this filing.

A. For the Deferral Period, on an Oregon-allocated basis, actual PCAM costs are $45.1 million more than base PCAM costs established in docket UE 339 (2019 TAM). The application of the earnings test results in no recovery through the 2019 PCAM.

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[1] *In the Matter of PacifiCorp, dba Pacific Power, Request for a General Rate Case*, Docket No. UE 246, Order No. 12-493 (Dec. 20, 2012) (Order No. 12-493).

Q. Have you provided detailed support for the calculation of the PCAM balance with your testimony?

A. Yes. Exhibit PAC/101 is a summary of the calculation of PacifiCorp's 2019 PCAM deferral on a monthly basis. Detailed workpapers supporting Exhibit PAC/101 are provided separately.[2]

IV. PCAM DEFERRAL CALCULATION

Q. Please describe the calculation of the PCAM deferral included in this filing.

A. The PCAM deferral is calculated on a monthly basis by comparing actual PCAM costs to base PCAM on a per-unit basis. The amount recovered from or refunded to customers for a given year is subject to the following parameters:

- Asymmetrical Deadband: Any PCAM difference between negative $15 million and positive $30 million will be absorbed by the Company.
- Sharing Band: Any PCAM difference above or below the deadband will be shared 90 percent by customers and 10 percent by PacifiCorp.
- Earnings Test: If PacifiCorp's earned return on equity (ROE) is within plus or minus 100 basis points of the authorized ROE, there will be no recovery from or refund to customers.
- Amortization Cap: The amortization of deferred amounts are capped at six percent of the revenue for the preceding calendar year.

For the Deferral Period the earned ROE was 9.34 percent which was within 100 basis points of the 9.8 percent authorized ROE. Therefore, PacifiCorp is not

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[2] Confidential workpapers are provided to the Commission under OAR 860-01-0070.

allowed to request a rate change to Schedule 206. A summary of the deferral calculation is shown in Table 1.

Table 1
Summary of PCAM Account Balance

Calendar Year 2019 PCAM Deferral		
Actual PCAM Costs ($/MWh)	$	29.16
Base PCAM Costs ($/MWh)		25.72
PCAM Cost Differential ($/MWh)		3.43
Oregon Retail Load (MWh)		13,088,664
PCAM Differential*	$	45,125,103
Situs Resource True-Up*		16,958
Total PCAM Differential*		45,142,061
Total Deferrable ABOVE Deadband		15,142,061
Total Deferrable BELOW Deadband		-
Oregon Deferral at 90% Sharing		13,627,855
Oregon Deferral at 90% Sharing after Earning Test		-
Interest Accrued through December 31, 2019		-
Requested PCAM Recovery	**$**	**-**

* *Calculated monthly*

Q. How is the PCAM differential calculated on a monthly basis?

A. As previously noted, on a monthly basis, actual PCAM costs are compared to base PCAM on a per-unit basis. PCAM costs are established in the Oregon TAM and include NPC, EIM costs, Other Revenues, and PTCs. EIM benefits are included in NPC. Any differences in the system per-unit cost are multiplied by the actual megawatt hours of Oregon retail sales in that month to determine Oregon's share of any differential. The calculation uses the following formula:

$$(PCAMC_a \div Load_a) - (PCAMC_b \div Load_b) = \text{System PCAM Unit Cost Differential}$$

$$\text{System PCAM Unit Cost Differential} \times Load_o + (SR_a - SR_b) = \text{PCAM Differential}$$

Where:

$PCAMC_a$	= Total Company Adjusted Actual NPC (Excluding Situs Resources) plus other costs/benefits reflected in Oregon TAM
$Load_a$	= Actual System Retail Load
$PCAMC_b$	= Total Company Base NPC (Excluding Situs Resources) adjusted for Direct Access plus other costs/benefits reflected in Oregon TAM
$Load_b$	= Base System Retail Load
$Load_o$	= Actual Oregon Retail Load
SR_a	= Actual Situs Resource Value
SR_b	= Forecasted Situs Resource Value

The cumulative PCAM differential (under- or over-recovery) is first compared against the asymmetrical deadband. Cumulative PCAM differential amounts in excess of the asymmetrical deadband are then subject to the sharing band (90 percent customers, 10 percent Company). Monthly balances accrue interest at PacifiCorp's authorized rate of return in Oregon for 2019. The final step is to apply, if necessary, the earnings test to determine if any amount is eligible for recovery from or refund to customers. To the extent earnings are within plus or minus 100 basis points of the authorized ROE, no recovery or refund is allowed under the approved PCAM design.

Q. What were total-company adjusted Actual NPC for the Deferral Period and how were they determined?

A. The total-company adjusted Actual NPC in the Deferral Period were approximately $1.656 billion. This amount captures all components of NPC as modeled by PacifiCorp's Generation and Regulation Initiative Decision Tool (GRID) model in the Company's annual TAM filings. Specifically, it includes amounts booked to the following Federal Energy Regulatory Commission accounts:

Account 447 – Sales for resale, excluding on-system wholesale sales and other revenues that are not modeled in GRID

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 GRID

Account 503 – Steam from other sources

Account 547 – Fuel, other generation

Account 555 – Purchased power, excluding the Bonneville Power Administration residential exchange credit pass-through if applicable

Account 565 – Transmission of electricity by others.

Q. What adjustments are made to Actual NPC and why are they needed?

A. PacifiCorp adjusts Actual NPC to reflect the ratemaking treatment of several items, including:

- out of period accounting entries booked in the Deferral Period that relate to operations before implementation of the PCAM on January 1, 2013;
- buy-through of economic curtailment by interruptible industrial customers;
- revenue from a contract related to the Leaning Juniper wind resource;
- situs assignment of the generation from Oregon solar resources procured to satisfy Oregon Revised Statute 757.370 solar capacity standard;
- situs assignment of Oregon allocated excess amortization related to a prepaid wheeling expense;

- situs assignment of certain Utah resources;
- avian curtailment at specific wind farms;
- the exclusion of Rolling Hills wind farm from Oregon rates (consistent with docket UE 200);
- coal inventory adjustments to reflect coal costs in the correct period;
- reductions to coal costs for management overtime, 50 percent of management incentive compensation, and legal fees related to fines and citations; and,
- adjustments related to liquidated damages that occurred outside the Deferral Period (all liquidated damage fees per a coal supply agreement are booked in accordance with generally accepted accounting principles).

Q. Please summarize the calculation of the Actual Non-NPC EIM Costs.

A. Non-NPC EIM costs are trued-up as part of the PCAM costs. These EIM costs include ongoing operations and maintenance expense and depreciation expense; the return on rate base is not included in the true-up per the 2016 PCAM Order.[3] Actual non-NPC EIM costs were $1.3 million lower than the EIM costs included in the 2019 TAM on a total-company basis. As described in more detail later on in my testimony, the EIM provides benefits to customers in the form of reduced Actual NPC.

Q. Please summarize the calculation of Other Revenues.

A. Other Revenues, or Oregon Schedule 205, that are forecasted in the TAM are also included in the PCAM. On a total-company basis, actual Other Revenues were

[3] Order No. 17-524.

$1.9 million lower than Other Revenues in the 2019 TAM.

Q. Please summarize the Direct Access load included in the PCAM.

A. Each year Base NPC is set in the TAM. After Base NPC is determined certain customers have the option to move to Direct Access (DA) and purchase energy from an Electricity Service Provider. In the PCAM, Base NPC is adjusted for the lost DA load.

Q. Please summarize the PTCs included in the PCAM.

A. PTCs forecasted in the TAM are also included in the PCAM. In the 2019 TAM, PTC benefits were calculated using PacifiCorp's combined federal and state income tax rate that was effective in 2018. On a total-company basis, actual PTCs were $1.3 million lower than PTCs in the 2019 TAM due to generation variances.

Q. Please describe the true-up of certain Oregon situs resources included in the PCAM.

A. The PCAM includes a true-up of the value of energy from solar facilities procured to satisfy the solar capacity standard in Oregon Revised Statute 757.370. Consistent with the Commission-approved 2017 Inter-Jurisdictional Allocation Protocol, these resources are situs-assigned to Oregon. Base NPC established in the TAM includes a situs credit for the market value of the solar energy. In the PCAM, the actual market value of the solar energy is compared to the prior forecast, and the difference is included in the balancing account. This treatment is necessary to ensure 100 percent of the energy benefits are assigned to Oregon customers, rather than allocated system-wide.

The PCAM also includes a true-up for the amortization of a prepaid wheeling expense. The amortization of Mead-Phoenix wheeling expense was updated to reflect the Cholla Unit 4 Oregon depreciation schedule. Therefore, the incremental increase in amortization expense associated with Mead-Phoenix is situs-assigned to Oregon.

Q. Is PacifiCorp requesting a rate change with this filing?

A. As described earlier, on an Oregon-allocated basis, actual PCAM costs were $45.1 million higher than base PCAM costs, which is above the $30 million asymmetrical positive deadband, but the earned ROE was within 100 basis points of the authorized ROE. Therefore, the 2019 PCAM does not pass the earnings test for recovery. Accordingly, no recovery from or refund to customers is necessary. Because Schedule 206, the Power Cost Adjustment Mechanism, is currently set at zero cents per kilowatt-hour for all schedules, no tariff change is required at this time.

V. SUMMARY OF THE NPC DIFFERENCES

Q. Please describe the Base NPC PacifiCorp used to calculate the NPC component of the PCAM deferral.

A. The Base NPC for the 2019 PCAM was set in Order No. 18-421 in docket UE 339. Base rates became effective January 1, 2019.

Q. Please describe Table 2 and the line items making up the difference between Actual NPC and Base NPC.

A. Table 2 displays the Base NPC approved by the Commission for the Deferral Period. The remainder of Table 2 is a breakout of the difference between Actual NPC and Base NPC, by cost category, on a total-company basis. The differences by category in Table 2 result from comparing Actual NPC to the Base NPC effective during the Deferral Period.

Table 2
Net Power Cost Reconciliation ($millions)

Base NPC	$	1,452
Increase/(Decrease) to NPC:		
Wholesale Sales Revenue		309
Purchased Power Expense		(54)
Coal Fuel Expense		(46)
Natural Gas Expense		(16)
Wheeling, Hydro and Other Expense		11
Total Increase/(Decrease)		203
Adjusted Actual NPC	$	1,656

Q. Please describe the differences between Actual NPC and Base NPC.

A. Actual NPC were $203 million higher than Base NPC due to a $309 million decrease in wholesale sales revenues and an $11 million increase in wheeling and other expenses. The reduction in wholesale sales revenue was partially offset by a $46 million reduction in coal fuel expense, a $16 million reduction in natural gas expense, and a $54 million reduction in purchased power expenses.

Q. Please explain the changes in wholesale sales revenue.

A. Wholesale sales revenue declined relative to Base NPC due to a reduction in wholesale sales volume of market transactions (represented in PacifiCorp's production model (GRID) as short-term firm and system balancing sales). Revenue from market transactions was approximately $309 million lower than Base NPC and the average price of actual market sales transactions was $2.95/megawatt-hour (MWh), or 10 percent, higher than average price in Base NPC. Actual wholesale market volumes were 10,624 gigawatt-hour (GWh), or 68 percent, lower than Base NPC.

Q. Please explain the changes in coal fuel expense.

A. Coal fuel expense decreased because coal generation volume decreased 1,105 GWh, or three percent, compared to Base NPC. The average cost of coal generation also decreased from $20.86/MWh in Base NPC to $20.19/MWh in the Deferral Period.

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

A. The total natural gas fuel expense in Actual NPC decreased by $16 million compared to Base NPC mainly due to a decrease in natural gas generation volume of 3,169 GWh, or 21 percent lower than Base NPC during the Deferral Period.

Q. Please provide an update of the Enbridge natural gas pipeline rupture and its impact on Company operations and costs.

A. On October 9, 2018, the Enbridge natural gas pipeline that transports natural gas produced in the Western Canadian Sedimentary Basin to consumers in British Columbia (B.C.) and, through interconnecting pipelines, the Northwestern United States (U.S.), experienced a massive rupture. The pipeline was brought back into service in late October 2018, however, at a reduced capacity until testing of the many segments of the pipeline were completed. Spot natural gas prices at the Sumas B.C.-U.S. border trading point traded as high as $159 per million British thermal units on days of intense demand due to cold weather and reduced natural gas supply in the first quarter of 2019.

The pipeline rupture and reduced operating capacity impacted electricity prices primarily at the Mid-Columbia power market hub, but also increased electricity prices at other trading points where PacifiCorp transacts. Because of PacifiCorp's geographical and resource diversity, the impact to the Company was not as severe as other utilities and power producers that have a high reliance on Sumas natural gas supplies. PacifiCorp has one natural gas-fired generator—the Chehalis plant—that is sourced from the Sumas natural gas hub. Due to the pipeline rupture, there were times of limited availability of natural gas flowing to the Sumas gas hub and limited ability to withdraw out of storage facilities at Jackson Prairie. With the inability to run Chehalis due to limited gas availability and supplies, plus the impact of uneconomical market conditions, the result contributed to higher prices at Mid-Columbia ultimately increasing NPC.

VI. IMPACT OF PARTICIPATING IN THE EIM

Q. Are the actual benefits from participating in the EIM with CAISO included in the PCAM deferral?

A. Yes. Participation in the EIM provides benefits to customers in the form of reduced Actual NPC. The EIM benefits are embedded in Actual NPC through lower fuel and purchased power costs. The Company is able to calculate the margin realized on its EIM imports and exports, the inter-regional benefit. The Company's EIM inter-regional benefit for the deferral period was approximately $57.2 million.

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

A. Using actual information from the EIM, including five- and 15-minute pricing, the Company identifies the incremental resource that could have facilitated the transfer to an adjacent EIM area or the CAISO in each five-minute interval. The benefit is then calculated as the difference between the revenue received less the expense of generation assumed to supply the transfer. In the event of an import, the benefit is equal to the cost of the import minus the avoided expense of the generation that would have otherwise been dispatched.

Q. Does this conclude your direct testimony?

A. Yes.

Docket No. UE 379
Exhibit PAC/101
Witness: David G. Webb

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

PACIFICORP

Exhibit Accompanying Direct Testimony of David G. Webb

2019 PCAM Calculation

May 2020

Oregon Power Cost Adjustment Mechanism
January 1, 2019 - December 31, 2019
Exhibit/PAC 101 - Power Cost Adjustment Mechanism Calculation

Line No.		Reference	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Actual:															
1	Total Company Adjusted Actual NPC	(2.1)	$ 131,540,281	$ 165,154,527	$ 136,294,942	$ 107,602,901	$ 112,620,252	$ 124,164,655	$ 167,860,313	$ 177,632,068	$ 152,222,400	$ 126,774,673	$ 124,909,292	$ 129,351,204	$ 1,656,127,508
2	Actual Allocated PTC	(4.1)	(3,487,444)	(2,951,365)	(1,816,786)	(2,536,684)	(1,780,817)	(1,345,285)	(1,073,516)	(1,161,531)	(2,294,136)	(5,116,609)	(5,175,044)	(7,474,271)	(36,213,490)
3	Actual EIM Costs	(5.1)	223,975	223,975	223,975	223,975	223,975	223,975	223,975	223,975	223,975	223,975	223,975	223,975	2,687,695
4	Actual Other Revenues	(6.1)	(761,558)	(637,191)	(635,506)	(1,084,085)	(877,447)	(1,028,624)	(989,101)	(855,439)	(930,079)	(922,779)	(640,797)	(696,289)	(10,058,895)
5	Total PCAM Adjusted Actual Costs	Sum Lines 1 - 4	127,515,254	161,789,945	134,066,625	104,206,106	110,185,962	122,014,720	166,021,670	175,839,073	149,222,159	120,959,259	119,317,425	121,404,618	1,612,542,818
6	Actual System Retail Load	(8.1)	4,799,736	4,474,747	4,479,477	4,083,700	4,234,177	4,582,946	5,288,590	5,153,136	4,404,692	4,431,700	4,434,088	4,936,316	55,303,306
7	Actual PCAM Costs $/MWH	Line 5 / Line 6	$ 26.57	$ 36.16	$ 29.93	$ 25.52	$ 26.02	$ 26.62	$ 31.39	$ 34.12	$ 33.88	$ 27.29	$ 26.91	$ 24.59	$ 29.16
Base:															
8	Total Company Base NPC	(3.1)	$ 124,011,813	$ 115,143,234	$ 120,747,988	$ 107,182,649	$ 113,237,311	$ 120,861,832	$ 152,621,725	$ 143,627,146	$ 112,462,222	$ 108,902,959	$ 111,519,174	$ 121,770,203	$ 1,452,088,256
9	Adjustment for Direct Access	(3.3)	(1,215,147)	(1,125,682)	(934,060)	(588,545)	(321,443)	(688,170)	(1,387,038)	(1,335,521)	(827,099)	(734,577)	(697,591)	(669,223)	(10,524,095)
10	Base Allocated PTC	(2.2)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(3,122,145)	(37,465,734)
11	Base EIM Costs	(3.4)	232,182	232,182	232,182	232,182	232,182	232,182	232,182	232,182	232,182	232,182	232,182	232,182	2,786,190
12	Base Other Revenues	(6.2)	(997,601)	(997,601)	(997,601)	(997,601)	(997,601)	(997,601)	(997,601)	(997,601)	(997,601)	(997,601)	(997,601)	(997,601)	(11,971,208)
13	Total PCAM Base Costs	Sum Lines 8 - 12	118,909,103	110,129,989	115,926,365	102,706,542	109,028,305	116,286,100	147,347,124	138,404,062	107,747,561	104,280,820	106,934,020	117,213,417	1,394,913,409
14	Base System Retail Load	(8.1)	4,851,164	4,220,608	4,377,254	4,113,656	4,295,331	4,473,053	5,148,822	4,931,687	4,319,834	4,253,283	4,378,320	4,861,392	54,224,405
15	Base PCAM Costs $/MWh	Line 8 / Line 14	$ 24.51	$ 26.09	$ 26.48	$ 24.97	$ 25.38	$ 26.00	$ 28.62	$ 28.06	$ 24.94	$ 24.52	$ 24.42	$ 24.11	$ 25.72
16	System PCAM Unit Cost Differential $/MWh	Line 7 - Line 15	$ 2.06	$ 10.06	$ 3.45	$ 0.55	$ 0.64	$ 0.63	$ 2.77	$ 6.06	$ 8.94	$ 2.78	$ 2.49	$ 0.48	$ 3.43
17	Oregon Retail Load	(8.1)	1,205,721	1,191,205	1,128,880	958,561	966,202	993,709	1,098,239	1,142,671	979,445	1,053,953	1,102,892	1,267,185	13,088,664
Deferral:															
18	Monthly PCAM Differential - Above or (Below) Base	Line 16 * Line 17	$ 2,478,580	$ 11,986,891	$ 3,889,291	$ 527,549	$ 618,380	$ 622,671	$ 3,047,382	$ 6,922,857	$ 8,751,815	$ 2,926,172	$ 2,741,345	$ 612,170	$ 45,125,103
19	Oregon Situs Resource True-Up	(7.1)	14,200	(29,408)	(71,229)	(10,465)	1,295	6,077	41,785	54,723	11,303	616	689	(2,626)	16,958
20	Total Monthly PCAM Differential - Above or (Below) Base	Line 18 + Line 19	2,492,780	11,957,482	3,818,062	517,084	619,675	628,748	3,089,167	6,977,580	8,763,118	2,926,788	2,742,035	609,544	45,142,061
21	Cumulative PCAM Differential - Above or (Below) base		2,492,780	14,450,262	18,268,324	18,785,408	19,405,083	20,033,831	23,122,997	30,100,577	38,863,695	41,790,483	44,532,517	45,142,061	
22	Positive Deadband - ABOVE Base	Order. 12-493	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000	30,000,000
23	Negative Deadband - BELOW Base	Order. 12-493	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)	(15,000,000)
24	Amount Deferrable - ABOVE Deadband		-	-	-	-	-	-	-	100,577	8,763,118	2,926,788	2,742,035	609,544	15,142,061
25	Amount Deferrable - BELOW Deadband		-	-	-	-	-	-	-	-	-	-	-	-	-
26	Total Incremental Deferrable	Line 24 + Line 25	-	-	-	-	-	-	-	100,577	8,763,118	2,926,788	2,742,035	609,544	15,142,061
27	Total Incremental Deferral After 90%/10% Sharing Band	Line 26 * 90%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 90,519	$ 7,886,806	$ 2,634,109	$ 2,467,831	$ 548,590	$ 13,627,855
Energy Balancing Account:															
28	Monthly Interest Rate	Note 1	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	0.64%	
29	Beginning Balance	Prior Month Line 32	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 90,807	$ 8,003,233	$ 10,696,534	$ 13,240,133	$ -
30	Incremental Deferral	Line 27	-	-	-	-	-	-	-	90,519	7,886,806	2,634,109	2,467,831	548,590	13,627,855
31	Interest	Line 28 * (Line 29 + 50% x Line 30)	-	-	-	-	-	-	-	287	25,621	59,192	75,768	85,828	246,696
32	Ending Balance	∑ Lines 29:31	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 90,807	$ 8,003,233	$ 10,696,534	$ 13,240,133	$ 13,874,551	$ 13,874,551
Earnings Test:															
33	Earned Return on Equity	(9.1)													9.34%
34	Allowed Return on Equity	UE 246													9.80%
35	100bp ROE Revenue Requirement														$ 23,833,022
36	Allowed Deferral After Earning Test														-
37	Total Deferred														$ -

Notes:

Note 1: 7.621% annual interest rate based on Oregon approved rate of return