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April 13, 2018

#### VIA ELECTRONIC FILING

Public Utility Commission of Oregon Filing Center P.O. Box 1088 201 High Street SE, Suite 100 Salem, Oregon 97301

Re: Docket No. UE 336 – Idaho Power Company's 2017 Annual Power Supply Expense True-Up

Attention Filing Center:

Attached for filing in the above-referenced docket is an electronic copy of Idaho Power Company's Supplemental Direct Testimony of Courtney Waites.

Please contact this office with any questions.

Sincerely,

Alisha Till Legal Assistant

Attachment

Idaho Power/200 Witness: Courtney Waites

# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

**DOCKET NO. UE 336** 

In the Matter of the Application of IDAHO POWER COMPANY for Amortization in Rates of the Power Cost Adjustment Mechanism and Intervenor Funding Amounts.

2017 ANNUAL POWER SUPPLY EXPENSE TRUE-UP

IDAHO POWER COMPANY
SUPPLEMENTAL DIRECT TESTIMONY
OF
COURTNEY WAITES

April 13, 2018

- 1 Q. Please state your name and business address.
- A. My name is Courtney Waites. My business address is 1221 West Idaho Street, Boise,
   Idaho 83702.
  - Q. Are you the same Courtney Waites that previously filed direct testimony in this matter?
- 6 A. Yes.

- 7 | Q. What is the scope and purpose of your supplemental direct testimony?
  - A. My supplemental direct testimony will revise the calculation of the Annual Power Supply Expense True-up with use of the 2017 Oregon Results of Operations ("ROO") report to determine the deferral deadbands and the Oregon allocation percentage. However, as I will show later in my testimony, neither of these revisions will change the zero deferral amount Idaho Power Company ("Idaho Power" or "Company") previously proposed be added to the Annual Power Supply Expense True-Up Balancing Account ("True-Up Balancing Account"). With this testimony, I am also filing revised Exhibit Nos. 201, 202, 203, and 204.
  - Q. Please explain the revision to the calculation of the Annual Power Supply Expense True-Up you are making.
  - A. Order No. 09-373 clarifies which year's ROO should be relied upon in calculating the deferral deadbands and the Earnings Test components of the Power Cost Adjustment Mechanism ("PCAM"). As directed in Order No. 09-373, Idaho Power's initial February filing included the quantification of the dollar balance proposed to be added to the True-Up Balancing Account based on the 2016 ROO. The results represented a preliminary estimate at the time, with this final determination being filed now that the 2017 ROO has been completed.
  - Q. What are the power supply expense deadbands based on the 2017 ROO?

- A. Using the Company's authorized Return on Equity in effect in 2017 and the Company's 2017 Oregon rate base of \$142,328,822, the Upper Deadband of 250 basis points equals \$3,118,896 and the Lower Band of 125 Basis Points equals a negative \$1,559,448 (please see Exhibit No. 202).
  - Q. Does the use of the 2017 ROO impact any other areas of the initial filing?
  - A. Yes. In addition to changing the deadbands, the 2017 ROO computes the Oregon allocation percentage used to calculate Oregon's share of the excess net power supply expenses and customer benefits from the sale of Renewable Energy Credits ("REC"). Exhibit No. 201, the Oregon PCAM quantification for 2017, reflects the revised deadbands and the revised Oregon allocation percentage. In addition, using the Oregon allocation percentage of 4.64 percent from the 2017 ROO slightly decreases the total customer benefit of REC sales to \$102,552 (please see Exhibit No. 203).
  - Q. How do the supplemental computations you describe above impact the amount you proposed be added to the True-up Balancing Account?
  - A. Applying the updated Oregon allocation percentage of 4.64 percent to the power cost deviation creates an Oregon Allocated Power Cost Deviation of \$391,353.64 which is less than the Upper Deadband of \$3,118,896. Therefore, the dollar amount associated with the Annual Power Supply Expense True-Up to be considered to add to the True-Up Balancing Account is zero; however, the total customer benefit of REC sales will be added to the True-Up Balancing Account, slightly reducing the amount proposed to \$102,552.
  - Q. In your initial filing, an Earnings Test was not performed because the Company was not proposing any deferral amounts be added to the True-Up Balancing Account. Does the use of the 2017 ROO change the need for an Earnings Test?

A. No. Using the 2017 ROO still results in a zero deferral amount to be added to the
 True-Up Balancing Account and therefore does not require an Earnings Test to be
 performed.

# Q. Will the change in the amount proposed to be added to the True-up Balancing Account affect the proposed Schedule 56 rate?

A. No. The 2017 ROO does not impact the updated level of amortization collection associated with intervenor funding amounts initially proposed by the Company and the slight change in the total customer benefit of the REC sales was not enough to change the proposed Schedule 56 rate. The updated detailed calculations of the rate impact can be found in Exhibit 204. Table 1 summarizes the impact on the rates associated with Idaho Power's proposal.

Table 1

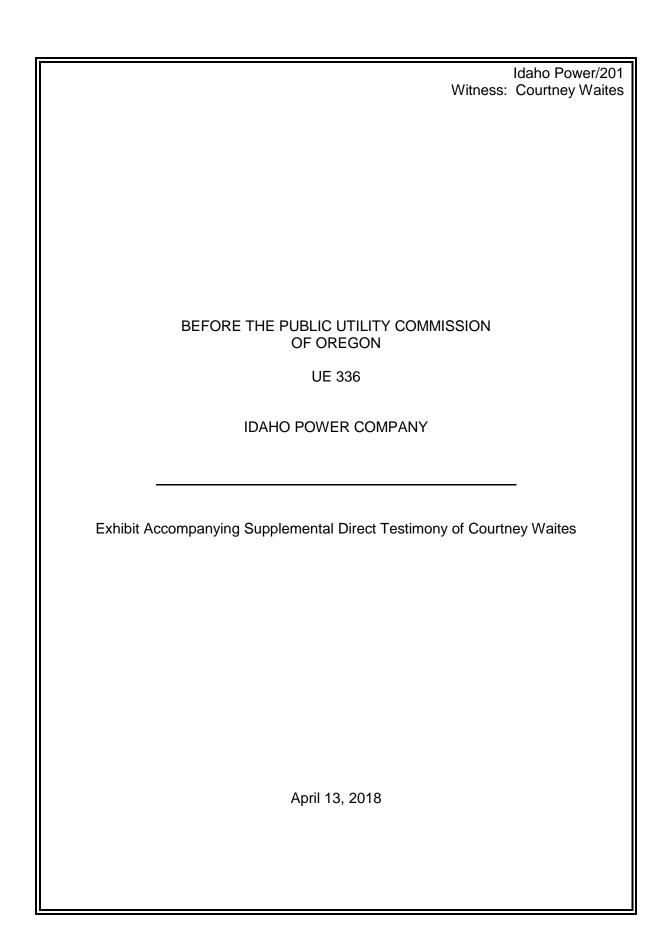
Customer Class	Current (cents per kWh)	Proposed (cents per kWh)
Residential service	0.0567	0.0002
All other	(0.0017)	(0.0001)

#### Q. Has Idaho Power updated Schedule 56 with the proposed rates?

A. Yes. Idaho Power is filing a proposed Schedule 56 reflecting the rates above concurrently as Advice No. 18-05.

#### Q. Does this conclude your testimony?

A. Yes, it does.

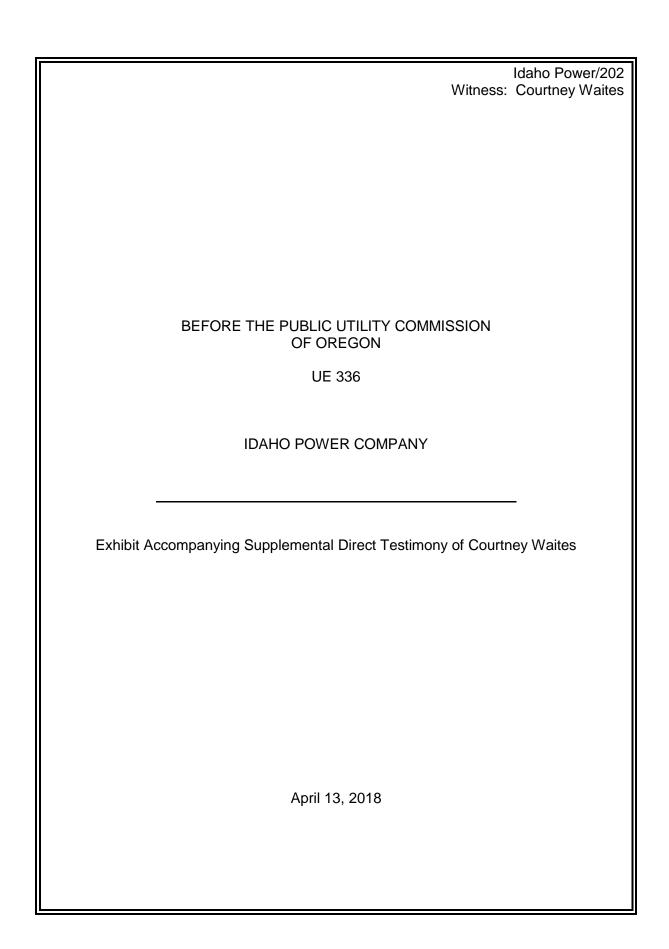


2017 PCAM Twelve Months Ended December 31, 2017

OREGON PCAM (Schedule 56)		January	January YTD	February	February YTD	March	March YTD	April	April YTD	Mav	May YTD	June	June YTD	July	July YTD	August
ACTUAL POWER COSTS										<u>,</u>						
Actual NPSE Costs																
Actual Sales - Includes Unbilled	MWh	1,349,781	1,349,781	1,048,787	2,398,568	1,009,387	3,407,955	924,860	4,332,815	1,140,933	5,473,748	1,397,830	6,871,578	1,725,944	8,597,522	1,551,576
Fuel	\$	17,090,975.58	17,090,975.58	11,721,996.11	28,812,971.69	7,439,097.25	36,252,068.94	5,927,373.33	42,179,442.27	6,349,416.23	48,528,858.50	8,139,296.25	56,668,154.75	18,466,024.40	75,134,179.15	21,558,559.11
Purchased Power	\$	7,214,181.14	7,214,181.14	5,238,406.76	12,452,587.90	4,941,024.77	17,393,612.67	4,962,519.42	22,356,132.09	3,700,846.68	26,056,978.77	4,968,791.54	31,025,770.31	6,877,460.25	37,903,230.56	6,140,751.72
Oregon Solar Pilot		523.03	523.03	470.57	993.60	686.71	1,680.31	408.86	2,089.17	626.70	2,715.87	1,659.85	4,375.72	2,557.72	6,933.44	2,608.16
Surplus Sales	\$	(669,275.09)	(669,275.09)	(4,270,571.00)	(4,939,846.09)	(5,658,378.26)	(10,598,224.35)	(4,370,592.38)	(14,968,816.73)	(1,667,567.57)	(16,636,384.30)	(1,249,427.00)	(17,885,811.30)	(607,777.93)	(18,493,589.23)	(2,074,773.27)
Total Non-QF	\$	23,636,404.66	23,636,404.66	12,690,302.44	36,326,707.10	6,722,430.47	43,049,137.57	6,519,709.23	49,568,846.80	8,383,322.04	57,952,168.84	11,860,320.64	69,812,489.48	24,738,264.44	94,550,753.92	25,627,145.72
QF - Includes Net Metering and Liquidated Damages	\$	10,219,839.42	10,219,839.42	11,987,820.21	22,207,659.63	11,314,503.25	33,522,162.88	16,607,358.27	50,129,521.15	18,593,223.07	68,722,744.22	21,845,696.87	90,568,441.09	22,493,206.73	113,061,647.82	22,416,129.97
Total Actual Power Costs Incurred	\$	33,856,244.08	33,856,244.08	24,678,122.65	58,534,366.73	18,036,933.72	76,571,300.45	23,127,067.50	99,698,367.95	26,976,545.11	126,674,913.06	33,706,017.51	160,380,930.57	47,231,471.17	207,612,401.74	48,043,275.69
Actual Power Cost per Unit	\$/MWh	\$25.08	\$25.08	\$23.53	\$24.40	\$17.87	\$22.47	\$25.01	\$23.01	\$23.64	\$23.14	\$24.11	\$23.34	\$27.37	\$24.15	\$30.96
POWER COSTS COLLECTED IN RATES																
Actual Sales	MWh	1.349.781	1.349.781	1,048,787	2.398.568	1.009.387	3,407,955	924,860	4.332.815	1,140,933	5.473.748	1.397.830	6.871.578	1.725.944	8.597.522	1,551,576
Combined Rate (Recoverd in Rates)	\$/MWh	\$ 24.86	\$24.86	\$ 24.95	\$24.90	\$ 24.81	\$24.87	\$ 24.33	\$24.76	\$ 24.66	\$24.74	\$ 25.69	\$24.93	\$ 25.83		\$ 26.00
Total Power Costs Collected in Rates		33.555.555.66	33.555.555.66	26.167.235.65	59.722.791.31	25.042.891.47	84.765.682.78	22.501.843.80	107.267.526.58	28,135,407.78	135,402,934,36	35.910.252.70	171.313.187.06	44.581.133.52	215.894.320.58	40,340,976.00
Total Total Cools Collected II Tales		00,000,000.00	00,000,000.00	20,101,200.00	00,722,701.01	20,042,001.47	04,700,002.70	22,001,040.00	101,201,020.00	20,100,101.10	100,102,001.00	00,010,202.70	17 1,010,101.00	11,001,100.02	210,001,020.00	10,010,010.00
CHANGE FROM FORECAST																
Actual Power Cost per Unit	\$/MWh	\$25.08	\$25.08	\$23.53	\$24.40	\$17.87	\$22.47	\$25.01	\$23.01	\$23.64	\$23.14	\$24.11	\$23.34	\$27.37	\$24.15	\$30.96
Combined Rate (Recoverd in Rates)	\$/MWh	\$24.86	\$24.86	\$24.95	\$24.90	\$24.81	\$24.87	\$24.33	\$24.76	\$24.66	\$24.74	\$25.69	\$24.93	\$25.83	\$25.11	\$26.00
Actual Increase (Decrease) Over Forecast Rate	\$/MWh	\$0.22	\$0.22	(\$1.42)	(\$0.50)	(\$6.94)	(\$2.40)	\$0.68	(\$1.75)	(\$1.02)	(\$1.59)	(\$1.58)	(\$1.59)	\$1.54	(\$0.96)	\$4.96
Deviation from Forecast	\$	300,688.42	300,688.42	(1,489,113.00)	(1,188,424.58)	(7,005,957.75)	(8,194,382.33)	625,223.70	(7,569,158.63)	(1,158,862.67)	(8,728,021.30)	(2,204,235.19)	(10,932,256.49)	2,650,337.65	(8,281,918.84)	7,702,299.69
O All	0/		4.64%		4.64%		4.64%		4.64%		4.64%		4.64%		4.64%	
Oregon Allocation Oregon Allocated Power Cost Deviation (before DB)	% S		13.951.94		(55,142.90)		(380,219.34)		(351,208.96)		(404,980.19)		4.64% (507,256.70)		(384,281.03)	
Oregon Allocated Power Cost Deviation (before DB)	3		13,951.94		(55,142.90)		(380,219.34)		(351,208.96)		(404,980.19)		(507,256.70)		(384,281.03)	
Deadband - Over 250 Basis Points			3.118.895.74		3.118.895.74		3.118.895.74		3.118.895.74		3,118,895,74		3.118.895.74		3.118.895.74	
Deadband - Under 125 Basis Points	ě		(1,559,447.87)		(1.559.447.87)		(1,559,447,87)		(1.559.447.87)		(1,559,447,87)		(1,559,447.87)		(1.559.447.87)	
Deadoand - Onder 125 Basis Folitis	•		(10.144,600,1)		(1,339,447.67)		(1,339,447.07)		(1,339,447.67)		(1,339,447.67)		(1,339,447.67)		(1,339,447.67)	
True-Up (+)	s		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
True-Up (-)	Š		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
THOO OP ( )	•		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
OREGON DEFERRAL before sharing	S		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
Portion of True-up Change Allowed	%		90%		90%		90%		90%		90%		90%		90%	
OREGON DEFERRAL w/ SHARING (90/10)	\$		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
Interest Rate	%		7.757%		7.757%		7.757%		7.757%		7.757%		7.757%		7.757%	
Interest Rate Interest Accrued to date	70		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
Interest Accided to date	٥		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
Total Deferred Balance			0.00		0.00		0.00		0.00		0.00		0.00		0.00	

2017 PCAM Twelve Months Ended December 31, 2017

OREGON PCAM (Schedule 56)		August YTD	September	September YTD	October	October YTD	November	November YTD	December	December YTD	Annual
ACTUAL POWER COSTS											
Actual NPSE Costs											
Actual Sales - Includes Unbilled	MWh	10,149,098	1,160,202	11,309,300	1,008,878	12,318,178	1,020,634	13,338,812	1,232,141	14,570,953	14,570,95
Fuel	s	96.692.738.26	14.504.699.16	111.197.437.42	9.725.779.35	120.923.216.77	12.339.504.43	133,262,721,20	12.566.106.98	145.828.828.18	145.828.828.1
Purchased Power	S	44.043.982.28	3.562.090.51	47.606.072.79	7,719,104,48	55.325.177.27	6.667.681.78	61.992.859.05	5.811.097.68	67.803.956.73	67.803.956.7
Oregon Solar Pilot		9.541.60	1.888.84	11.430.44	2,366,37	13,796,81	1.347.40	15,144,21	785.40	15,929,61	15,929.6
Surplus Sales	s	(20.568.362.50)	(3.426.550.45)	(23.994.912.95)	(2.696,279,14)	(26.691.192.09)	(1.385,309,96)	(28.076.502.05)	(3.395.007.03)	(31,471,509,08)	(31,471,509.0
Total Non-QF	s	120.177.899.64	14.642.128.06	134.820.027.70	14.750.971.06	149,570,998,76	17.623.223.65	167,194,222,41	14.982.983.03	182,177,205.44	182,177,205,4
QF - Includes Net Metering and Liquidated Damages	S	135,477,777,79	16.158.511.77	151,636,289,56	16.996.556.88	168.632.846.44	16.361.948.28	184,994,794,72	12.362.992.69	197.357.787.41	197.357.787.4
Total Actual Power Costs Incurred	š 📗	255,655,677.43	30,800,639.83	286,456,317.26	31,747,527.94	318,203,845.20	33,985,171.93	352,189,017.13	27,345,975.72	379,534,992.85	379,534,992.8
Actual Power Cost per Unit	\$/MWh	\$25.19	\$26.55	\$25.33	\$31.47	\$25.83	\$33.30	\$26.40	\$22.19	\$26.05	\$26.0
POWER COSTS COLLECTED IN RATES											
Actual Sales	MWh	10,149,098	1,160,202	11,309,300	1,008,878	12,318,178	1,020,634	13,338,812	1,232,141	14,570,953	14,570,95
Combined Rate (Recoverd in Rates)	\$/MWh	\$25,25	\$ 25.68	\$25.29	\$ 25.58	\$25,32	\$ 25.99	\$25,37	\$ 26.57	\$25,47	\$25.4
Total Power Costs Collected in Rates	S	256.235.296.58	29,793,987.36	286.029.283.94	25,807,099.24	311,836,383.18	26,526,277.66	338,362,660.84	32,737,986.37	371,100,647.21	371,100,647.2
			,,			,	,,	,,		***************************************	,,
CHANGE FROM FORECAST											
Actual Power Cost per Unit	\$/MWh	\$25.19	\$26.55	\$25.33	\$31.47	\$25.83	\$33.30	\$26.40	\$22.19	\$26.05	\$26.0
Combined Rate (Recoverd in Rates)	\$/MWh	\$25.25	\$25.68	\$25.29	\$25.58	\$25.32	\$25.99	\$25.37	\$26.57	\$25.47	\$25.4
Actual Increase (Decrease) Over Forecast Rate	\$/MWh	(\$0.06)	\$0.87	\$0.04	\$5.89	\$0.52	\$7.31	\$1.04	(\$4.38)	\$0.58	\$0.5
Deviation from Forecast	\$	(579,619.15)	1,006,652.47	427,033.32	5,940,428.70	6,367,462.02	7,458,894.27	13,826,356.29	(5,392,010.65)	8,434,345.64	8,434,345.6
Oregon Allocation	%	4.64%		4.64%		4.64%		4.64%		4.64%	4.64
Oregon Allocated Power Cost Deviation (before DB)	\$	(26,894.33)		19,814.35		295,450.24		641,542.93		391,353.64	391,353.6
Deadband - Over 250 Basis Points	s	3.118.895.74		3.118.895.74		3.118.895.74		3.118.895.74		3.118.895.74	3.118.895.7
Deadband - Under 125 Basis Points	Š	(1,559,447,87)		(1,559,447,87)		(1,559,447,87)		(1,559,447,87)		(1,559,447.87)	(1,559,447.8
Dedubate Officer 120 Design Cities	•	(1,000,141,101)		(1,000,141,01)		(1,000,1411,011)		(1,000,111.01)		(1,000,447.01)	(1,000,117.0
True-Up (+)	\$	0.00		0.00		0.00		0.00		0.00	0.0
True-Up (-)	\$	0.00		0.00		0.00		0.00		0.00	0.0
OREGON DEFERRAL before sharing	s	0.00		0.00		0.00		0.00		0.00	0.0
Portion of True-up Change Allowed	%	90%		90%		90%		90%		90%	90
OREGON DEFERRAL w/ SHARING (90/10)	s	0.00		0.00		0.00		0.00		0.00	0.0
											-
nterest Rate	%	7.757%		7.757%		7.757%		7.757%		7.757%	7.757
nterest Accrued to date	s	0.00		0.00		0.00		0.00		0.00	0.0
Total Deferred Balance	\$	0.00		0.00		0.00		0.00		0.00	0.0

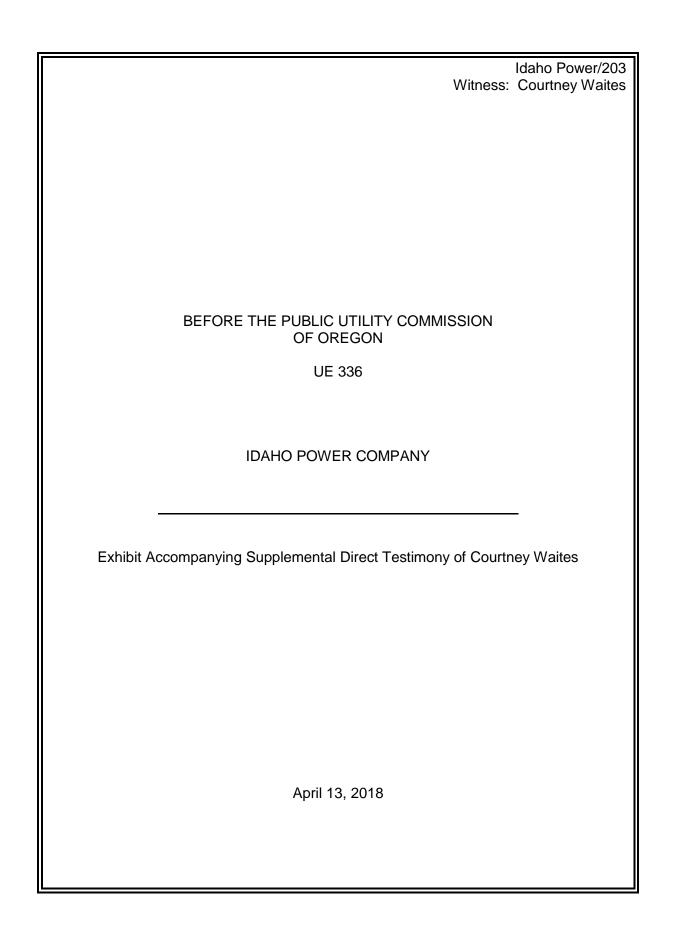


#### Determination of Oregon PCAM Deadbands Based on Idaho Power 2017 Results of Operations

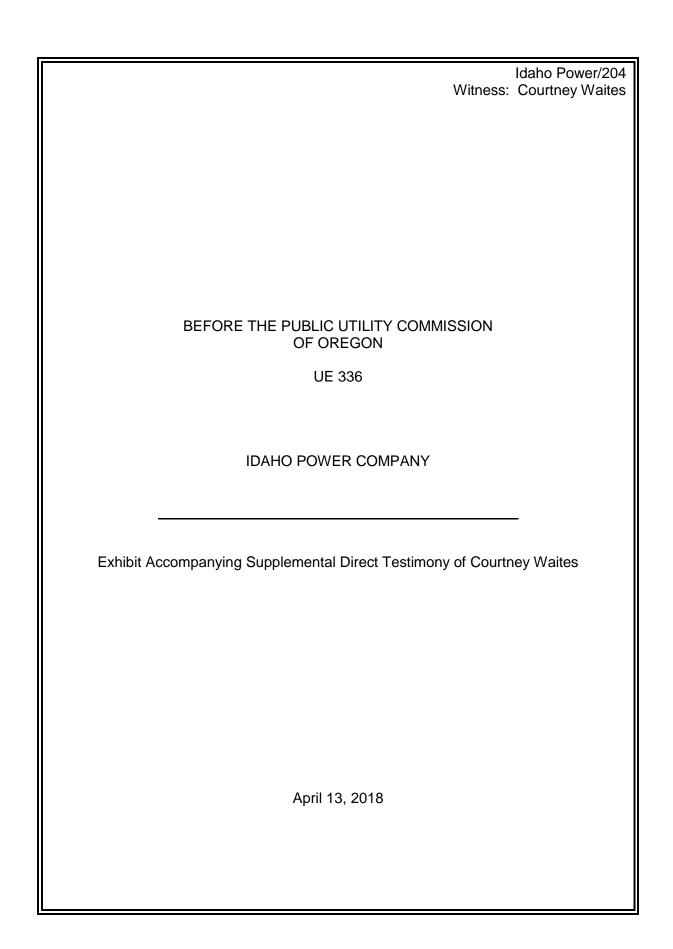
(A) (B)

,284,204,938 53.382%	\$142,328,822 53.382%
,753,174,280	\$75,977,972
1.000%	1.000%
\$17,531,743	\$759,780
1.64200	1.64200
\$28,787,122	\$ 1,247,558
	53.382% ,753,174,280 1.000% \$17,531,743 1.64200

(8)	Upper Band of Basis Points	250	\$3,118,895.74
(9)	Lower Band of Basis Points	125	(\$1,559,447.87)



_											.,				
- ⊢-	A	В	С	D	E	F	G	Н	ı	J	K	L	M	N	0
1															
	Oregon Renewable Energy Credit Sales														
3	January 2017 thru December 2017							. 20							
4		_	January	February	March	April	May	June	July	August	September	October	November	December	Totals
	Prior Month Sale(s)	\$	852,442.50	-	36,222.24	941,634.38	-	40,500.00	257,540.25	2,902.50	-	73,529.00	94,480.00	50,000.00	2,349,250.87
	Annual Certification	_	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(3,000.00)	(3,000.00)
	Brokerage Fee's Paid in Prior Month	\$	0.00	0.00	(482.37)	(2,999.98)	0.00	0.00	0.00	0.00	0.00	(1,169.80)	0.00	0.00	(4,652.15)
	Washington REC Registration Fees		0.00	0.00	0.00	0.00	0.00	0.00	0.00	(2,500.00)	0.00	0.00	0.00	0.00	(2,500.00)
	Western Electric Coordinating Council Fees		(171.63)	0.00	(1,609.68)	(364.86)	0.00	(1,673.04)	(270.51)	(484.97)	(193.53)	(186.88)	(509.60)	(349.11)	(5,813.81)
10	Net Proceeds	\$	852,270.87	-	34,130.19	938,269.54	-	38,826.96	257,269.74	(82.47)	(193.53)	72,172.32	93,970.40	46,650.89	2,333,284.91
11															
	Oregon Allocation		4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%		4.64%	4.64%	
	Sharing Percentage		90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	
14															
15	Total Customer Benefit	\$	35,590.83	-	1,425.28	39,182.14	-	1,621.41	10,743.58	(3.44)	(8.08)	3,013.92	3,924.20	1,948.14	97,437.98
16															
17															
18															
	Principle														
	Beginning Balance	\$	-	35,590.83	35,590.83	37,016.11	76,198.25	76,198.25	77,819.66	88,563.24	88,559.80	88,551.72	91,565.64	95,489.84	-
21															
	Amount Deferred		35,590.83	-	1,425.28	39,182.14	-	1,621.41	10,743.58	(3.44)	(8.08)	3,013.92	3,924.20	1,948.14	97,437.98
23															
	Ending Balance	\$	35,590.83	35,590.83	37,016.11	76,198.25	76,198.25	77,819.66	88,563.24	88,559.80	88,551.72	91,565.64	95,489.84	97,437.98	97,437.98
25															
26															
	Interest														
	Beginning Balance	\$	-	-	230.07	460.14	699.42	1,191.98	1,684.54	2,187.58	2,760.07	3,332.54	3,904.95	4,496.85	-
29															
	Annual Interest Rate		7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%
31															
	Monthly Interest	\$	-	230.07	230.07	239.28	492.56	492.56	503.04	572.49	572.47	572.41	591.90	617.26	5,114.11
33															
	Interest Accrued to Date	\$	-	230.07	460.14	699.42	1,191.98	1,684.54	2,187.58	2,760.07	3,332.54	3,904.95	4,496.85	5,114.11	5,114.11
35	B ( - 1B   - 1	_	05 500	05 000 55	07.470.55	70 007	77.000.77	70 504	00 750	04.040	04.007.77	05 470	00.000	400 550 55	400 555 55
	Deferral Balance Including Interest	\$	35,590.83	35,820.90	37,476.25	76,897.67	77,390.23	79,504.20	90,750.82	91,319.87	91,884.26	95,470.59	99,986.69	102,552.09	102,552.09
37															
38															
39	Total Customer Benefit														102,552.09
40															
41					The state of the s										



#### Oregon

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	12 MOS	S ENDED DEC 2017
Total Revenues	\$	53,986,138
		6%
Deferral Revenues Allowed	\$	3,239,168
True-Up Balancing Account		
Oregon kWh Forecast <sup>1</sup>		701,192,978
Rate (cents per kWh)		(0.0001)
Estimated Collection (Refund)	\$	(102,552)
Intervenor Funding deferrals		
Oregon Residential kWh Forecast <sup>1</sup>		192,406,240
Rate (cents per kWh)		0.0003
Estimated Collection (Refund)	\$	61,183
Total Rate - Residential Service (cents per kW	h)	0.0002
Total Rate - All Other (cents per kWh)	•	(0.0001)

<sup>1.</sup> June 1, 2018 - May, 31, 2019 test year.

2017 PCAM Twelve Months Ended December 31, 2017

OREGON PCAM (Schedule 56)		January	January YTD	February	February YTD	March	March YTD	April	April YTD	Mav	May YTD	June	June YTD	July	July YTD	August
ACTUAL POWER COSTS						<u></u>				<u>,</u>	,					
Actual NPSE Costs																
Actual Sales - Includes Unbilled	MWh	1,349,781	1,349,781	1,048,787	2,398,568	1,009,387	3,407,955	924,860	4,332,815	1,140,933	5,473,748	1,397,830	6,871,578	1,725,944	8,597,522	1,551,576
Fuel	\$	17,090,975.58	17,090,975.58	11,721,996.11	28,812,971.69	7,439,097.25	36,252,068.94	5,927,373.33	42,179,442.27	6,349,416.23	48,528,858.50	8,139,296.25	56,668,154.75	18,466,024.40	75,134,179.15	21,558,559.11
Purchased Power	\$	7,214,181.14	7,214,181.14	5,238,406.76	12,452,587.90	4,941,024.77	17,393,612.67	4,962,519.42	22,356,132.09	3,700,846.68	26,056,978.77	4,968,791.54	31,025,770.31	6,877,460.25	37,903,230.56	6,140,751.72
Oregon Solar Pilot		523.03	523.03	470.57	993.60	686.71	1,680.31	408.86	2,089.17	626.70	2,715.87	1,659.85	4,375.72	2,557.72	6,933.44	2,608.16
Surplus Sales	\$	(669,275.09)	(669,275.09)	(4,270,571.00)	(4,939,846.09)	(5,658,378.26)	(10,598,224.35)	(4,370,592.38)	(14,968,816.73)	(1,667,567.57)	(16,636,384.30)	(1,249,427.00)	(17,885,811.30)	(607,777.93)	(18,493,589.23)	(2,074,773.27)
Total Non-QF	\$	23,636,404.66	23,636,404.66	12,690,302.44	36,326,707.10	6,722,430.47	43,049,137.57	6,519,709.23	49,568,846.80	8,383,322.04	57,952,168.84	11,860,320.64	69,812,489.48	24,738,264.44	94,550,753.92	25,627,145.72
QF - Includes Net Metering and Liquidated Damages	\$	10,219,839.42	10,219,839.42	11,987,820.21	22,207,659.63	11,314,503.25	33,522,162.88	16,607,358.27	50,129,521.15	18,593,223.07	68,722,744.22	21,845,696.87	90,568,441.09	22,493,206.73	113,061,647.82	22,416,129.97
Total Actual Power Costs Incurred	\$	33,856,244.08	33,856,244.08	24,678,122.65	58,534,366.73	18,036,933.72	76,571,300.45	23,127,067.50	99,698,367.95	26,976,545.11	126,674,913.06	33,706,017.51	160,380,930.57	47,231,471.17	207,612,401.74	48,043,275.69
Actual Power Cost per Unit	\$/MWh	\$25.08	\$25.08	\$23.53	\$24.40	\$17.87	\$22.47	\$25.01	\$23.01	\$23.64	\$23.14	\$24.11	\$23.34	\$27.37	\$24.15	\$30.96
POWER COSTS COLLECTED IN RATES																
Actual Sales	MWh	1,349,781	1,349,781	1,048,787	2,398,568	1,009,387	3,407,955	924,860	4,332,815	1,140,933	5,473,748	1,397,830	6,871,578	1,725,944	8,597,522	1,551,576
Combined Rate (Recoverd in Rates)	\$/MWh		\$24.86	\$ 24.95	\$24.90	\$ 24.81	\$24.87	\$ 24.33	\$24.76	\$ 24.66	\$24.74	\$ 25.69	\$24.93	\$ 25.83	\$25.11	\$ 26.00
Total Power Costs Collected in Rates	\$	33,555,555.66	33,555,555.66	26,167,235.65	59,722,791.31	25,042,891.47	84,765,682.78	22,501,843.80	107,267,526.58	28,135,407.78	135,402,934.36	35,910,252.70	171,313,187.06	44,581,133.52	215,894,320.58	40,340,976.00
CHANGE FROM FORECAST																
Actual Power Cost per Unit	\$/MWh	\$25.08	\$25.08	\$23.53	\$24.40	\$17.87	\$22.47	\$25.01	\$23.01	\$23.64	\$23.14	\$24.11	\$23.34	\$27.37	\$24.15	\$30.96
Combined Rate (Recoverd in Rates)	\$/MWh	\$24.86	\$24.86	\$24.95	\$24.90	\$24.81	\$24.87	\$24.33	\$24.76	\$24.66	\$24.74	\$25.69	\$24.93	\$25.83	\$25.11	\$26.00
Actual Increase (Decrease) Over Forecast Rate	\$/MWh	\$0.22	\$0.22	(\$1.42)	(\$0.50)	(\$6.94)	(\$2,40)	\$0.68	(\$1.75)	(\$1.02)	(\$1.59)	(\$1.58)	(\$1.59)	\$1.54	(\$0.96)	\$4.96
Deviation from Forecast	\$	300,688.42	300,688.42	(1,489,113.00)	(1,188,424.58)	(7,005,957.75)	(8,194,382.33)	625,223.70	(7,569,158.63)	(1,158,862.67)	(8,728,021.30)	(2,204,235.19)	(10,932,256.49)	2,650,337.65	(8,281,918.84)	7,702,299.69
Oregon Allocation	%		4.64%		4.64%		4.64%		4.64%		4.64%		4.64%		4.64%	
Oregon Allocated Power Cost Deviation (before DB)	\$		13,951.94		(55,142.90)		(380,219.34)		(351,208.96)		(404,980.19)		(507,256.70)		(384,281.03)	
Deadband - Over 250 Basis Points			3.118.895.74		3.118.895.74		3.118.895.74		3.118.895.74		3.118.895.74		3.118.895.74		3.118.895.74	
Deadband - Over 250 Basis Points  Deadband - Under 125 Basis Points	3															
Deadband - Under 125 Basis Points	\$		(1,559,447.87)		(1,559,447.87)		(1,559,447.87)		(1,559,447.87)		(1,559,447.87)		(1,559,447.87)		(1,559,447.87)	
True-Up (+)	e		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
True-Up (-)	ě		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
Tide-Op (-)	¥		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
OREGON DEFERRAL before sharing	s		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
Portion of True-up Change Allowed	%		90%		90%		90%		90%		90%		90%		90%	
OREGON DEFERRAL w/ SHARING (90/10)	\$		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
Interest Rate	%		7.757%		7.757%		7.757%		7.757%		7.757%		7.757%		7.757%	
Interest Accrued to date	% \$		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
	Ψ		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
Total Deferred Balance	\$		0.00		0.00		0.00		0.00		0.00		0.00		0.00	

2017 PCAM Twelve Months Ended December 31, 2017

OREGON PCAM (Schedule 56)		August YTD	September	September YTD	October	October YTD	November	November YTD	December	December YTD	Annual
ACTUAL POWER COSTS											
Actual NPSE Costs											
Actual Sales - Includes Unbilled	MWh	10,149,098	1,160,202	11,309,300	1,008,878	12,318,178	1,020,634	13,338,812	1,232,141	14,570,953	14,570,953
Fuel	s	96.692.738.26	14.504.699.16	111.197.437.42	9.725.779.35	120.923.216.77	12.339.504.43	133,262,721,20	12.566.106.98	145.828.828.18	145.828.828.18
Purchased Power	Š	44.043.982.28	3.562.090.51	47,606,072,79	7.719.104.48	55.325.177.27	6.667.681.78	61.992.859.05	5.811.097.68	67.803.956.73	67.803.956.73
Oregon Solar Pilot		9,541,60	1.888.84	11,430,44	2.366.37	13,796,81	1,347,40	15.144.21	785.40	15,929,61	15,929,61
Surplus Sales	s	(20.568.362.50)	(3.426.550.45)	(23.994.912.95)	(2.696,279,14)	(26.691.192.09)	(1.385.309.96)	(28.076.502.05)	(3.395.007.03)	(31,471,509,08)	(31,471,509,08)
Total Non-OF	š	120,177,899,64	14.642.128.06	134.820.027.70	14.750.971.06	149.570.998.76	17.623.223.65	167.194.222.41	14.982.983.03	182,177,205,44	182.177.205.44
QF - Includes Net Metering and Liquidated Damages	Š	135,477,777,79	16.158.511.77	151,636,289,56	16.996.556.88	168.632.846.44	16.361.948.28	184,994,794,72	12.362.992.69	197.357.787.41	197,357,787,41
Total Actual Power Costs Incurred	\$	255,655,677.43	30,800,639.83	286,456,317.26	31,747,527.94	318,203,845.20	33,985,171.93	352,189,017.13	27,345,975.72	379,534,992.85	379,534,992.85
Actual Power Cost per Unit	\$/MWh	\$25.19	\$26.55	\$25.33	\$31.47	\$25.83	\$33.30	\$26.40	\$22.19	\$26.05	\$26.05
POWER COSTS COLLECTED IN RATES										888	
Actual Sales	MWh	10,149,098	1,160,202	11,309,300	1,008,878	12,318,178	1,020,634	13,338,812	1,232,141	14,570,953	14,570,953
Combined Rate (Recoverd in Rates)	\$/MWh	\$25.25	\$ 25.68	\$25.29	\$ 25.58	\$25.32	\$ 25.99	\$25.37	\$ 26.57	\$25.47	\$25.47
Total Power Costs Collected in Rates	\$	256,235,296.58	29,793,987.36	286,029,283.94	25,807,099.24	311,836,383.18	26,526,277.66	338,362,660.84	32,737,986.37	371,100,647.21	371,100,647.21
CHANGE FROM FORECAST											
Actual Power Cost per Unit	\$/MWh	\$25.19	\$26.55	\$25.33	\$31.47	\$25.83	\$33.30	\$26.40	\$22.19	\$26.05	\$26.05
Combined Rate (Recoverd in Rates)	\$/MWh	\$25.25	\$25.68	\$25.29	\$25.58	\$25.32	\$25.99	\$25.37	\$26.57	\$25.47	\$25.47
Actual Increase (Decrease) Over Forecast Rate	\$/MWh	(\$0.06)	\$0.87	\$0.04	\$5.89	\$0.52	\$7.31	\$1.04	(\$4.38)	\$0.58	\$0.58
Deviation from Forecast	\$	(579,619.15)	1,006,652.47	427,033.32	5,940,428.70	6,367,462.02	7,458,894.27	13,826,356.29	(5,392,010.65)	8,434,345.64	8,434,345.64
Oregon Allocation	%	4.64%		4.64%		4.64%		4.64%		4.64%	4.64%
Oregon Allocated Power Cost Deviation (before DB)	\$	(26,894.33)		19,814.35		295,450.24		641,542.93		391,353.64	391,353.64
Deadband - Over 250 Basis Points	\$	3,118,895.74		3,118,895.74		3,118,895.74		3,118,895.74		3,118,895.74	3,118,895.74
Deadband - Under 125 Basis Points	\$	(1,559,447.87)		(1,559,447.87)		(1,559,447.87)		(1,559,447.87)		(1,559,447.87)	(1,559,447.87)
True-Up (+)	\$	0.00		0.00		0.00		0.00		0.00	0.00
True-Up (-)	\$	0.00		0.00		0.00		0.00		0.00	0.00
OREGON DEFERRAL before sharing	\$	0.00		0.00		0.00		0.00		0.00	0.00
Portion of True-up Change Allowed	%	90%		90%		90%		90%		90%	90%
OREGON DEFERRAL w/ SHARING (90/10)	\$	0.00		0.00		0.00		0.00		0.00	0.00
Interest Rate	%	7.757%		7.757%		7.757%		7.757%		7.757%	7.757%
Interest Accrued to date	\$	0.00		0.00		0.00		0.00		0.00	0.00
Total Deferred Balance	\$	0.00		0.00		0.00		0.00		0.00	0.00

### Determination of Oregon PCAM Deadbands Based on Idaho Power 2017 Results of Operations

(A) (B)

(1) (2)	Rate Base % Equity in cap structure	Total System \$3,284,204,938 53.382%	Oregon \$142,328,822 53.382%
(3)	Equity in rate base	\$1,753,174,280	\$75,977,972
(4)	100 basis points	1.000%	1.000%
(5)	Resulting return (NOI Effect)	\$17,531,743	\$759,780
(6)	Net-to Gross Factor	1.64200	1.64200
(7)	Revenue requirement	\$28,787,122 \$	1,247,558
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(8)	Upper Band of Basis Points	250	\$3,118,895.74
(9)	Lower Band of Basis Points	125	(\$1,559,447.87)

	I A I	В	С	D	F	F	G	н			V		М	N	0
_	A	В	C	U	E	Г	G	П		J	N.	L	IVI	IN	U
1	Oregon Renewable Energy Credit Sales														
	January 2017 thru December 2017			ļ				201	17						
4	January 2017 thru December 2017		January	February	March	April	Mav	June	July	August	September	October	November	December	Totals
	Prior Month Sale(s)	¢	852.442.50	- I ebidaly	36.222.24	941.634.38	iviay -	40.500.00	257.540.25	2,902.50	- September	73.529.00	94.480.00	50.000.00	2.349.250.87
	Annual Certification	Ψ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(3.000.00)	(3.000.00)
	Brokerage Fee's Paid in Prior Month	¢	0.00	0.00	(482.37)	(2.999.98)	0.00	0.00	0.00	0.00	0.00	(1.169.80)	0.00	0.00	(4,652.15)
	Washington REC Registration Fees	Ψ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(2,500.00)	0.00	0.00	0.00	0.00	(2,500.00)
	Western Electric Coordinating Council Fees		(171.63)	0.00	(1.609.68)	(364.86)	0.00	(1.673.04)	(270.51)	(484.97)	(193.53)	(186.88)	(509.60)	(349.11)	(5.813.81)
10		¢	852,270,87	- 0.00	34.130.19	938.269.54	- 0.00	38.826.96	257,269.74	(82.47)	(193.53)	72,172,32	93,970.40	46.650.89	2.333.284.91
11	Net Floceeus	Ψ	032,270.07	-	34,130.13	330,203.34	-	30,020.30	231,203.14	(02.47)	(133.33)	12,112.02	33,370.40	40,030.03	2,333,204.31
	Oregon Allocation		4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	4.64%	
	Sharing Percentage		90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	
14	Sharing i Groonlage		30.076	30.076	30.076	30.078	30.078	30.076	30.076	33.078	33.078	30.076	30.076	30.078	
15	Total Customer Benefit	\$	35.590.83	-	1,425,28	39.182.14	-	1.621.41	10.743.58	(3.44)	(8.08)	3.013.92	3,924,20	1.948.14	97.437.98
16	Total Castomor Borlont	· ·	00,000.00		1,120.20	00,102.11		1,021.11	10,1 10.00	(0.11)	(0.00)	0,010.02	0,02 1.20	1,0 10.11	01,101.00
17															
18															
	Principle														
	Beginning Balance	\$	-	35.590.83	35,590,83	37.016.11	76.198.25	76.198.25	77.819.66	88.563.24	88.559.80	88.551.72	91.565.64	95,489,84	-
21	gg	*		00,000.00	00,000.00	01,010111	,	,	,	00,000		00,00	0.,000.0.	00,100101	
	Amount Deferred		35,590,83	-	1,425,28	39.182.14	-	1,621.41	10.743.58	(3,44)	(8.08)	3.013.92	3,924,20	1,948,14	97.437.98
23			00,000.00		.,	00,102.11		.,,=	,	(5111)	(0.00)	0,010.00	0,021.20	.,	0.,.0
	Ending Balance	\$	35,590,83	35.590.83	37.016.11	76.198.25	76.198.25	77.819.66	88.563.24	88.559.80	88.551.72	91.565.64	95,489,84	97.437.98	97.437.98
25		·					-,	, , , , , ,							
26															
27	Interest														
28	Beginning Balance	\$		-	230.07	460.14	699.42	1,191.98	1,684.54	2,187.58	2,760.07	3,332.54	3,904.95	4,496.85	-
29	l · ·														
30	Annual Interest Rate		7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%	7.757%
31															
32	Monthly Interest	\$	-	230.07	230.07	239.28	492.56	492.56	503.04	572.49	572.47	572.41	591.90	617.26	5,114.11
33															
34	Interest Accrued to Date	\$	-	230.07	460.14	699.42	1,191.98	1,684.54	2,187.58	2,760.07	3,332.54	3,904.95	4,496.85	5,114.11	5,114.11
35															
36		\$	35,590.83	35,820.90	37,476.25	76,897.67	77,390.23	79,504.20	90,750.82	91,319.87	91,884.26	95,470.59	99,986.69	102,552.09	102,552.09
37															
38															
39	Total Customer Benefit														102,552.09
40															
41					İ										

## Oregon

	12 MC	DS ENDED DEC 2017
Total Revenues	\$	53,986,138 6%
Deferral Revenues Allowed	\$	3,239,168
True-Up Balancing Account		
Oregon kWh Forecast <sup>1</sup>		701,192,978
Rate (cents per kWh)		(0.0001)
Estimated Collection (Refund)	\$	(102,552)
Intervenor Funding deferrals		
Oregon Residential kWh Forecast <sup>1</sup>		192,406,240
Rate (cents per kWh)		0.0003
Estimated Collection (Refund)	\$	61,183
Total Rate - Residential Service (cents per kWh)	)	0.0002
Total Rate - All Other (cents per kWh)		(0.0001)

<sup>1.</sup> June 1, 2018 - May, 31, 2019 test year.