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May 1, 2018

**VIA ELECTRONIC FILING**

Attention: Filing Center  
Public Utility Commission of Oregon  
201 High Street SE, Suite 100  
P.O. Box 1088  
Salem, Oregon 97308-1088

**Re: Docket UE 333: In the Matter of IDAHO POWER COMPANY, 2018 Annual Power Cost Update**

Attention Filing Center:

Attached for filing in the above-captioned docket is the Stipulation. The Joint Explanatory Brief is being filed concurrently in this docket.

Please contact this office with any questions.

Sincerely,

A handwritten signature in black ink that reads "Alisha Till".

Alisha Till  
Legal Assistant

Attachment

1 **BEFORE THE PUBLIC UTILITY COMMISSION**  
2 **OF OREGON**  
3 **UE 333**

4 In the Matter of  
5 IDAHO POWER COMPANY  
6 2018 ANNUAL POWER COST UPDATE  
7

**STIPULATION**

8 This Stipulation resolves all issues among the parties to Idaho Power Company's  
9 ("Idaho Power" or "Company") 2018 Annual Power Cost Update ("APCU") filed pursuant to  
10 Order No. 08-238.<sup>1</sup> The APCU updates the Company's net power supply expense ("NPSE")  
11 and results in new rates, which the mechanism permits to go into effect June 1, 2018.

12 **PARTIES**

13 1. The parties to this Stipulation are Staff of the Public Utility Commission of  
14 Oregon ("Staff"), the Oregon Citizens' Utility Board ("CUB"), and Idaho Power (together, the  
15 "Stipulating Parties").

16 **BACKGROUND**

17 2. Pursuant to Order No. 08-238, Idaho Power annually updates its NPSE included  
18 in rates through an automatic adjustment clause, the APCU. The APCU is comprised of two  
19 components—an "October Update" and a "March Forecast." The October Update  
20 establishes the prospective base or normalized level of NPSE for an April through March test  
21 period. The March Forecast contains the Company's forecast of expected NPSE over the  
22 same test period. Pursuant to Order No. 10-191 the Company adjusts base rates to reflect  
23 changes in revenue requirement related to the October Update, while the rates resulting from  
24 the March Forecast are listed on Schedule 55. The rates associated with the October Update  
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26 <sup>1</sup> Re Idaho Power Company's Application for Authority to Implement a Power Cost Adjustment Mechanism, Docket No. UE 195, Order No. 08-238 (Apr. 28, 2008).

1 and the March Forecast are intended, under the mechanisms, to become effective on June  
2 1 of each year.

3 3. On October 31, 2017, Idaho Power filed testimony and exhibits for the 2018  
4 October Update component of the APCU (“2018 October Update”).<sup>2</sup> Pursuant to Order No.  
5 08-238, Idaho Power reviewed all the inputs and provided changes in the 2018 October  
6 Update for the following variables: (1) fuel prices and transportation costs, (2) wheeling  
7 expenses, (3) planned outages and forced outage rates, (4) heat rates, (5) forecast of  
8 normalized load and normalized sales, (6) contracts for wholesale power and power  
9 purchases and sales, (7) forward price curve, (8) Public Utility Regulatory Policies Act of  
10 1978 (“PURPA”) expenses, and (9) the Oregon state allocation factor.<sup>3</sup>

11 4. The test period for the 2018 October Update was April 2018 through March  
12 2019 and included updates to the above-referenced variables for all Company-owned  
13 resources and updated sales and load forecasts.<sup>4</sup> The 2018 October Update specifically  
14 accounted for changes in coal and natural gas prices, generation and expenses related to  
15 contracts entered into pursuant to PURPA, and normalized system load.<sup>5</sup>

16 5. As part of the fuel expense update, the Company updated its forecast of Oil,  
17 Handling, and Administrative and General (“OHAG”) expenses per the terms of the 2016 and  
18 2017 APCU settlement stipulations. Per the terms of the 2016 APCU settlement stipulation <sup>6</sup>,  
19 the per unit OHAG expense included in the AURORA model was updated to reflect the  
20 amount of OHAG expense driven by Idaho Power’s dispatch of each of its coal plants. The  
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22 <sup>2</sup> See Idaho Power/100-109.

23 <sup>3</sup> Idaho Power/100, Blackwell/4-5.

24 <sup>4</sup> Idaho Power/100, Blackwell/2 and 5.

25 <sup>5</sup> Idaho Power/100, Blackwell/5-11.

26 <sup>6</sup> *Re Idaho Power Company’s 2016 Annual Power Cost Update*, Docket No. UE 301,  
Stipulation at 7 (May 11, 2016).

1 Company then separately accounted for its proportional share of the total OHAG expense  
2 incurred at each of its coal plants. Per the terms of the 2017 APCU settlement stipulation <sup>7</sup>  
3 (“2017 Stipulation”), Idaho Power’s proportional share of total OHAG expenses incurred at  
4 each of its coal plants was forecast using the three-year historical average of actual OHAG  
5 costs, with a growth (reduction) rate equal to the five-year historical average growth  
6 (reduction) rate. Idaho Power also accounted for revenues received from or expenses paid  
7 to NV Energy (its ownership partner in the North Valmy Plant (“Valmy”)) for usage of the  
8 Company’s unused capacity or the Company’s usage of NV Energy’s unused capacity per  
9 the terms of the 2017 Stipulation.

10 6. The October Update included the Company’s estimate of incremental costs and  
11 benefits associated with participation in the Western Energy Imbalance Market (“EIM”) to be  
12 included in the 2018 APCU. The Company proposed to set estimated EIM benefits equal to  
13 expected EIM costs. <sup>8</sup>

14 7. The filed 2018 October Update resulted in a cost per unit of \$26.54 per  
15 megawatt-hour (“MWh”), representing an increase of 1.8 percent over last year’s October  
16 Update cost per unit of \$26.06 per MWh.<sup>9</sup>

17 8. For the 2018 October Update, the Company calculated the Oregon jurisdictional  
18 share of total NPSE by multiplying the cost per unit of \$26.54 per MWh by the forecasted  
19 Oregon jurisdictional loss-adjusted normalized sales for the April through March test period,  
20 consistent with the methodology approved in the 2017 Stipulation. Idaho Power then  
21 calculated the incremental Oregon jurisdictional NPSE by comparing the 2018 October  
22 Update Oregon jurisdictional share of total NPSE to the NPSE recovery under current

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23 <sup>7</sup> *Re Idaho Power Company’s 2017 Annual Power Cost Update*, Docket No. UE 314,  
24 Stipulation at 7 (April 28, 2017).

25 <sup>8</sup> Idaho Power/100, Blackwell/14-16.

26 <sup>9</sup> Idaho Power/100, Blackwell/17.

1 approved rates from the 2017 APCU October Update, resulting in an incremental revenue  
2 requirement of \$360,109.<sup>10</sup>

3 9. The Company's revenue spread methodology for the 2018 October Update  
4 allocated the incremental revenue requirement to individual customer classes on the basis  
5 of normalized jurisdictional forecasted sales at the generation level for the test period.<sup>11</sup>

6 10. On November 2, 2017, CUB filed its Notice of Intervention. On January 11,  
7 2018, Administrative Law Judge (“ALJ”) Patrick Power held a prehearing conference at which  
8 the parties to docket UE 333 agreed upon a procedural schedule that would allow the Public  
9 Utility Commission of Oregon (“Commission”) to issue an order on Idaho Power’s 2018 APCU  
10 prior to June 1, 2018.<sup>12</sup>

11 11. The Stipulating Parties held an initial workshop on January 23, 2018, to discuss  
12 the 2018 October Update filing. Staff and CUB served discovery on Idaho Power and  
13 conducted a thorough investigation of the 2018 October Update.

14 12. On February 12, 2018, Staff filed Opening Testimony. Staff’s testimony raised  
15 concerns related to the following: (1) the method used by the Company to allocate costs  
16 between Oregon rate classes; (2) the recovery of depreciation expense for plant owned by  
17 Bridger Coal Company (“BCC”); (3) Idaho Power’s fueling plan for the Jim Bridger Plant  
18 (“Bridger”); (4) Idaho Power’s proposal for the recovery of costs—including capital costs—  
19 related to its participation in the EIM; and (5) Idaho Power’s accounting for the costs related  
20 to purchases from qualified facilities (QFs) under PURPA.

21 13. CUB did not file Opening Testimony.<sup>13</sup>

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23 <sup>10</sup> Idaho Power/200, Blackwell/18.

24 <sup>11</sup> Idaho Power/100, Blackwell/20; Idaho Power/108.

25 <sup>12</sup> *Re Idaho Power Company’s 2018 Annual Power Cost Update*, Docket No. UE 333,  
Prehearing Conference Memorandum at 1 (January 11, 2018).

26 <sup>13</sup> Letter to Filing Center from William Gehrke, dated February 8, 2018.

1           14. Idaho Power filed Reply Testimony on March 1, 2018, in which the Company  
2 responded to the issues raised in Staff’s Opening Testimony.<sup>14</sup> The Company supported its  
3 rate spread and allocation proposals, estimates of PURPA costs, and its request to recover  
4 EIM costs. In addition, the Company supported its BCC costs, including its method for  
5 calculating the depreciable lives of BCC assets.

6           15. CUB also filed Reply Testimony on March 1, 2018. CUB’s testimony focused  
7 on a single issue, arguing that the APCU is not the appropriate mechanism by which Idaho  
8 Power should recover capital costs related to the EIM.<sup>15</sup>

9           16. On March 23, 2018, Idaho Power filed the 2018 March Forecast component of  
10 the APCU (“2018 March Forecast”). The 2018 March Forecast consisted of direct testimony  
11 describing the Company’s estimate of the expected NPSE for the upcoming water year—  
12 April 2018 through March 2019.<sup>16</sup> Order No. 08-238 calls for the March Forecast to update  
13 the following variables: fuel prices, transportation costs, wheeling expenses, planned and  
14 forced outages, heat rates, forecast of normalized sales and loads updated for significant  
15 changes since the October Update, forecast hydro generation, wholesale power purchase  
16 and sale contracts, forward price curve, PURPA expenses, and the Oregon state allocation  
17 factor.

18           17. Idaho Power reviewed all the variables for the March Forecast and the following  
19 variables changed since the 2018 October Update: (1) fuel prices and transportation costs;  
20 (2) planned outages and forced outage rates; (3) heat rates, (4) forecast of hydro generation  
21 from stream flow conditions using the most recent water supply forecast from the Northwest  
22 River Forecast Center (“NRFC”) and current reservoir levels, (5) known power purchases

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24           <sup>14</sup> See Idaho Power/200 and 300.

25           <sup>15</sup> CUB/100, Gehrke/3.

26           <sup>16</sup> Idaho Power/300-305.

1 and surplus sales made in compliance with the Company's Energy Risk Management Policy,  
2 (6) forward price curve, and (7) PURPA contract expenses.<sup>17</sup>

3 18. The fuel prices were updated to reflect changes in forecast natural gas and coal  
4 costs.<sup>18</sup> The per-unit cost of generation for the Boardman plant decreased 12 percent  
5 between the October Updated and March Forecast. The per-unit cost of generation  
6 increased at Bridger and Valmy.<sup>19</sup>

7 19. The Company updated the hydro forecast.<sup>20</sup> For this APCU year, Idaho Power  
8 reports that expected inflows and flood control targets are forecast to keep flows generally  
9 within power plant capacity through the spring, resulting in a similar generation estimate as  
10 compared to last year.<sup>21</sup> Hydro generation in the March Forecast represents a .12 million  
11 MWh decrease as compared to the October Update.<sup>22</sup>

12 20. The filed 2018 March Forecast estimated 331 aMW in PURPA generation,  
13 which was 1 aMW lower than projected in the October Update, reflecting a decrease in  
14 PURPA expense of 3 percent compared to the October Update.<sup>23</sup>

15 21. The March Forecast also updated the estimated EIM costs and benefits to be  
16 included in the 2018 APCU. On an Oregon allocated basis, the revenue requirement  
17 associated with EIM costs is \$113,268, which represented an increase of \$31,748 over the  
18 October Update estimate.<sup>24</sup>

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20 <sup>17</sup> Idaho Power/400, Blackwell/4.

21 <sup>18</sup> Idaho Power/400, Blackwell/4-7.

22 <sup>19</sup> Idaho Power/300, Blackwell/5-6.

23 <sup>20</sup> Idaho Power/300, Blackwell/8.

24 <sup>21</sup> Idaho Power/400, Blackwell/9

25 <sup>22</sup> Idaho Power/300, Blackwell/8-9.

26 <sup>23</sup> Idaho Power/300, Blackwell/8.

<sup>24</sup> Idaho Power/400, Blackwell/14-15.





1 information known at the time of its creation. As part of that analysis, Idaho Power will  
2 compare the costs of Option A with Option B.

3 29. The Stipulating Parties agree that in future APCU filings, Idaho Power will  
4 include information setting forth how and why BCC depreciation expense has changed from  
5 the levels set in the Company's most recent general rate case. The Stipulating Parties agree  
6 that Idaho Power will provide workpapers in future APCU filings to support the depreciable  
7 lives of Bridger Coal Company assets. The Stipulating Parties will continue to work together  
8 to determine the types of workpapers to be included with future APCU filings prior to the filing  
9 of the 2019 APCU in October 2018.

10 30. The Stipulating Parties agree that Idaho Power will implement adjustments to  
11 the PURPA forecast included in the March Forecast of the APCU, beginning with the 2018  
12 APCU March Forecast. First, for any new PURPA project expected to come online during  
13 the APCU forecast test period, the forecast generation and expense will be included in the  
14 forecast beginning in the month in which the project is expected to come online. For example,  
15 if a new PURPA project is expected to come online in December of the APCU forecast test  
16 period, the forecast generation and expense for the project will be included in the PURPA  
17 forecast beginning in December. Second, the expected online date for any new PURPA  
18 project will be adjusted using the three-year average Contract Delay Rate ("CDR") of  
19 historical PURPA projects. The CDR is based on the average of differences in scheduled  
20 operation date and actual operation date for historical PURPA projects. The three-year  
21 historical average CDR will be applied to any new PURPA project expected to come online  
22 during the forecast test period for the March Forecast of the APCU. The methodology used  
23 to calculate the CDR for the 2018 APCU is provided as Exhibit 1 to this stipulation.

24 31. The Stipulating Parties agree that the EIM costs recovered through the 2018  
25 APCU will include operation and maintenance costs and capital costs. The 2018 APCU will  
26 include \$5.5 million in system EIM benefits, or approximately \$255,200 on an Oregon-

1 allocated basis. The \$5.5 million in system EIM benefits accounts for \$4.5 million in estimated  
2 benefits as determined by the Energy + Environmental Economics, Inc. (“E3”) EIM study  
3 commissioned by Idaho Power, as well as an additional \$1 million in benefits in accordance  
4 with Staff’s estimate of flexible reserve benefits that were not included in the E3 study.<sup>28</sup> The  
5 Oregon-allocated revenue requirement associated with EIM costs to be included in the 2018  
6 APCU is \$113,268. The parties emphasize that the agreement to include these costs and  
7 benefits in the APCU is the result of a compromise of positions and should not be viewed as  
8 reflecting any party’s agreement to this approach in other circumstances.

9 32. Based on the foregoing agreements, the Stipulating Parties agree to Idaho  
10 Power’s requested revenue requirement decrease of \$376,324, or a 0.68 percent decrease  
11 in current billed revenue.

12 33. The Stipulating Parties agree that rates agreed to by the terms of this Stipulation  
13 should be made effective on June 1, 2018, as permitted by the APCU mechanism.

14 34. The Stipulating Parties agree the result is in conformance with the methodology  
15 adopted by the Commission in Order No. 08-238 and Order No. 17-165.

16 35. The Stipulating Parties agree that the rate decrease resulting from the  
17 Stipulation results in rates that are fair, just, and reasonable.

18 36. The Stipulating Parties agree to submit this Stipulation to the Commission and  
19 request that the Commission approve the Stipulation as presented.

20 37. This Stipulation will be offered into the record of this proceeding as evidence  
21 pursuant to OAR 860-001-0350(7). The Stipulating Parties agree to support this Stipulation  
22 throughout this proceeding and any appeal, (if necessary) provide witnesses to sponsor this  
23 Stipulation at the hearing, and recommend that the Commission issue an order adopting the  
24 settlements contained herein.

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26 <sup>28</sup> Staff/400, Gibbens/4.

1           38. If this Stipulation is challenged, the Stipulating Parties agree that they will  
2 continue to support the Commission's adoption of the terms of this Stipulation. The  
3 Stipulating Parties agree to cooperate in cross-examination and put on such a case as they  
4 deem appropriate to respond fully to the issues presented, which may include raising issues  
5 that are incorporated in the settlements embodied in this Stipulation.

6           39. The Stipulating Parties have negotiated this Stipulation as an integrated  
7 document. If the Commission rejects all or any material part of this Stipulation, or adds any  
8 material condition to any final order that is not consistent with this Stipulation, each  
9 Stipulating Party reserves its right, pursuant to OAR 860-001-0350(9), to present evidence  
10 and argument on the record in support of the Stipulation or to withdraw from the Stipulation.  
11 Stipulating Parties shall be entitled to seek rehearing or reconsideration pursuant to OAR  
12 860-001-0720 in any manner that is consistent with the agreement embodied in this  
13 Stipulation.

14           40. By entering into this Stipulation, no Stipulating Party shall be deemed to have  
15 approved, admitted, or consented to the facts, principles, methods, or theories employed by  
16 any other Stipulating Party in arriving at the terms of this Stipulation, other than those  
17 specifically identified in the body of this Stipulation. No Stipulating Party shall be deemed to  
18 have agreed that any provision of this Stipulation is appropriate for resolving issues in any  
19 other proceeding, except as specifically identified in this Stipulation.

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1           41. This Stipulation may be executed in counterparts and each signed counterpart  
2 shall constitute an original document.


3           42. This Stipulation is entered into by each Stipulating Party on the date entered  
4 below such Stipulating Party's signature.

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**STAFF**

By: \_\_\_\_\_  
Date: \_\_\_\_\_

**IDAHO POWER**

By:   
Date: 5-1-18

**OREGON CITIZENS' UTILITY BOARD**

By: \_\_\_\_\_  
Date: \_\_\_\_\_

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**STAFF**

By: \_\_\_\_\_

Date: \_\_\_\_\_

**IDAHO POWER**

By: \_\_\_\_\_

Date: \_\_\_\_\_

**OREGON CITIZENS' UTILITY BOARD**

By:  \_\_\_\_\_

Date: 4/27/18

BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON

UE 333

STIPULATION

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Exhibit 1  
Revised October Update NPSE with EIM Benefits

May 1, 2018

IPCO POWER SUPPLY EXPENSES FOR APRIL 1, 2018 -- MARCH 31, 2019 (Multiple Gas Prices/89 Hydro Year Conditions)  
Repriced Using UE 195 Settlement Methodology - 2018 October Update  
AVERAGE

Line No.		April	May	June	July	August	September	October	November	December	January	February	March	Annual
1	Hydroelectric Generation (MWh)	885,182.1	952,651.2	917,349.3	699,905.3	480,006.8	561,102.5	543,922.8	458,232.2	676,610.9	758,719.4	838,774.5	857,895.4	8,630,352.4
	<b>Bridger</b>													
2	Energy (MWh)	12,053.1	8,007.8	58,468.1	226,618.4	275,862.2	97,600.0	72,872.7	104,608.2	156,285.1	133,551.2	87,253.5	67,353.4	1,300,533.7
3	Expense (\$ x 1000)	\$ 683.3	\$ 537.3	\$ 2,341.7	\$ 8,219.7	\$ 9,919.0	\$ 3,705.9	\$ 2,887.3	\$ 4,007.7	\$ 5,831.3	\$ 4,838.4	\$ 3,259.7	\$ 2,591.1	\$ 48,822.4
	<b>Boardman</b>													
4	Energy (MWh)	7,362.4	6,723.3	14,975.3	33,087.6	38,238.4	25,855.3	21,148.3	26,635.3	28,786.9	22,763.7	13,510.9	12,211.5	251,299.0
5	Expense (\$ x 1000)	\$ 235.0	\$ 218.0	\$ 449.4	\$ 957.2	\$ 1,102.2	\$ 756.2	\$ 626.2	\$ 777.4	\$ 838.0	\$ 710.0	\$ 433.7	\$ 396.1	\$ 7,499.4
	<b>Valmy</b>													
6	Energy (MWh)	9,263.2	7,727.8	26,565.7	83,948.0	112,300.7	46,892.0	34,255.6	49,123.1	59,293.1	47,908.1	27,832.6	24,799.5	529,909.3
7	Expense (\$ x 1000)	\$ 678.9	\$ 627.0	\$ 1,228.2	\$ 3,011.2	\$ 3,891.4	\$ 1,871.3	\$ 1,480.9	\$ 1,940.6	\$ 2,256.3	\$ 1,894.7	\$ 1,263.6	\$ 1,153.5	\$ 21,297.8
	<b>Langley Gulch</b>													
8	Energy (MWh)	178,162.3	186,452.0	185,677.3	198,549.6	199,045.6	194,474.6	197,157.3	193,209.2	198,311.3	198,599.1	168,657.1	177,491.9	2,275,787.3
9	Expense (\$ x 1000)	\$ 2,866.7	\$ 2,933.5	\$ 2,940.6	\$ 3,628.9	\$ 3,635.1	\$ 3,492.9	\$ 3,515.3	\$ 4,165.7	\$ 4,867.8	\$ 4,703.6	\$ 3,661.3	\$ 3,701.7	\$ 44,113.1
	<b>Danskin</b>													
10	Energy (MWh)	7,591.1	10,381.6	53,286.2	94,524.7	118,678.9	68,562.9	50,471.0	23,086.6	8,791.9	4,425.6	5,886.5	2,251.0	447,938.1
11	Expense (\$ x 1000)	\$ 191.1	\$ 270.7	\$ 1,453.9	\$ 2,825.4	\$ 3,533.5	\$ 1,932.7	\$ 1,390.7	\$ 675.0	\$ 295.9	\$ 165.0	\$ 213.2	\$ 78.8	\$ 13,025.9
	<b>Bennett Mountain</b>													
12	Energy (MWh)	2,840.9	3,050.1	31,950.7	61,247.8	79,612.5	42,357.0	29,833.2	10,180.9	4,577.0	1,530.8	3,362.1	773.0	271,316.1
13	Expense (\$ x 1000)	\$ 72.6	\$ 79.5	\$ 881.1	\$ 1,804.0	\$ 2,308.5	\$ 1,186.3	\$ 815.1	\$ 288.7	\$ 158.0	\$ 61.7	\$ 127.5	\$ 27.3	\$ 7,810.3
14	Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 695.1	\$ 717.9	\$ 716.1	\$ 739.6	\$ 739.6	\$ 716.1	\$ 713.4	\$ 690.8	\$ 713.4	\$ 712.0	\$ 644.1	\$ 712.0	\$ 8,509.8
	<b>Purchased Power (Excluding CSPP)</b>													
15	Market Energy (MWh)	9,041.2	9,683.3	57,344.2	60,814.4	72,455.9	28,774.1	17,519.2	73,868.3	45,079.3	76,370.9	11,516.0	12,935.2	475,402.0
16	Elkhorn Wind Energy (MWh)	26,520.8	25,525.8	24,790.8	26,601.0	23,943.0	21,200.4	22,027.8	30,132.4	29,442.4	24,406.6	24,037.6	26,788.0	305,416.3
17	Neal Hot Springs Energy (MWh)	14,315.7	11,493.2	10,545.1	8,775.0	9,512.8	11,769.1	12,824.2	16,268.0	18,722.7	17,961.6	16,403.0	16,710.6	165,300.9
18	Raft River Geothermal Energy (MWh)	6,436.3	5,156.4	5,315.6	5,768.1	5,254.4	5,967.1	6,353.2	6,873.5	7,236.1	7,122.3	6,304.8	6,671.6	74,459.3
19	Total Energy Excl. CSPP (MWh)	56,313.9	51,858.7	97,995.6	101,958.4	111,166.1	67,710.7	58,724.4	127,142.1	100,480.4	125,861.4	58,261.4	63,105.4	1,020,578.5
20	Market Expense (\$ x 1000)	\$ 166.2	\$ 158.7	\$ 899.1	\$ 1,431.1	\$ 2,045.6	\$ 742.0	\$ 417.6	\$ 1,955.6	\$ 1,350.5	\$ 2,333.9	\$ 323.2	\$ 318.2	\$ 12,141.6
21	Elkhorn Wind Expense (\$ x 1000)	\$ 1,217.0	\$ 1,171.4	\$ 1,547.7	\$ 1,992.7	\$ 1,793.6	\$ 1,323.5	\$ 1,375.2	\$ 2,257.2	\$ 2,205.5	\$ 1,569.3	\$ 1,545.6	\$ 1,266.0	\$ 19,264.8
22	Neal Hot Springs Expense (\$ x 1000)	\$ 1,201.4	\$ 964.5	\$ 1,207.3	\$ 1,205.5	\$ 1,306.9	\$ 1,347.4	\$ 1,468.2	\$ 2,234.9	\$ 2,572.1	\$ 2,091.6	\$ 1,910.1	\$ 1,426.4	\$ 18,936.4
23	Raft River Geothermal Expense (\$ x 1000)	\$ 312.2	\$ 250.1	\$ 350.8	\$ 456.8	\$ 416.1	\$ 393.8	\$ 419.2	\$ 544.3	\$ 573.0	\$ 479.9	\$ 424.8	\$ 330.4	\$ 4,951.3
24	Total Expense Excl. CSPP (\$ x 1000)	\$ 2,896.7	\$ 2,544.7	\$ 4,004.9	\$ 5,086.0	\$ 5,562.2	\$ 3,806.7	\$ 3,680.2	\$ 6,992.0	\$ 6,701.2	\$ 6,474.7	\$ 4,203.7	\$ 3,341.0	\$ 55,294.2
	<b>Surplus Sales</b>													
25	Energy (MWh)	315,245.4	247,863.7	103,441.7	23,787.7	13,429.6	56,525.8	79,933.8	8,054.7	50,036.9	54,847.1	196,075.1	242,923.9	1,392,165.4
26	Revenue Including Transmission Costs (\$ x 1000)	\$ 5,253.5	\$ 3,682.7	\$ 1,470.0	\$ 507.4	\$ 343.8	\$ 1,321.6	\$ 1,727.9	\$ 193.4	\$ 1,359.5	\$ 1,520.1	\$ 4,990.4	\$ 5,420.2	\$ 27,790.5
27	Transmission Costs (\$ x 1000)	\$ 315.2	\$ 247.9	\$ 103.4	\$ 23.8	\$ 13.4	\$ 56.5	\$ 79.9	\$ 8.1	\$ 50.5	\$ 54.8	\$ 196.1	\$ 242.9	\$ 1,392.2
28	Revenue Excluding Transmission Costs (\$ x 1000)	\$ 4,938.3	\$ 3,434.8	\$ 1,366.6	\$ 483.6	\$ 330.3	\$ 1,265.1	\$ 1,647.9	\$ 185.3	\$ 1,309.5	\$ 1,465.3	\$ 4,794.3	\$ 5,177.3	\$ 26,398.3
29	Net Power Supply Expenses (\$ x 1000)	\$ 3,381.2	\$ 4,493.8	\$ 12,649.3	\$ 25,788.3	\$ 30,361.2	\$ 16,203.1	\$ 13,461.3	\$ 19,352.6	\$ 20,352.3	\$ 18,094.9	\$ 9,012.5	\$ 6,824.2	\$ 179,974.7
30	PURPA (\$ x 1000)	\$ 17,582.1	\$ 19,584.5	\$ 21,761.0	\$ 25,654.1	\$ 23,655.6	\$ 18,171.9	\$ 15,587.7	\$ 17,898.9	\$ 17,887.8	\$ 11,853.5	\$ 14,314.1	\$ 13,255.9	\$ 217,207.2
31	EIM Benefits													\$ 5,500.0
32	Total Net Power Supply Expenses (\$ x 1000)	\$ 20,963.3	\$ 24,078.3	\$ 34,410.3	\$ 51,442.4	\$ 54,016.9	\$ 34,375.0	\$ 29,049.0	\$ 37,251.6	\$ 38,240.1	\$ 29,948.4	\$ 23,326.7	\$ 20,080.1	\$ 391,681.9
33	Sales at Customer Level (In 000s MWH)	1,046.856	1,088.531	1,253.529	1,518.425	1,587.884	1,443.479	1,134.623	1,056.620	1,182.173	1,295.156	1,231.836	1,123.754	14,962.866
34	Hours in Month	720	744	720	744	744	720	744	721	744	744	672	743	8760
35	Unit Cost / MWH (for PCAM)	\$20.03	\$22.12	\$27.45	\$33.88	\$34.02	\$23.81	\$25.60	\$35.26	\$32.35	\$23.12	\$18.94	\$17.87	\$26.18
	<b>Prices Used in Purchased Power &amp; Surplus Sales Above:</b>													
	<b>Heavy Load</b>													
36	Portion of Purchased Power considered HL Purchases	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%
37	Purchased Power HL Price	\$20.00	\$19.24	\$19.28	\$28.18	\$32.04	\$28.49	\$24.54	\$27.19	\$31.15	\$31.37	\$28.49	\$24.96	
38	Portion of Surplus Sales considered HL Surplus Sales	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%
39	Surplus Sales HL Price	\$18.56	\$17.85	\$17.89	\$26.15	\$29.73	\$26.43	\$22.77	\$25.23	\$28.90	\$29.11	\$26.43	\$23.16	
	<b>Light Load</b>													
40	Portion of Purchased Power considered LL Purchases	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%
41	Purchased Power LL Price	\$15.46	\$11.27	\$9.20	\$15.17	\$21.39	\$20.92	\$22.56	\$25.18	\$27.82	\$29.10	\$27.30	\$23.95	
42	Portion of Surplus Sales considered LL Surplus Sales	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%
43	Surplus Sales LL Price	\$13.49	\$9.83	\$8.02	\$13.23	\$18.65	\$18.25	\$19.68	\$21.96	\$24.26	\$25.38	\$23.81	\$20.89	



BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON

UE 333

STIPULATION

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Exhibit 2  
Revised March Forecast NPSE with EIM Benefits

May 1, 2018

**IPCO POWER SUPPLY EXPENSES FOR APRIL 1, 2018 – MARCH 31, 2019 (One Hydro Condition)**  
**Repriced Using UE 195 Settlement Methodology - 2018 March Forecast**

Settlement Stipulation  
Exhibit No. 2

Line No.		April	May	June	July	August	September	October	November	December	January	February	March	Annual
1	Hydroelectric Generation (MWh)	1,150,817.5	1,080,698.5	959,452.5	663,106.1	538,915.8	363,058.2	473,489.4	394,576.0	585,260.4	687,487.2	733,315.3	881,348.2	8,511,525.1
	<b>Bridger</b>													
2	Energy (MWh)	-	-	118.0	159,129.6	208,926.1	121,886.6	36,534.0	109,262.6	133,883.4	67,267.2	33,342.9	-	870,350.5
3	AURORA Modeled Expense (\$ x 1000)	\$ -	\$ -	\$ 4.3	\$ 5,661.9	\$ 7,436.7	\$ 4,390.3	\$ 1,373.0	\$ 4,106.0	\$ 4,853.9	\$ 2,454.9	\$ 1,236.5	\$ -	\$ 31,518.1
4	AURORA Modeled Handling Expense (\$ x 1000)	\$ -	\$ -	\$ 0.0	\$ 25.5	\$ 33.4	\$ 19.5	\$ 5.8	\$ 17.5	\$ 21.4	\$ 10.8	\$ 5.3	\$ -	\$ 139.3
5	AURORA Expense less Modeled Handling Expense (\$ x 1000)	\$ -	\$ -	\$ 4.3	\$ 5,636.4	\$ 7,403.3	\$ 4,370.8	\$ 1,367.9	\$ 4,088.5	\$ 4,832.5	\$ 2,444.1	\$ 1,231.1	\$ -	\$ 31,378.8
6	IPC Share of OHAG Expense (\$ x 1000)	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 209.9	\$ 2,518.9
7	Total Expense (\$ x 1000)	\$ 209.9	\$ 209.9	\$ 214.2	\$ 5,846.3	\$ 7,613.2	\$ 4,580.7	\$ 1,577.8	\$ 4,298.4	\$ 5,042.4	\$ 2,654.0	\$ 1,441.1	\$ 209.9	\$ 33,897.8
	<b>Boardman</b>													
8	Energy (MWh)	4,213.8	1,301.2	15,163.3	38,848.9	40,177.4	34,548.2	26,667.7	29,384.7	34,366.5	31,692.1	22,329.1	10,975.1	289,667.9
9	AURORA Modeled Expense (\$ x 1000)	\$ 123.0	\$ 39.5	\$ 390.8	\$ 977.2	\$ 1,010.5	\$ 870.2	\$ 675.8	\$ 742.6	\$ 864.9	\$ 834.6	\$ 595.3	\$ 307.3	\$ 7,431.6
10	AURORA Modeled Handling Expense (\$ x 1000)	\$ 0.2	\$ 0.1	\$ 0.8	\$ 1.9	\$ 2.0	\$ 1.7	\$ 1.3	\$ 1.5	\$ 1.7	\$ 1.6	\$ 1.1	\$ 0.5	\$ 14.5
11	AURORA Expense less Modeled Handling Expense (\$ x 1000)	\$ 122.8	\$ 39.5	\$ 390.0	\$ 975.2	\$ 1,008.5	\$ 868.5	\$ 674.5	\$ 741.1	\$ 863.2	\$ 833.1	\$ 594.2	\$ 306.7	\$ 7,417.1
12	IPC Share of OHAG Expense (\$ x 1000)	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 17.7	\$ 212.8
13	Total Expense (\$ x 1000)	\$ 140.5	\$ 57.2	\$ 407.7	\$ 993.0	\$ 1,026.2	\$ 886.2	\$ 692.2	\$ 758.8	\$ 880.9	\$ 850.8	\$ 611.9	\$ 324.5	\$ 7,629.9
	<b>Valmy</b>													
14	Energy (MWh)	-	-	1,215.8	65,204.3	67,346.1	57,060.3	29,184.7	41,536.7	72,175.2	47,720.9	23,607.3	79.9	405,131.2
15	AURORA Modeled Expense (\$ x 1000)	\$ -	\$ -	\$ 39.3	\$ 2,155.4	\$ 2,204.2	\$ 1,991.1	\$ 1,024.2	\$ 1,383.2	\$ 2,350.4	\$ 1,594.1	\$ 823.2	\$ 2.9	\$ 13,478.2
16	AURORA Modeled Handling Expense (\$ x 1000)	\$ -	\$ -	\$ 1.1	\$ 60.0	\$ 62.0	\$ 52.5	\$ 26.8	\$ 38.2	\$ 68.4	\$ 43.9	\$ 21.7	\$ 0.1	\$ 372.7
17	AURORA Expense less Modeled Handling Expense (\$ x 1000)	\$ -	\$ -	\$ 38.2	\$ 2,095.4	\$ 2,142.3	\$ 1,848.6	\$ 997.4	\$ 1,345.0	\$ 2,284.0	\$ 1,550.2	\$ 801.5	\$ 2.8	\$ 13,105.4
18	IPC Share of OHAG Expense (\$ x 1000)	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 326.9	\$ 3,923.3
19	Usage Charges Paid to IPC (\$ x 1000)													\$ 48.4
20	Total Expense (\$ x 1000)	\$ 326.9	\$ 326.9	\$ 365.1	\$ 2,422.4	\$ 2,469.2	\$ 2,175.5	\$ 1,324.3	\$ 1,672.0	\$ 2,611.0	\$ 1,877.2	\$ 1,128.4	\$ 329.8	\$ 16,980.4
	<b>Langley Gulch</b>													
21	Energy (MWh)	179,776.6	198,754.0	190,861.9	199,049.8	199,049.8	194,647.7	197,343.3	193,112.3	211,799.1	211,628.5	180,200.5	189,876.9	2,346,100.4
22	Expense (\$ x 1000)	\$ 2,659.0	\$ 2,914.6	\$ 2,913.6	\$ 2,963.2	\$ 3,106.0	\$ 3,277.7	\$ 3,210.5	\$ 3,694.6	\$ 4,744.3	\$ 4,377.3	\$ 3,529.6	\$ 3,308.6	\$ 40,699.0
	<b>Danskin</b>													
23	Energy (MWh)	324.5	317.3	40,418.1	158,021.3	162,922.3	109,665.2	83,461.7	47,663.1	7,203.5	7,080.2	5,230.4	5,086.7	627,394.2
24	Expense (\$ x 1000)	\$ 8.0	\$ 7.8	\$ 1,035.9	\$ 4,128.7	\$ 4,462.3	\$ 3,115.5	\$ 2,268.4	\$ 1,496.2	\$ 262.1	\$ 238.8	\$ 167.8	\$ 146.1	\$ 17,337.6
	<b>Bennett Mountain</b>													
25	Energy (MWh)	-	-	16,761.8	106,264.2	109,564.6	80,361.1	45,889.6	23,379.1	3,192.9	851.5	2,767.9	2,021.0	391,053.7
26	Expense (\$ x 1000)	\$ -	\$ -	\$ 433.9	\$ 2,691.1	\$ 2,898.9	\$ 2,277.8	\$ 1,258.1	\$ 743.9	\$ 117.9	\$ 29.2	\$ 90.2	\$ 59.0	\$ 10,599.9
27	Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 696.5	\$ 719.3	\$ 723.5	\$ 747.2	\$ 747.2	\$ 723.5	\$ 714.8	\$ 692.2	\$ 714.8	\$ 713.5	\$ 645.6	\$ 713.5	\$ 8,551.4
	<b>Purchased Power (Excluding PURPA)</b>													
28	Market Energy (MWh)	-	-	56,854.3	40,970.0	50,724.8	62,143.8	18,512.5	98,559.2	104,699.6	135,733.3	36,445.9	6,665.8	611,309.1
29	Elkhorn Wind Energy (MWh)	26,520.8	25,525.8	25,150.8	26,303.4	23,209.4	21,015.4	23,409.4	30,182.4	27,577.6	24,216.8	24,037.6	26,788.0	303,937.1
30	Neal Hot Springs Energy (MWh)	14,315.7	11,493.2	10,545.1	8,775.0	9,512.8	11,769.1	12,824.2	16,268.0	18,722.7	17,961.6	16,403.0	16,710.6	165,300.9
31	Raft River Geothermal Energy (MWh)	6,436.3	5,156.4	5,315.6	5,768.1	5,254.4	5,967.1	6,353.2	6,873.5	7,236.1	7,122.3	6,304.8	6,671.6	74,459.3
32	Total Energy Excl. PURPA (MWh)	47,272.8	42,175.4	97,865.8	81,816.5	88,701.4	100,895.4	61,099.2	151,883.0	158,235.9	185,034.0	83,191.3	56,836.0	1,155,006.5
33	Market Expense (\$ x 1000)	\$ -	\$ -	\$ 456.7	\$ 875.6	\$ 1,349.9	\$ 1,649.9	\$ 430.8	\$ 2,122.0	\$ 2,900.6	\$ 3,428.1	\$ 804.9	\$ 114.1	\$ 14,132.5
34	Elkhorn Wind Expense (\$ x 1000)	\$ 1,217.0	\$ 1,171.4	\$ 1,570.2	\$ 1,970.4	\$ 1,738.6	\$ 1,312.0	\$ 1,461.4	\$ 2,261.0	\$ 2,065.8	\$ 1,557.1	\$ 1,545.6	\$ 1,266.0	\$ 19,136.6
35	Neal Hot Springs Expense (\$ x 1000)	\$ 1,201.4	\$ 964.5	\$ 1,207.3	\$ 1,205.5	\$ 1,306.9	\$ 1,347.4	\$ 1,468.2	\$ 2,234.9	\$ 2,572.1	\$ 2,091.6	\$ 1,910.1	\$ 1,426.4	\$ 18,936.4
36	Raft River Geothermal Expense (\$ x 1000)	\$ 312.2	\$ 250.1	\$ 350.8	\$ 456.8	\$ 416.1	\$ 393.8	\$ 419.2	\$ 544.3	\$ 573.0	\$ 479.9	\$ 424.8	\$ 330.4	\$ 4,951.3
37	Total Expense Excl. PURPA (\$ x 1000)	\$ 2,730.6	\$ 2,386.0	\$ 3,585.0	\$ 4,508.3	\$ 4,811.5	\$ 4,703.1	\$ 3,779.7	\$ 7,162.1	\$ 8,111.6	\$ 7,556.8	\$ 4,685.5	\$ 3,136.9	\$ 57,156.8
	<b>Surplus Sales</b>													
38	Energy (MWh)	533,073.1	345,919.7	41,057.5	18,325.9	19,135.5	9,619.7	38,114.7	4,427.2	11,686.8	9,788.1	68,079.9	179,731.9	1,278,960.0
39	Revenue Including Transmission Expenses (\$ x 1000)	\$ 7,259.0	\$ 3,081.5	\$ 419.6	\$ 375.5	\$ 607.2	\$ 240.2	\$ 796.1	\$ 83.0	\$ 313.3	\$ 239.2	\$ 1,481.3	\$ 3,154.4	\$ 18,050.4
40	Transmission Expenses (\$ x 1000)	\$ 533.1	\$ 345.9	\$ 41.1	\$ 18.3	\$ 19.1	\$ 9.6	\$ 38.1	\$ 4.4	\$ 11.7	\$ 9.8	\$ 68.1	\$ 179.7	\$ 1,279.0
41	Revenue Excluding Transmission Expenses (\$ x 1000)	\$ 6,725.9	\$ 2,735.6	\$ 378.5	\$ 357.2	\$ 588.0	\$ 230.6	\$ 758.0	\$ 78.6	\$ 301.6	\$ 229.5	\$ 1,413.2	\$ 2,974.6	\$ 16,771.4
	<b>Net Hedges</b>													
42	Energy (MWh)	-	-	-	21,104.0	12,960.0	-	-	-	-	-	-	-	34,064.0
43	Cost (\$ x 1000)	\$ -	\$ -	\$ -	\$ 432.9	\$ 372.6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 805.5
44	Net Power Supply Expenses (\$ x 1000)	\$ 45.6	\$ 3,886.1	\$ 9,300.4	\$ 24,375.7	\$ 26,918.9	\$ 21,509.4	\$ 14,067.9	\$ 20,439.6	\$ 22,183.3	\$ 18,068.1	\$ 10,886.8	\$ 5,253.5	\$ 176,887.0
45	PURPA (\$ x 1000)	\$ 17,297.4	\$ 19,512.8	\$ 21,753.9	\$ 24,206.4	\$ 22,314.0	\$ 18,075.7	\$ 16,499.6	\$ 16,135.7	\$ 15,245.1	\$ 12,558.6	\$ 13,866.6	\$ 13,102.3	\$ 210,568.1
46	EIM Benefits													\$ 5,500.0
47	Total Net Power Supply Expenses (\$ x 1000)	\$ 17,342.9	\$ 23,398.8	\$ 31,054.3	\$ 48,582.2	\$ 49,233.0	\$ 39,585.1	\$ 30,567.5	\$ 36,575.3	\$ 37,428.4	\$ 30,626.7	\$ 24,753.4	\$ 18,355.8	\$ <b>381,955.0</b>
48	Sales at Customer Level (In 000s MWh)	1,046,856	1,088,531	1,253,529	1,518,425	1,587,884	1,443,479	1,134,623	1,056,620	1,182,173	1,295,156	1,231,836	1,123,754	14,962,866
49	Hours in Month	720	744	720	744	744	720	744	720	744	744	672	744	8760
50	Unit Cost / MWh (for PCAM)	\$16.57	\$21.50	\$24.77	\$32.00	\$31.01	\$27.42	\$26.94	\$34.62	\$31.66	\$23.65	\$20.09	\$16.33	\$ <b>25.53</b>
	<b>Prices Used in Purchased Power &amp; Surplus Sales Above:</b>													
	<b>Heavy Load</b>													
51	Portion of Purchased Power considered HL Purchases	0.00%	0.00%	42.70%	48.20%	20.50%	51.59%	53.98%	55.27%	44.15%	37.27%	19.64%	3.04%	
52	Purchased Power HL Price	16.62	12.94	14.29	28.05	35.33	29.35	24.57	22.70	30.23	28.47	24.36	19.74	
53	Portion of Surplus Sales considered HL Surplus Sales	64.27%	62.78%	70.56%	56.79%	90.93%	66.20%	50.20%	34.90%	77.88%	67.44%	77.89%	77.91%	
54	Surplus Sales HL Price	15.42	12.00	13.26	26.03	32.78	27.23	22.80	21.06	28.05	26.41	22.61	18.32	
	<b>Light Load</b>													
55	Portion of Purchased Power considered LL Purchases	0.00%	0.00%	57.30%	51.80%	79.50%	48.41%	46.02%	44.73%	55.85%	62.73%	80.36%	96.96%	
56	Purchased Power LL Price	11.89	4.23	3.37	15.15	24.37	23.56	21.74	20.08	25.70	23.35	21.53	17.03	
57	Portion of Surplus Sales considered LL Surplus Sales	35.73%	37.22%	29.44%	43.21%	9.07%	33.80%	49.80%	65.10%	22.12%	32.56%	22.11%	22.09%	
58	Surplus Sales LL Price	10.37	3.69	2.94	13.22	21.25	20.55	18.96	17.51	22.42	20.36	18.77	14.85	

BEFORE THE PUBLIC UTILITY COMMISSION  
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Exhibit 3  
Revised Combined Rate Calculation

May 1, 2018

**APCU Combined Rate Calculation**  
**April 2018 - March 2019**

<u>Line</u>	<u>OCTOBER APCU</u>	
1	Forecast of Normalized Sales (MWh)	14,962,866
2	Total Net Power Supply Expense	\$391,681,877
3	October APCU Unit Cost (\$/MWh)	\$26.18
	 <u>MARCH FORECAST</u>	
4	Forecast of Normalized Sales (MWh)	14,962,866
5	Total Net Power Supply Expense	\$381,955,040
6	March Forecast Unit Cost (\$/MWh)	\$25.53
7	Sales Adjusted Forecast Power Cost Change	-\$9,725,863
8	Portion of Change Allowed	95%
9	Forecast Change Allowed	(\$9,239,570)
10	<b>March Forecast Rate (\$/MWh)</b>	<b>(\$0.62)</b>
11	<b><u>Combined Rate (\$/MWh)</u></b>	<b><u>\$25.56</u></b>

BEFORE THE PUBLIC UTILITY COMMISSION  
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Exhibit 4  
Revised Revenue Spread – Revenue Impact – Total NPSE Methodology

May 1, 2018

Idaho Power Company  
Revenue Spread Exhibit for 2018 APCU October Update  
Stipulated Revenue Spread

Line No.

1	2018 October Update Oregon Jurisdictional Share of Base NPSE = \$26.18/MWh x 694,276.451 MWhs =	\$18,176,157
2	Oregon Allocated EIM Costs	\$113,268
3	<b>Proposed October Update APCU Revenue Requirement</b>	<b>\$18,289,425</b>

	TOTAL SYSTEM	RESIDENTIAL (1)	GEN SRV (7)	GEN SRV SECONDARY (9-S)	GEN SRV PRIMARY (9-P)	GEN SRV TRANS (9-T)	AREA LIGHTING (15)	LG POWER PRIMARY (19-P)	LG POWER TRANS (19-T)	IRRIGATION SECONDARY (24-S)	UNMETERED GEN SERVICE (40)	MUNICIPAL ST LIGHT (41)	TRAFFIC CONTROL (42)	
4	April 2018 - March 2019 Generation Level Normalized Sales (kWh)	748,251,156	209,227,304	20,744,179	130,134,511	17,351,238	3,138,528	475,798	183,804,202	110,241,240	72,113,759	5,904	989,628	24,865
5	Class Share of April 2018 - March 2019 Generation Level Normalized Sales (kWh)	100%	27.96%	2.77%	17.39%	2.32%	0.42%	0.06%	24.56%	14.73%	9.64%	0.00%	0.13%	0.00%
6	2018 October Update Class Allocated Base NPSE	\$ 18,289,425	\$ 5,114,121	\$ 507,048	\$ 3,180,864	\$ 424,115	\$ 76,715	\$ 11,630	\$ 4,492,707	\$ 2,694,615	\$ 1,762,669	\$ 144	\$ 24,189	\$ 608
7	June 2018 - May 2019 Loss-Adjusted Normalized Sales (kWh)	695,839,775	191,153,085	18,933,523	118,780,814	16,359,226	3,035,328	434,123	173,550,380	106,832,451	65,829,824	5,388	902,945	22,688
8	Proposed APCU Rates for 2018 October Update (\$/kWh)	0.02628	0.02675	0.02678	0.02678	0.02593	0.02527	0.02679	0.02589	0.02522	0.02678	0.02678	0.02679	0.02679
9	Proposed October Update APCU Revenue Requirement	\$18,289,425	\$5,114,121	\$507,048	\$3,180,864	\$424,115	\$76,715	\$11,630	\$4,492,707	\$2,694,615	\$1,762,669	\$144	\$24,189	\$608
10	APCU Rates for 2017 October Update - Order No. 17-165	25.979	31.101	25.408	25.878	23.452	26.369	22.645	24.906	19.884	24.793	60.766	17.563	18.916
11	June 2018 - May 2019 Loss-Adjusted Normalized Sales (kWh)	695,839,775	191,153,085	18,933,523	118,780,814	16,359,226	3,035,328	434,123	173,550,380	106,832,451	65,829,824	5,388	902,945	22,688
12	Base NPSE Recovered under Current APCU Rates	\$18,068,893	\$5,944,979	\$481,057	\$3,073,866	\$383,657	\$80,040	\$9,831	\$4,322,474	\$2,124,262	\$1,632,112	\$327	\$15,859	\$429

Idaho Power Company  
 Calculation of Revenue Impact  
 State of Oregon  
 APCU October Update  
 Effective June 1, 2018

Summary of Revenue Impact  
 Current Base Revenue to Proposed Base Revenue

Line No	Tariff Description	Rate Sch. No.	Average Number of Customers	Normalized Energy (kWh)	Current Base Revenue w/o NPSE	Current Base NPSE Revenue	Total Current Base Revenue	Proposed Base NPSE Revenue	Total Proposed Base Revenue	Adjustments to Base Revenue	Percent Change Base to Base Revenue	Stipulated Revenue Increase 3.4% Cap	Revenue Requirement Shortfall
<u>Uniform Tariff Rates:</u>													
1	Residential Service	1	13,720	191,153,085	\$13,256,174	\$5,944,979	\$19,201,153	\$5,114,121	\$18,370,295	(\$830,857)	(4.33)%	-\$830,857	\$0
2	Small General Service	7	2,540	18,933,523	\$1,508,938	\$481,057	\$1,989,995	\$507,048	\$2,015,986	\$25,991	1.31%	\$25,991	\$0
3	Large General Secondary	9S	943	118,780,814	\$6,239,807	\$3,073,866	\$9,313,673	\$3,180,864	\$9,420,671	\$106,998	1.15%	\$106,998	\$0
4	Large General Primary	9P	6	16,359,226	\$746,600	\$383,657	\$1,130,257	\$424,115	\$1,170,715	\$40,458	3.58%	\$38,429	\$2,029
5	Large General Transmission	9T	1	3,035,328	\$124,517	\$80,040	\$204,557	\$76,715	\$201,232	(\$3,325)	(1.63)%	-\$3,325	\$0
6	Dusk to Dawn Lighting	15	0	434,123	\$98,510	\$9,831	\$108,341	\$11,630	\$110,140	\$1,799	1.66%	\$1,799	\$0
8	Large Power Primary	19P	6	173,550,380	\$6,406,873	\$4,322,474	\$10,729,347	\$4,492,707	\$10,899,580	\$170,233	1.59%	\$170,233	\$0
9	Large Power Transmission	19T	1	106,832,451	\$4,020,341	\$2,124,262	\$6,144,603	\$2,694,615	\$6,714,957	\$570,353	9.28%	\$208,917	\$361,437
10	Agricultural Irrigation Service	24	1,988	65,829,824	\$4,795,387	\$1,632,112	\$6,427,499	\$1,762,669	\$6,558,056	\$130,557	2.03%	\$130,557	\$0
11	Unmetered General Service	40	2	5,388	\$217	\$327	\$544	\$144	\$361	(\$183)	(33.65)%	-\$183	\$0
12	Street Lighting	41	10	902,945	\$126,775	\$15,859	\$142,634	\$24,189	\$150,964	\$8,331	5.84%	\$4,850	\$3,481
13	Traffic Control Lighting	42	8	22,688	\$1,703	\$429	\$2,132	\$608	\$2,310	\$179	8.38%	\$72	\$106
14	Total Uniform Tariffs		19,225	695,839,775	\$37,325,843	\$18,068,893	\$55,394,735	\$18,289,425	\$55,615,268	\$220,533	0.40%		\$367,053
15	Total Oregon Retail Sales		19,225	695,839,775	\$37,325,843	\$18,068,893	\$55,394,735	\$18,289,425	\$55,615,268	\$220,533	0.40%		

(1) Updated June 2018-May 2019 Test Year

Idaho Power Company  
 Revenue Spread Exhibit for 2018 APCU October Update  
 Stipulated Revenue Spread

Line No.

1	3.4% Increase Cap - Revenue Requirement Shortfall		\$367,053											
		<b>TOTAL SYSTEM</b>	<b>RESIDENTIAL (1)</b>	<b>GEN SRV (7)</b>	<b>GEN SRV SECONDARY (9-S)</b>	<b>GEN SRV PRIMARY (9-P)</b>	<b>GEN SRV TRANS (9-T)</b>	<b>AREA LIGHTING (15)</b>	<b>LG POWER PRIMARY (19-P)</b>	<b>LG POWER TRANS (19-T)</b>	<b>IRRIGATION SECONDARY (24-S)</b>	<b>UNMETERED GEN SERVICE (40)</b>	<b>MUNICIPAL ST LIGHT (41)</b>	<b>TRAFFIC CONTROL (42)</b>
7	April 2018 - March 2019 Generation Level Normalized Sales (kWh)	619,644,185	209,227,304	20,744,179	130,134,511		3,138,528	475,798	183,804,202		72,113,759	5,904		
8	Class Share of April 2018 - March 2019 Generation Level Normalized Sales (kWh)	100%	33.77%	3.35%	21.00%		0.51%	0.08%	29.66%		11.64%	0.00%		
9	2018 October Update Class Allocated Base NPSE	\$ 367,053	\$ 123,938	\$ 12,288	\$ 77,087		\$ 1,859	\$ 282	\$ 108,879		\$ 42,717	\$ 3		
10	June 2018 - May 2019 Loss-Adjusted Normalized Sales (kWh)	571,722,465	191,153,085	18,933,523	118,780,814		3,035,328	434,123	173,550,380		65,829,824	5,388		
11	Proposed APCU Rates for 2018 October Update (\$/kWh)	0.00064	0.00065	0.00065	0.00065		0.00061	0.00065	0.00063		0.00065	0.00065		
12	Proposed October Update APCU Revenue Requirement	\$367,053	\$123,938	\$12,288	\$77,087	\$0	\$1,859	\$282	\$108,879	\$0	\$42,717	\$3	\$0	\$0



Idaho Power Company  
Calculation of Revenue Impact  
State of Oregon  
APCU October Update  
Effective June 1, 2018

Summary of Revenue Impact  
Current Base Revenue to Proposed Base Revenue

Line No	Tariff Description	Rate Sch. No.	Average Number of Customers	Normalized Energy (kWh)	Current Base Revenue w/o NPSE	Current Base NPSE Revenue	Total Current Base Revenue	Proposed Base NPSE Revenue	Total Proposed Base Revenue	Adjustments to Base Revenue	Percent Change Base to Base Revenue	1st Pass Adjustment to Proposed Base NPSE Revenue	1st Pass Total Adjustments to Proposed Base NPSE Revenue	1st Pass Percent Change Base to Base Revenue	1st Pass Proposed Base NPSE Revenue	Revised APCU Rates for 2018 October Update (\$/kWh)
<u>Uniform Tariff Rates:</u>																
1	Residential Service	1	13,720	191,153,085	\$13,256,174	\$5,944,979	\$19,201,153	\$5,114,121	\$18,370,295	(\$830,857)	(4.33)%	\$123,938	(706,919)	(3.68)%	\$5,238,060	0.027402
2	Small General Service	7	2,540	18,933,523	\$1,508,938	\$481,057	\$1,989,995	\$507,048	\$2,015,986	\$25,991	1.31%	\$12,288	38,279	1.92%	\$519,336	0.027429
3	Large General Secondary	9S	943	118,780,814	\$6,239,807	\$3,073,866	\$9,313,673	\$3,180,864	\$9,420,671	\$106,998	1.15%	\$77,087	184,085	1.98%	\$3,257,951	0.027428
4	Large General Primary	9P	6	16,359,226	\$746,600	\$383,657	\$1,130,257	\$424,115	\$1,170,715	\$40,458	3.58%		38,429	3.40%	\$422,085	0.025801
5	Large General Transmission	9T	1	3,035,328	\$124,517	\$80,040	\$204,557	\$76,715	\$201,232	(\$3,325)	(1.63)%	\$1,859	(1,466)	(0.72)%	\$78,574	0.025886
6	Dusk to Dawn Lighting	15	0	434,123	\$98,510	\$9,831	\$108,341	\$11,630	\$110,140	\$1,799	1.66%	\$282	2,081	1.92%	\$11,912	0.027439
7	Large Power Primary	19P	6	173,550,380	\$6,406,873	\$4,322,474	\$10,729,347	\$4,492,707	\$10,899,580	\$170,233	1.59%	\$108,879	279,111	2.60%	\$4,601,586	0.026514
8	Large Power Transmission	19T	1	106,832,451	\$4,020,341	\$2,124,262	\$6,144,603	\$2,694,615	\$6,714,957	\$570,353	9.28%		208,917	3.40%	\$2,333,178	0.021840
9	Agricultural Irrigation Service	24	1,988	65,829,824	\$4,795,387	\$1,632,112	\$6,427,499	\$1,762,669	\$6,558,056	\$130,557	2.03%	\$42,717	173,274	2.70%	\$1,805,387	0.027425
10	Unmetered General Service	40	2	5,388	\$217	\$327	\$544	\$144	\$361	(\$183)	(33.65)%	\$3	(180)	(33.01)%	\$148	0.027433
11	Street Lighting	41	10	902,945	\$126,775	\$15,859	\$142,634	\$24,189	\$150,964	\$8,331	5.84%		4,850	3.40%	\$20,708	0.022934
12	Traffic Control Lighting	42	8	22,688	\$1,703	\$429	\$2,132	\$608	\$2,310	\$179	8.38%		72	3.40%	\$502	0.022111
13	Total Uniform Tariffs		19,225	695,839,775	\$37,325,843	\$18,068,893	\$55,394,735	\$18,289,425	\$55,615,268	\$220,533	0.40%	\$367,053	\$220,533	0.40%	\$18,289,425	
14	Total Oregon Retail Sales		19,225	695,839,775	\$37,325,843	\$18,068,893	\$55,394,735	\$18,289,425	\$55,615,268	\$220,533	0.40%					



**Idaho Power Company**  
**Calculation of Revenue Impact**  
**State of Oregon**  
**Revised October Update / March Forecast Filing**  
**Effective June 1, 2018**

**Summary of Revenue Impact**  
**Current Billed Revenue to Proposed Billed Revenue**

Line No	Tariff Description	Rate Sch. No.	Average Number of Customers	Normalized Energy (kWh)	Current Billed Revenue w/o March Forecast	Current Billed March Forecast Revenue	Total Current Billed Revenue	Proposed March Forecast Revenue	Proposed Adjustments to March Forecast Revenue	Total Adjustments to Base Revenue	Total Adjustments to Billed Revenue	Proposed Total Billed Revenue	Percent Change Billed to Billed Revenue
<u>Uniform Tariff Rates:</u>													
1	Residential Service	1	13,720	191,153,085	\$19,230,017	\$54,750	\$19,284,767	(\$120,364)	(\$175,114)	(\$706,919)	(\$882,033)	\$18,402,734	(4.57)%
2	Small General Service	7	2,540	18,933,523	\$1,992,797	\$4,430	\$1,997,227	(\$11,934)	(\$16,364)	\$38,279	\$21,915	\$2,019,142	1.10%
3	Large General Secondary	9S	943	118,780,814	\$9,331,252	\$28,309	\$9,359,561	(\$74,863)	(\$103,172)	\$184,085	\$80,913	\$9,440,474	0.86%
	Large General Primary	9P	6	16,359,226	\$1,132,678	\$3,533	\$1,136,211	(\$9,982)	(\$13,515)	\$38,429	\$24,914	\$1,161,125	2.19%
	Large General Transmission	9T	1	3,035,328	\$205,007	\$737	\$205,744	(\$1,806)	(\$2,543)	(\$1,466)	(\$4,009)	\$201,735	(1.95)%
4	Dusk to Dawn Lighting	15	0	434,123	\$108,405	91	\$108,496	(\$274)	(\$364)	\$2,081	\$1,717	\$110,213	1.58%
5	Large Power Primary	19P	6	173,550,380	\$10,755,033	\$39,808	\$10,794,841	(\$105,738)	(\$145,546)	\$279,111	\$133,565	\$10,928,406	1.24%
	Large Power Transmission	19T	1	106,832,451	\$6,160,414	\$19,563	\$6,179,978	(\$63,419)	(\$82,983)	\$208,917	\$125,934	\$6,305,912	2.04%
6	Agricultural Irrigation Service	24	1,988	65,829,824	\$6,437,242	\$15,031	\$6,452,273	(\$41,485)	(\$56,516)	\$173,274	\$116,758	\$6,569,031	1.81%
7	Unmetered General Service	40	2	5,388	\$545	3	\$548	(\$3)	(\$6)	(\$180)	(\$186)	\$362	(33.95)%
8	Street Lighting	41	10	902,945	\$142,710	146	\$142,856	(\$569)	(\$715)	\$4,850	\$4,134	\$146,990	2.89%
9	Traffic Control Lighting	42	8	22,688	\$2,135	4	\$2,139	(\$14)	(\$18)	\$72	\$54	\$2,193	2.53%
10	Total Uniform Tariffs		19,225	695,839,775	55,498,236	166,406	\$55,664,642	(\$430,451)	(\$596,857)	\$220,533	(\$376,324)	\$55,288,317	(0.68)%
11	Total Oregon Retail Sales		19,225	695,839,775	55,498,236	166,406	\$55,664,642	(\$430,451)	(\$596,857)	\$220,533	(\$376,324)	\$55,288,317	(0.68)%

(1) Updated June 2018-May 2019 Test Year