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October 18, 2013

## VIA ELECTRONIC AND U.S. MAIL

PUC Filing Center  
Public Utility Commission of Oregon  
PO Box 2148  
Salem, OR 97308-2148

**Re: UE \_\_\_ In The Matter of IDAHO POWER COMPANY's 2014 Annual Power Cost Update**

Attention Filing Center:

Enclosed for filing in the above-referenced matter is an original and five copies of the Testimony of Scott Wright (Idaho Power/100-108). Please direct all communications in this matter to:

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A copy of this filing has been served on all parties to the 2013 APCU (UE 257). Please contact this office with any questions.

Very truly yours,

Wendy McIndoo  
Office Manager

Enclosures  
cc: Service List

Idaho Power/100  
Witness: Scott Wright

BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON

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IN THE MATTER OF IDAHO POWER )  
COMPANY'S 2014 ANNUAL POWER )  
COST UPDATE )  
OCTOBER UPDATE )  
\_\_\_\_\_  
)

**IDAHO POWER COMPANY**  
**DIRECT TESTIMONY**  
**OF**  
**SCOTT WRIGHT**

October 18, 2013

- 1   **Q. Please state your name, business address, and present occupation.**
- 2   A. My name is Scott Wright. I am employed by Idaho Power Company ("Idaho Power"  
3       or "Company") as a Regulatory Analyst II in the Regulatory Affairs Department. My  
4       business address is 1221 West Idaho Street, Boise, Idaho 83702.
- 5   **Q. Please describe your educational background.**
- 6   A. I received a Bachelor of Science degree in Business Economics from Eastern  
7       Oregon University. I have also attended the Center for Public Utilities "Practical  
8       Skills for a Changing Electric Industry" course at New Mexico State University in  
9       Albuquerque, New Mexico, the Edison Electric Institute "Electric Rate Advanced  
10      Course" in Madison, Wisconsin and the NERA "Marginal Costing for Electric Utilities  
11      Course" in Los Angeles, California.
- 12   **Q. Please describe your work experience.**
- 13   A. In May 1998, I accepted a position as Research Assistant with Idaho Power in the  
14       Regulatory Affairs Department. In March 2007, I was promoted to a Regulatory  
15       Analyst I. In March 2010, I was promoted to a Regulatory Analyst II. As a  
16       Regulatory Analyst II, I am responsible for running the AURORA model to calculate  
17       net power supply expenses ("NPSE") for ratemaking purposes, as well as the  
18       determination of the marginal cost of energy used in the Company's marginal cost  
19       analyses. My duties also include providing analytical support for other regulatory  
20       activities within the Regulatory Affairs Department. In my current role, I have served  
21       as the Company's power supply expense witness in the last five Annual Power Cost  
22       Update ("APCU") filings before the Public Utility Commission of Oregon  
23       ("Commission"), UE 203, UE 214, UE 222, UE 242, and UE 257.
- 24   **Q. What is the purpose of your testimony?**
- 25   A. The purpose of my testimony is to describe the Company's October Update for the  
26       2014 APCU, which has been prepared in accordance with Order No. 08-238.

1   **Q. What is the October Update?**

2   A. The October Update is the Company's estimate of what "normal" NPSE will be for an  
3       upcoming 12-month test year. In this case, the 12-month test year is April 2014  
4       through March 2015.

5   **Q. Was the AURORA model used for this October Update?**

6   A. Yes.

7   **Q. Please describe the AURORA model and how it is used by the Company.**

8   A. The AURORA model is a comprehensive electric market resource dispatch model.  
9       The Company uses AURORA to simulate the economic dispatch of its resources to  
10      determine NPSE under "normal" conditions.

11   **Q. Please describe the variables that are to be updated in the AURORA model as  
12      delineated in Order No. 08-238.**

13   A. Order No. 08-238 identifies a number of variables to be updated in the AURORA  
14      model annually in October: fuel prices, transportation costs, maintenance rates, heat  
15      rates, and forced outage rates for the thermal plants. This year's NPSE modeling  
16      results for the 12-month test year reflect updates to the variables listed above for all  
17      Company-owned resources as well as an updated Sales and Load Forecast.

18       Natural gas prices were updated using the forecast methodology used in the  
19      Company's Integrated Resource Plan, which is also consistent with the methodology  
20      used in prior APCU filings. This methodology uses the Northwest Power and  
21      Conservation Council (NPCC), New York Mercantile Exchange (NYMEX), Natural  
22      Gas Exchange (NGX), Energy Information Administration (EIA), and Moody's  
23      forecast data to develop a normalized gas price. The normalization process is  
24      intended to reduce volatility that may occur in the short-term market.

25

26

1                   Public Utility Regulatory Policies Act of 1978 (“PURPA”) contracts and other  
2                   Purchased Power Agreements (“PPA”) were updated to reflect expected costs during  
3                   the April 2014 through March 2015 test year.

4       **Q. Have you prepared an exhibit to demonstrate the normalization of variable  
5                   power supply expenses as determined by the AURORA modeling process?**

6       A. Yes. Exhibit 101 shows the results of the AURORA modeling determination of  
7                   normalized NPSE for the April 2014 through March 2015 test year. Exhibit 101  
8                   shows the summary of results containing average variable power supply generation  
9                   sources and expenses based on 85 historical water conditions.

10      **Q. Please summarize the sources and disposition of energy shown on Exhibit  
11                  101.**

12      A. As can be seen on Exhibit 101, hydro generation supplies 8.5 million megawatt-  
13                  hours (“MWh”), approximately 46 percent ( $8.5 \text{ million MWh} / 18.3 \text{ million MWh} = 46$   
14                  percent) of the generation mix. Thermal generation supplies 6.4 million MWh  
15                  (Bridger 4.8, Boardman 0.3, Valmy 0.5, Langley Gulch 0.8), approximately 35  
16                  percent ( $6.4 \text{ million MWh} / 18.3 \text{ million MWh} = 35 \text{ percent}$ ) of the generation mix.  
17                  Danskin and Bennett Mountain are peaking units typically supplying energy at times  
18                  when resources and/or transmission lines are constrained. Purchases of power are  
19                  made up of short-term and longer-term market purchases, PPAs, and PURPA.  
20                  PURPA purchases reflect normalized and annualized generation levels and account  
21                  for nearly 2.2 million MWh. PURPA purchases are not included on Exhibit 101;  
22                  however, when combined with market purchases of 1.1 million MWh, total purchases  
23                  amount to 3.3 million MWh ( $2.2 \text{ million MWh} + 1.1 \text{ million MWh} = 3.3 \text{ million MWh}$ ) or  
24                  approximately 18 percent ( $3.3 \text{ million MWh} / 18.3 \text{ million MWh} = 18 \text{ percent}$ ) of the  
25                  generation mix. Of the 18.3 million MWh generated by the system, 15.6 million MWh  
26                  are utilized for system loads while nearly 2.7 million MWh are sold as surplus.

**Q. Have any changes in coal prices occurred since last year's October Update filing?**

A. Yes. Coal prices for each of the Company's coal-fired thermal generation plants have been updated to reflect current operating costs. The coal prices at the Bridger plant have decreased slightly from \$22.93 per MWh to \$22.68 per MWh. The coal prices at the Boardman plant have increased from \$22.74 per MWh to \$26.68 per MWh. The coal prices at the Valmy plant have decreased from \$37.59 per MWh to \$35.50 per MWh.

**Q. Please explain the changes in coal prices described above.**

10 A. Fuel costs at the Company's coal plants are expected to vary from year to year in the  
11 course of normal operations. These normal variations can be attributed to price  
12 variability provided for in existing contracts for coal supply and shipment, plant  
13 operational variability, and coal yard operational variability.

In addition to the normal variations in coal fuel costs that should be expected from year to year, there were additional factors that contributed to the changes in coal costs at the Boardman and Valmy plants. The increase in the Boardman per unit cost can also be attributed to the expiration of a long-term shipping contract that terminates at the end of 2013, which will be replaced with a contract containing higher costs. The decrease in the Valmy per unit cost can be attributed to a billing dispute with Black Butte which, if resolved in the Company's favor, will result in lower coal prices for Valmy as compared to the prices used in the preparation of the 2013 October Update. The dispute is not yet resolved and may go to arbitration, but a lower coal price is projected in the Company's coal forecast, and therefore, is being used for the 2014 October Update.

## **Q. Have natural gas prices changed from last year's October Update?**

1 A. Yes. The Henry Hub price used in the 2013 October Update was \$3.69 per MMBtu,  
2 while the Henry Hub price used in the 2014 October Update is \$4.32 per MMBtu, an  
3 increase of \$0.63 per mmBtu. The increase in gas prices for the 2014 October  
4 Update is the result of several factors. The 2013 October Update included an  
5 adjustment to the 2013 forecast year to account for the mild 2012-2013 winter  
6 season which created above normal natural gas storage, which in turn helped to  
7 push natural gas prices down. Approval of new U.S. LNG export terminals has  
8 resulted in decreased imports from Canada and increased exports to Mexico.  
9 Correspondingly, prices are expected to track more closely with the global LNG price  
10 over time, which is currently above the \$4.32 per MMBtu.

11 Q. **Please describe the change in PURPA generation and expenses since last  
12 year's October filing.**

13 A. PURPA generation has decreased from 267 average megawatts ("aMW") to 252  
14 aMW, a decrease of 15 aMW. Corresponding PURPA expenses have also  
15 decreased from \$172.9 million to \$165.9 million, a decrease of \$7 million.

16 Q. **Why did PURPA generation decrease since the 2013 October Update?**

17 A. The decrease in PURPA generation and expenses since the 2013 October Update is  
18 driven by the removal of six PURPA projects that did not develop as planned and  
19 have since terminated their contracts.

20 Q. **Please explain the regulatory treatment of PURPA expense in Oregon.**

21 A. Many of the PURPA contracts have payment provisions that require the Company to  
22 provide leveled monthly payments over the length of the contract. Per Order No.  
23 85-010, Oregon regulation requires the Company to reflect a non-leveled payment  
24 stream in rates, rather than the leveled monthly payment stream. The non-  
25 leveled method provides benefits in the early years of the contract by paying less  
26 than the actual leveled contract levels. As time passes, the non-leveled method

1 required in Oregon begins to exceed the levelized monthly payment stream,  
2 therefore, reflecting the higher re-priced costs. This is the case with the majority of  
3 the PURPA contracts being impacted by this re-pricing methodology resulting in  
4 higher PURPA expenses in the Oregon jurisdiction. In last year's APCU proceeding,  
5 Staff conducted extensive discovery regarding the methodology used for the re-  
6 pricing of PURPA contracts. After several rounds of workshops, all parties agreed in  
7 the Stipulation filed in UE 257 that the methodology used for re-pricing PURPA  
8 contracts is consistent with past practices and represents a reasonable methodology  
9 going forward.

10 **Q. Has the Company changed the way PURPA generation is modeled as  
11 compared to the way it was modeled in last year's 2013 October Update?**

12 A. Yes. Previously all of the PURPA projects were aggregated and modeled in  
13 AURORA based on a monthly generation shape. For example, if the month of  
14 January was forecasted to include 200 MW of PURPA generation, 200 MW of  
15 PURPA generation would show up for each hour in January. This resulted in a flat  
16 block of PURPA generation with no hourly fluctuations within the month. For the  
17 2014 October Update, the Company broke PURPA generation into two categories,  
18 "PURPA Wind" and all other PURPA. PURPA wind is now modeled by applying the  
19 2012 hourly actual historical PURPA wind generation shape to the monthly  
20 forecasted generation amounts. All other PURPA generation is modeled on a  
21 monthly basis because hourly fluctuations do not occur to as great an extent for  
22 those resource types. The Company views the modification to be an improvement  
23 that more accurately reflects the variable nature of wind into the hourly dispatch  
24 modeling in AURORA.

25 **Q. Have the Company's system loads changed since last year's October Update?**

26

- 1 A. The Company's annual normalized system load used in last year's April 2013  
2 through March 2014 filing was 1,764 aMW. The Company's April 2014 through  
3 March 2015 annual normalized system load used in this filing is 1,780 aMW, an  
4 increase of 16 aMW. The increase of 16 aMW is less than a one percent increase in  
5 loads between the two test years.
- 6 Q. **What forward price curve did the Company use to re-price purchased power  
7 and surplus sales?**
- 8 A. For the October Update, the Company used the methodology approved in Order No.  
9 08-238. This methodology uses a one-year average of the daily forward price curves  
10 for April 2015 through March 2016 shown in Exhibit 102, which is then discounted for  
11 inflation back to April 2014 through March 2015 according to the quarterly inflation  
12 indices provided in Exhibit 103.
- 13 Q. **What average forward price curves did the Company use to re-price purchased  
14 power and surplus sales for the normalized test year?**
- 15 A. Exhibit 104 shows the revised monthly prices for April 2014 through March 2015.  
16 Per Order No. 08-238, these are considered the "normal" forward prices used to re-  
17 price the Company's purchased power and surplus sales estimates for the  
18 normalized test year.
- 19 Q. **How does the re-pricing of purchased power and surplus sales, using a  
20 "normal" forward price curve, change purchased power expenses and surplus  
21 sales revenues as modeled by AURORA?**
- 22 A. Exhibit 101 shows the purchased power expenses and surplus sales revenues  
23 before re-pricing as determined by the AURORA modeling process. Exhibit 105  
24 shows the same normalized generation dispatch with purchased power and surplus  
25 sales re-priced using the normalized forward price curve shown in Exhibit 104. A  
26 comparison of Exhibit 101 and Exhibit 105 demonstrates the changes due to re-

1       pricing. Purchased power expenses decrease by \$0.9 million, moving from \$20.6  
2       million to \$19.7 million. Surplus sales revenues increase by \$14.4 million, moving  
3       from \$72.5 million to \$86.9 million. In this case, the NPSE resulting from the re-  
4       pricing methodology shown on Exhibit 105 is a decrease in NPSE of \$15.4 million or  
5       approximately \$1.05/MWh as compared to the AURORA generated expectation  
6       shown on Exhibit 101.

7       **Q. Does the methodology used to estimate the power supply expenses  
8       represented in Exhibit 104 conform with the methodology detailed in Order No.  
9       08-238?**

10      A. Yes, it does.

11      **Q. What is the October Update unit cost per megawatt-hour (\$/MWh) represented  
12       by this filing?**

13      A. Exhibit 105 shows the normalized annual sales at customer level for the April 2014  
14       through March 2015 test year are 14,186,526 MWh. Based upon test year sales, the  
15       cost per unit for the October Update to become effective on June 1, 2014, is \$21.80  
16       per MWh ( $\$309.3 \text{ million} / 14.187 \text{ million MWh} = \$21.80 \text{ per MWh}$ ).

17      **Q. How does this \$21.80 per MWh October Update compare to the October Update  
18       that resulted from last year's computation?**

19      A. The October Update unit cost which became effective June 1, 2013, was \$23.13 per  
20       MWh based upon a determination of total net power supply expenses of \$325.2  
21       million. This year's October Update per unit cost of \$21.80 per MWh equates to a  
22       decrease of \$1.33 per MWh ( $\$23.13 - 21.80 = \$1.33$ ) or a \$15.9 million decrease in  
23       system net power supply expenses from last year's October Update.

24      **Q. Please explain how the revenue deficiency for the October Update is  
25       calculated using the unit cost of negative \$1.33 per MWh.**

26

1 A. The revenue deficiency for the October Update is calculated by multiplying the unit  
2 cost of negative \$1.33 per MWh by the loss adjusted sales for the April 2014 through  
3 March 2015 test period of 638,186.407 MWh, creating a revenue deficiency of  
4 negative \$0.8 million.

5 Q. **What factor or factors led to a revenue deficiency of negative \$0.8 million?**

6 A. As described earlier in my testimony, the Company performs a re-pricing of  
7 purchased power and surplus sales. When comparing this year's October Update to  
8 last year's October Update, the reduction in system NPSE of \$15.9 million is largely  
9 the result of applying the re-pricing methodology described earlier in my testimony.

10 Q. **Have you prepared an exhibit to demonstrate the impact that the re-pricing had  
11 on this year's October Update as compared to last year's October Update?**

12 A. Yes. Exhibit 106 presents a comparison of the AURORA developed market prices  
13 versus the re-pricing methodology described earlier in my testimony.

14 Q. **How does the NPSE in this year's October Update compare to last year's  
15 October Update when comparing only the AURORA developed market prices?**

16 A. Column E of Exhibit 106 presents the differences in NPSE by cost and revenue  
17 component that exist between this year's October Update and last year's October  
18 Update, based on the market price determinations made by the AURORA model. As  
19 can be seen in Column E of Exhibit 106, an \$8.8 million increase in NPSE exists  
20 between the 2014 October Update and the 2013 October Update, which is calculated  
21 by taking the values under the heading "2014 October Update" in column B of \$324.6  
22 million minus the values under the heading "2013 October Update" in column A of  
23 \$315.8 million.

24 Q. **How does the NPSE in this year's October Update compare to last year's  
25 October Update after market prices are re-priced under the methodology  
26 described earlier in your testimony?**

1 A. Column F of Exhibit 106 presents the differences in NPSE by cost and revenue  
2 component that exist between this year's October Update and last year's October  
3 Update, based on the market price determinations made by the re-pricing  
4 methodology. As can be seen in Column F of Exhibit 106, a \$15.9 million decrease  
5 in NPSE exists between the 2014 October Update and the 2013 October Update,  
6 which is calculated by taking the values under the heading "2014 October Update" in  
7 column B of \$309.3 million minus the values under the heading "2013 October  
8 Update" in column A of \$325.2 million.

9 Q. **What can be concluded from the information included in Exhibit 106?**

10 A. The impact that the re-pricing methodology had on the 2013 October Update and the  
11 2014 October Update is shown in Column G and Column H, respectively. As can be  
12 seen in Column G, the net effect that the re-pricing of market price had on market  
13 purchases and surplus sales was an increase of \$9.4 million in the 2013 October  
14 Update. As can be seen in Column H, the net effect that the re-pricing of market  
15 price had on market purchases and surplus sales was a decrease of \$15.4 million in  
16 the 2014 October Update. Line 14 of Column H demonstrates that the re-pricing  
17 methodology served to increase the value of surplus sales by \$14.5 million in the  
18 2014 October Update, accounting for the majority of the overall decrease in total  
19 NPSE.

20 Q. **What method of allocation are you proposing to spread the incremental  
21 revenue requirement associated with the October Update to the various  
22 customer classes?**

23 A. I am proposing to allocate the revenue deficiency associated with the 2014 October  
24 Update according to the revenue spread methodology approved by the Commission  
25 in UE 214, Order No. 10-191. Order No. 10-191 established a revenue spread  
26 methodology whereby the revenue deficiency for the October Update is allocated to

1 individual customer classes on the basis of the total generation-related revenue  
2 requirement approved in the Company's last general rate case. In this instance, the  
3 Company's last general rate case, UE 233, was a settled case in which parties did  
4 not adopt the Company's class cost-of-service methodology, but rather agreed to a  
5 revenue spread methodology that was set forth in Exhibit B to the Partial Stipulation  
6 filed on February 1, 2012. In light of the stipulated revenue spread, the Company  
7 has utilized the total generation-related revenue requirement detailed on Exhibit B to  
8 the Partial Stipulation to apportion the October Update revenue requirement to each  
9 customer class. The proposed revenue spread resulting from the application of the  
10 stipulated methodology in UE 233 is shown on Exhibit 107.

11 Q. **Was the incremental spread of the revenue requirement mentioned above  
12 approved in prior years' APCU filings?**

13 A. Yes. The Company used this same methodology in UE 242 and UE 257. This  
14 methodology was approved in Order No. 12-176 on May 18, 2012.

15 Q. **What is the overall revenue impact of this year's October Update compared to  
16 last year's October Update using the rate spread methodology described  
17 above?**

18 A. The overall revenue impact of the October Update compared to last year's October  
19 Update is a 1.64 percent decrease.

20 Q. **Have you prepared an exhibit showing the summary of revenue impact  
21 resulting from the October Update proposed by the Company?**

22 A. Yes. Exhibit 108 provides a summary of the revenue change resulting from this  
23 year's October Update as compared to current revenue.

24 Q. **Does this conclude your testimony?**

25 A. Yes, it does.

26

Idaho Power/101  
Witness: Scott Wright

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**IDAHO POWER COMPANY**

Exhibit Accompanying Testimony of Scott Wright

Idaho Power Company's Power Supply Expenses for April 1, 2014 – March 31, 2015  
Normalized Loads Over 85 Water Year Conditions

October 18, 2013

**IPCO POWER SUPPLY EXPENSES FOR APRIL 1, 2014 -- MARCH 31, 2015 (Multiple Gas Prices/85 Years of Hydro Conditions)**  
**Repriced Using UE 195 Settlement Methodology - October Update**  
**AVERAGE**

	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>Annual</u>
Hydroelectric Generation (MWh)	852,208.0	935,956.8	894,784.8	676,572.5	507,298.0	540,092.4	551,497.9	468,580.3	673,213.8	753,542.0	825,731.1	844,213.0	8,523,690.7
Bridger													
Energy (MWh)	208,161.3	280,964.7	283,378.6	473,492.8	484,176.6	458,325.8	482,786.1	467,109.2	485,075.4	454,980.0	382,781.3	380,627.4	4,841,859.1
Expense (\$ x 1000)	\$ 4,931.7	\$ 6,608.2	\$ 6,633.2	\$ 10,753.3	\$ 10,976.0	\$ 10,416.8	\$ 10,950.7	\$ 10,595.9	\$ 10,991.8	\$ 10,035.9	\$ 8,481.4	\$ 8,420.3	\$ 109,795.1
Boardman													
Energy (MWh)	1,737.5	2,968.6	11,159.6	31,566.2	34,821.6	29,852.6	34,457.6	30,903.5	35,111.3	20,094.6	13,229.9	17,833.1	263,736.0
Expense (\$ x 1000)	\$ 47.9	\$ 81.2	\$ 311.9	\$ 819.9	\$ 896.4	\$ 777.1	\$ 886.8	\$ 803.3	\$ 904.1	\$ 586.9	\$ 393.5	\$ 526.2	\$ 7,035.3
Valmy													
Energy (MWh)	5,067.0	7,748.4	4,627.7	57,130.9	68,926.2	39,944.9	61,583.0	59,772.2	90,612.8	34,308.1	17,888.1	23,385.1	470,994.4
Expense (\$ x 1000)	\$ 183.9	\$ 283.7	\$ 167.7	\$ 2,002.5	\$ 2,409.0	\$ 1,398.8	\$ 2,150.7	\$ 2,097.1	\$ 3,136.6	\$ 1,309.8	\$ 684.2	\$ 896.9	\$ 16,721.0
Langley Gulch													
Energy (MWh)	13,371.3	31,445.7	15,778.1	128,009.0	140,533.7	116,327.9	127,126.8	71,121.9	116,343.6	34,883.9	14,312.2	29,776.8	839,031.0
Expense (\$ x 1000)	\$ 437.0	\$ 963.9	\$ 491.5	\$ 3,757.9	\$ 4,198.7	\$ 3,461.5	\$ 3,855.6	\$ 2,376.9	\$ 4,180.3	\$ 1,308.4	\$ 549.2	\$ 1,097.1	\$ 26,678.0
Danskin													
Energy (MWh)	1.8	0.3	29.1	1,545.7	1,115.6	351.8	204.2	10.8	17.5	22.6	1.2	3.2	3,303.8
Expense (\$ x 1000)	\$ 0.1	\$ 0.0	\$ 1.5	\$ 74.0	\$ 53.1	\$ 17.9	\$ 10.1	\$ 0.6	\$ 1.0	\$ 1.4	\$ 0.1	\$ 0.2	\$ 159.9
Bennett Mountain													
Energy (MWh)	-	-	2.8	167.2	158.9	95.1	4.7	-	0.5	0.1	-	-	429.3
Expense (\$ x 1000)	\$ -	\$ -	\$ 0.1	\$ 7.8	\$ 8.0	\$ 5.0	\$ 0.2	\$ -	\$ 0.0	\$ 0.0	\$ -	\$ -	\$ 21.3
Fixed Capacity Charge - Gas Transportation (\$ x 1000)	\$ 737.7	\$ 761.7	\$ 746.7	\$ 780.3	\$ 780.3	\$ 755.7	\$ 761.7	\$ 737.7	\$ 761.7	\$ 761.7	\$ 689.6	\$ 761.7	\$ 9,036.3
Purchased Power (Excluding CSPP)													
Market Energy (MWh)	3,141.3	11,955.1	96,932.1	184,027.2	173,842.9	23,530.6	45.5	4,432.5	6,564.5	31,744.4	1,774.0	1,047.2	539,037.2
Elkhorn Wind Energy (MWh)	20,502.0	18,304.0	22,117.6	31,551.7	24,405.1	19,545.2	19,382.1	32,298.0	26,193.4	33,933.8	24,180.5	38,239.2	310,652.6
Neal Hot Springs Energy (MWh)	15,867.9	16,396.9	15,867.9	16,396.9	15,867.9	16,396.9	15,867.9	16,396.9	16,396.9	14,810.1	16,396.9	183,959.8	
Raft River Geothermal Energy (MWh)	5,360.0	5,316.0	5,323.0	5,726.0	5,998.0	6,111.0	7,004.0	6,939.0	7,199.0	7,056.0	6,662.0	5,674.0	74,367.9
Total Energy Excl. CSPP (MWh)	44,871.2	51,972.0	140,240.6	237,172.8	220,642.8	65,054.7	42,828.5	59,537.4	56,353.8	80,559.9	47,426.6	61,357.3	1,108,017.5
Market Expense (\$ x 1000)	\$ 106.4	\$ 389.6	\$ 3,061.3	\$ 7,397.8	\$ 6,785.5	\$ 1,009.2	\$ 1.7	\$ 198.3	\$ 271.1	\$ 1,289.0	\$ 61.7	\$ 43.5	\$ 20,615.0
Elkhorn Wind Expense (\$ x 1000)	\$ 835.8	\$ 746.2	\$ 1,226.8	\$ 2,100.1	\$ 1,624.4	\$ 1,084.1	\$ 1,075.1	\$ 2,149.8	\$ 1,743.5	\$ 1,938.7	\$ 1,381.5	\$ 1,605.7	\$ 17,511.7
Neal Hot Springs Expense (\$ x 1000)	\$ 1,195.5	\$ 1,235.3	\$ 1,630.9	\$ 1,957.1	\$ 2,022.3	\$ 1,630.9	\$ 1,685.3	\$ 1,957.1	\$ 2,022.3	\$ 835.7	\$ 1,581.6	\$ 1,283.5	\$ 19,037.4
Raft River Geothermal Expense (\$ x 1000)	\$ 239.2	\$ 237.2	\$ 323.2	\$ 417.2	\$ 437.0	\$ 371.1	\$ 425.3	\$ 505.6	\$ 524.5	\$ 437.5	\$ 413.0	\$ 258.6	\$ 4,589.5
Total Expense Excl. CSPP (\$ x 1000)	\$ 2,376.9	\$ 2,608.4	\$ 6,242.2	\$ 11,872.2	\$ 10,869.3	\$ 4,095.3	\$ 3,187.3	\$ 4,810.8	\$ 4,561.4	\$ 4,500.9	\$ 3,437.8	\$ 3,191.3	\$ 61,753.7
Surplus Sales													
Energy (MWh)	292,939.0	300,214.9	125,544.1	47,732.4	26,775.1	150,639.2	404,347.8	207,150.9	200,423.5	145,291.3	349,247.7	416,156.4	2,666,462.4
Revenue Including Transmission Expenses (\$ x 1000)	\$ 6,969.8	\$ 6,665.6	\$ 2,315.2	\$ 1,187.3	\$ 763.6	\$ 4,168.9	\$ 13,536.7	\$ 6,500.3	\$ 7,063.0	\$ 3,949.6	\$ 9,939.2	\$ 12,066.0	\$ 75,125.2
Transmission Expenses (\$ x 1000)	\$ 292.9	\$ 300.2	\$ 125.5	\$ 47.7	\$ 26.8	\$ 150.6	\$ 404.3	\$ 207.2	\$ 200.4	\$ 145.3	\$ 349.2	\$ 416.2	\$ 2,666.5
Revenue Excluding Transmission Expenses (\$ x 1000)	\$ 6,676.9	\$ 6,365.3	\$ 2,189.7	\$ 1,139.6	\$ 736.8	\$ 4,018.3	\$ 13,132.3	\$ 6,293.2	\$ 6,862.5	\$ 3,804.3	\$ 9,590.0	\$ 11,649.8	\$ 72,458.7
Net Power Supply Expenses (\$ x 1000)	\$ 2,038.2	\$ 4,941.6	\$ 12,405.1	\$ 28,928.3	\$ 29,453.9	\$ 16,909.8	\$ 8,670.9	\$ 15,129.1	\$ 17,674.4	\$ 14,700.8	\$ 4,645.7	\$ 3,243.9	\$ 158,741.8

Idaho Power/102  
Witness: Scott Wright

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**IDAHO POWER COMPANY**

Exhibit Accompanying Testimony of Scott Wright

Mid Columbia Heavy and Light Load  
Forward Market Prices

October 18, 2013

Mid-Columbia Heavy Load and Light Load Daily Forward Curves  
April 2015 - March 2016

Idaho Power/102  
Wright/1

MidC HL	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
9/24/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	47.33	45.66	38.18
9/25/2012	37.03	33.86	28.22	46.01	46.28	41.50	40.76	42.35	47.22	47.61	45.93	38.41
9/26/2012	36.67	33.53	27.95	45.56	45.82	41.09	40.36	41.93	46.75	47.44	45.77	38.27
9/27/2012	36.94	33.78	28.15	45.90	46.16	41.40	40.66	42.24	47.10	47.39	45.71	38.23
9/28/2012	37.26	34.07	28.40	46.29	46.56	41.75	41.01	42.61	47.50	47.78	46.09	38.54
10/1/2012	38.62	35.32	29.43	47.99	48.26	43.28	42.51	44.16	49.24	49.45	47.70	39.89
10/2/2012	38.62	35.32	29.43	47.99	48.26	43.28	42.51	44.16	49.24	49.45	47.70	39.89
10/3/2012	38.62	35.32	29.43	47.99	48.26	43.28	42.51	44.16	49.24	49.45	47.70	39.89
10/4/2012	37.49	34.28	28.57	46.58	46.84	42.01	41.26	42.87	47.79	48.06	46.36	38.77
10/5/2012	37.35	34.15	28.47	46.41	46.67	41.86	41.11	42.71	47.62	47.89	46.19	38.63
10/8/2012	37.49	34.28	28.57	46.58	46.84	42.01	41.26	42.87	47.79	48.06	46.36	38.77
10/9/2012	37.49	34.28	28.57	46.58	46.84	42.01	41.26	42.87	47.79	48.06	46.36	38.77
10/10/2012	38.40	35.11	29.26	47.71	47.98	43.03	42.26	43.90	48.95	49.17	47.43	39.66
10/11/2012	39.08	35.73	29.78	48.55	48.83	43.79	43.01	44.68	49.82	50.00	48.24	40.34
10/12/2012	38.85	35.52	29.61	48.27	48.55	43.54	42.76	44.42	49.53	49.73	47.97	40.11
10/15/2012	38.40	35.11	29.26	47.71	47.98	43.03	42.26	43.90	48.95	49.17	47.43	39.66
10/16/2012	38.40	35.11	29.26	47.71	47.98	43.03	42.26	43.90	48.95	49.17	47.43	39.66
10/17/2012	38.85	35.52	29.61	48.27	48.55	43.54	42.76	44.42	49.53	49.73	47.97	40.11
10/18/2012	38.85	35.52	29.61	48.27	48.55	43.54	42.76	44.42	49.53	49.73	47.97	40.11
10/19/2012	38.62	35.32	29.43	47.99	48.26	43.28	42.51	44.16	49.24	49.45	47.70	39.89
10/22/2012	37.72	34.49	28.74	46.86	47.13	42.26	41.51	43.13	48.08	48.33	46.62	38.99
10/23/2012	37.94	34.69	28.92	47.14	47.41	42.52	41.76	43.39	48.37	48.61	46.89	39.21
10/24/2012	37.72	34.49	28.74	46.86	47.13	42.26	41.51	43.13	48.08	48.33	46.62	38.99
10/25/2012	37.72	34.49	28.74	46.86	47.13	42.26	41.51	43.13	48.08	48.33	46.62	38.99
10/26/2012	37.72	34.49	28.74	46.86	47.13	42.26	41.51	43.13	48.08	48.33	46.62	38.99
10/29/2012	37.72	34.49	28.74	46.86	47.13	42.26	41.51	43.13	48.08	48.33	46.62	38.99
10/30/2012	37.72	34.49	28.74	46.86	47.13	42.26	41.51	43.13	48.08	48.33	46.62	38.99
10/31/2012	37.26	34.07	28.40	46.29	46.56	41.75	41.01	42.61	47.50	47.78	46.09	38.54
11/1/2012	38.17	34.90	29.09	47.42	47.69	42.77	42.01	43.65	48.66	48.72	47.00	39.30
11/2/2012	37.03	33.86	28.22	46.01	46.28	41.50	40.76	42.35	47.22	47.33	45.66	38.18
11/5/2012	37.03	33.86	28.22	46.01	46.28	41.50	40.76	42.35	47.22	47.33	45.66	38.18
11/6/2012	37.03	33.86	28.22	46.01	46.28	41.50	40.76	42.35	47.22	47.33	45.66	38.18
11/7/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	47.05	45.39	37.96
11/8/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	47.05	45.39	37.96
11/9/2012	36.35	33.24	27.70	45.17	45.42	40.74	40.01	41.57	46.35	46.50	44.85	37.51
11/12/2012	36.35	33.24	27.70	45.17	45.42	40.74	40.01	41.57	46.35	46.50	44.85	37.51
11/13/2012	38.17	34.90	29.09	47.42	47.69	42.77	42.01	43.65	48.66	48.72	47.00	39.30
11/14/2012	37.03	33.86	28.22	46.01	46.28	41.50	40.76	42.35	47.22	47.61	45.93	38.41
11/15/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	47.33	45.66	38.18
11/16/2012	37.49	34.28	28.57	46.58	46.84	42.01	41.26	42.87	47.79	48.17	46.46	38.86
11/19/2012	37.26	34.07	28.40	46.29	46.56	41.75	41.01	42.61	47.50	47.61	45.93	38.41
11/20/2012	37.03	33.86	28.22	46.01	46.28	41.50	40.76	42.35	47.22	47.61	45.93	38.41
11/21/2012	37.58	34.36	28.64	46.69	46.96	42.11	41.36	42.97	47.91	48.28	46.57	38.95
11/23/2012	37.58	34.36	28.64	46.69	46.96	42.11	41.36	42.97	47.91	48.28	46.57	38.95
11/26/2012	37.40	34.19	28.50	46.46	46.73	41.91	41.16	42.76	47.68	47.78	46.09	38.54
11/27/2012	37.26	34.07	28.40	46.29	46.56	41.75	41.01	42.61	47.50	48.45	46.73	39.08
11/28/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	47.89	46.19	38.63
11/29/2012	36.44	33.32	27.77	45.28	45.54	40.84	40.11	41.67	46.46	46.89	45.23	37.82
11/30/2012	36.44	33.32	27.77	45.28	45.54	40.84	40.11	41.67	46.46	46.89	45.23	37.82
12/3/2012	36.49	33.36	27.81	45.34	45.59	40.89	40.16	41.72	46.52	47.22	45.55	38.09
12/4/2012	36.13	33.03	27.53	44.88	45.14	40.48	39.76	41.31	46.06	47.22	45.55	38.09
12/5/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	47.22	45.55	38.09
12/6/2012	36.58	33.45	27.88	45.45	45.71	40.99	40.26	41.83	46.64	47.33	45.66	38.18
12/7/2012	35.90	32.82	27.36	44.60	44.86	40.23	39.51	41.05	45.77	47.05	45.39	37.96
12/10/2012	35.44	32.41	27.01	44.04	44.29	39.72	39.01	40.53	45.19	46.50	44.85	37.51
12/11/2012	35.44	32.41	27.01	44.04	44.29	39.72	39.01	40.53	45.19	46.50	44.85	37.51
12/12/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	47.61	45.93	38.41
12/13/2012	37.03	33.86	28.22	46.01	46.28	41.50	40.76	42.35	47.22	47.89	46.19	38.63

Mid-Columbia Heavy Load and Light Load Daily Forward Curves  
April 2015 - March 2016

Idaho Power/102  
Wright/2

MidC HL	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
12/14/2012	37.76	34.53	28.78	46.92	47.18	42.31	41.56	43.18	48.14	48.78	47.05	39.35
12/17/2012	36.58	33.45	27.88	45.45	45.71	40.99	40.26	41.83	46.64	48.72	47.00	39.30
12/18/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	49.00	47.27	39.53
12/19/2012	36.35	33.24	27.70	45.17	45.42	40.74	40.01	41.57	46.35	48.17	46.46	38.86
12/20/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	48.72	47.00	39.30
12/21/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	48.72	47.00	39.30
12/24/2012	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	48.72	47.00	39.30
12/26/2012	36.62	33.49	27.91	45.50	45.76	41.04	40.31	41.88	46.69	48.50	46.79	39.13
12/27/2012	36.17	33.07	27.56	44.94	45.20	40.53	39.81	41.36	46.11	47.94	46.25	38.68
12/28/2012	36.72	33.57	27.98	45.62	45.88	41.14	40.41	41.98	46.81	48.61	46.89	39.21
12/31/2012	36.35	33.24	27.70	45.17	45.42	40.74	40.01	41.57	46.35	48.17	46.46	38.86
1/2/2013	35.81	32.74	27.29	44.49	44.74	40.12	39.41	40.94	45.65	47.50	45.82	38.32
1/3/2013	35.90	32.82	27.36	44.60	44.86	40.23	39.51	41.05	45.77	46.77	45.12	37.73
1/4/2013	36.35	33.24	27.70	45.17	45.42	40.74	40.01	41.57	46.35	47.72	46.03	38.50
1/7/2013	36.58	33.45	27.88	45.45	45.71	40.99	40.26	41.83	46.64	48.00	46.30	38.72
1/8/2013	36.35	33.24	27.70	45.17	45.42	40.74	40.01	41.57	46.35	47.72	46.03	38.50
1/9/2013	35.94	32.87	27.39	44.66	44.91	40.28	39.56	41.10	45.82	47.22	45.55	38.09
1/10/2013	36.13	33.03	27.53	44.88	45.14	40.48	39.76	41.31	46.06	47.44	45.77	38.27
1/11/2013	36.26	33.16	27.63	45.05	45.31	40.63	39.91	41.46	46.23	47.50	45.82	38.32
1/14/2013	36.81	33.65	28.05	45.73	45.99	41.24	40.51	42.09	46.93	48.17	46.46	38.86
1/15/2013	36.99	33.82	28.19	45.96	46.22	41.45	40.71	42.29	47.16	48.39	46.68	39.04
1/16/2013	36.13	33.03	27.53	44.88	45.14	40.48	39.76	41.31	46.06	47.89	46.19	38.63
1/17/2013	36.58	33.45	27.88	45.45	45.71	40.99	40.26	41.83	46.64	48.45	46.73	39.08
1/18/2013	36.49	33.36	27.81	45.34	45.59	40.89	40.16	41.72	46.52	48.33	46.62	38.99
1/22/2013	36.67	33.53	27.95	45.56	45.82	41.09	40.36	41.93	46.75	48.56	46.84	39.17
1/23/2013	36.53	33.41	27.84	45.39	45.65	40.94	40.21	41.77	46.58	47.83	46.14	38.59
1/24/2013	36.13	33.03	27.53	44.88	45.14	40.48	39.76	41.31	46.06	47.33	45.66	38.18
1/25/2013	36.90	33.74	28.12	45.84	46.10	41.35	40.61	42.19	47.04	48.28	46.57	38.95
1/28/2013	35.90	32.82	27.36	44.60	44.86	40.23	39.51	41.05	45.77	47.05	45.39	37.96
1/29/2013	35.67	32.62	27.18	44.32	44.57	39.97	39.26	40.79	45.48	46.77	45.12	37.73
1/30/2013	36.03	32.95	27.46	44.77	45.03	40.38	39.66	41.20	45.94	47.22	45.55	38.09
1/31/2013	35.99	32.91	27.43	44.71	44.97	40.33	39.61	41.15	45.88	46.89	45.23	37.82
2/1/2013	35.85	32.78	27.32	44.54	44.80	40.18	39.46	41.00	45.71	46.72	45.07	37.69
2/4/2013	36.13	33.03	27.53	44.88	45.14	40.48	39.76	41.31	46.06	47.05	45.39	37.96
2/5/2013	36.13	33.03	27.53	44.88	45.14	40.48	39.76	41.31	46.06	47.05	45.39	37.96
2/6/2013	35.85	32.78	27.32	44.54	44.80	40.18	39.46	41.00	45.71	46.72	45.07	37.69
2/7/2013	35.85	32.78	27.32	44.54	44.80	40.18	39.46	41.00	45.71	46.72	45.07	37.69
2/8/2013	36.44	33.32	27.77	45.28	45.54	40.84	40.11	41.67	46.46	47.44	45.77	38.27
2/11/2013	36.13	33.03	27.53	44.88	45.14	40.48	39.76	41.31	46.06	47.05	45.39	37.96
2/12/2013	35.76	32.70	27.25	44.43	44.69	40.07	39.36	40.89	45.59	46.61	44.96	37.60
2/13/2013	35.90	32.82	27.36	44.60	44.86	40.23	39.51	41.05	45.77	47.33	45.66	38.18
2/14/2013	35.31	32.28	26.91	43.87	44.12	39.56	38.86	40.37	45.01	46.61	44.96	37.60
2/15/2013	35.53	32.49	27.08	44.15	44.40	39.82	39.11	40.63	45.30	46.89	45.23	37.82
2/19/2013	35.31	32.28	26.91	43.87	44.12	39.56	38.86	40.37	45.01	46.61	44.96	37.60
2/20/2013	30.84	30.03	28.36	41.94	43.66	43.71	41.58	42.73	43.88	43.31	44.00	40.34
2/21/2013	35.28	32.26	26.89	43.83	44.08	39.53	38.83	40.34	44.98	46.34	44.70	37.38
2/22/2013	30.84	30.03	28.36	41.94	43.66	43.71	41.58	42.73	43.88	43.31	44.00	40.34
2/25/2013	31.39	30.57	28.86	42.68	44.44	44.49	42.32	43.49	44.66	44.04	44.74	41.02
2/26/2013	31.39	30.57	28.86	42.68	44.44	44.49	42.32	43.49	44.66	44.04	44.74	41.02
2/27/2013	31.35	30.53	28.83	42.63	44.38	44.43	42.27	43.43	44.61	44.04	44.74	41.02
2/28/2013	31.69	30.86	29.14	43.09	44.87	44.91	42.73	43.91	45.09	44.30	45.01	41.26
3/1/2013	31.69	30.86	29.14	43.09	44.87	44.91	42.73	43.91	45.09	44.30	45.01	41.26
3/4/2013	31.97	31.13	29.40	43.47	45.26	45.31	43.10	44.29	45.49	44.67	45.38	41.60
3/5/2013	31.97	31.13	29.40	43.47	45.26	45.31	43.10	44.29	45.49	44.67	45.38	41.60
3/6/2013	31.89	31.06	29.32	43.36	45.15	45.20	43.00	44.18	45.38	44.56	45.27	41.51
3/7/2013	32.25	31.40	29.65	43.85	45.65	45.70	43.48	44.68	45.88	44.04	44.74	41.02
3/8/2013	32.09	31.25	29.50	43.63	45.43	45.48	43.26	44.46	45.66	43.83	44.53	40.83
3/11/2013	32.03	31.20	29.45	43.56	45.35	45.40	43.19	44.38	45.58	43.83	44.53	40.83

Mid-Columbia Heavy Load and Light Load Daily Forward Curves  
April 2015 - March 2016

Idaho Power/102  
Wright/3

MidC HL	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
3/12/2013	31.68	30.85	29.12	43.07	44.84	44.89	42.71	43.88	45.07	43.78	44.48	40.78
3/13/2013	31.36	30.54	28.83	42.64	44.39	44.44	42.28	43.44	44.62	43.89	44.59	40.88
3/14/2013	31.45	30.62	28.91	42.76	44.52	44.56	42.40	43.57	44.74	43.99	44.69	40.97
3/15/2013	31.80	30.97	29.24	43.24	45.02	45.07	42.88	44.06	45.25	44.46	45.17	41.41
3/18/2013	31.41	30.58	28.88	42.70	44.46	44.51	42.34	43.51	44.69	43.94	44.64	40.92
3/19/2013	31.57	30.74	29.02	42.92	44.69	44.73	42.56	43.73	44.91	44.15	44.85	41.12
3/20/2013	31.76	30.93	29.21	43.19	44.97	45.01	42.83	44.01	45.19	44.41	45.11	41.36
3/21/2013	31.57	30.74	29.02	42.92	44.69	44.73	42.56	43.73	44.91	44.30	45.01	41.26
3/22/2013	31.43	30.61	28.90	42.74	44.49	44.54	42.38	43.54	44.72	44.03	44.73	41.01
3/25/2013	31.23	30.41	28.72	42.47	44.21	44.26	42.11	43.27	44.44	43.77	44.47	40.77
3/26/2013	31.47	30.65	28.93	42.79	44.55	44.60	42.43	43.60	44.78	44.08	44.79	41.06
3/27/2013	31.47	30.65	28.93	42.79	44.55	44.60	42.43	43.60	44.78	44.08	44.79	41.06
3/28/2013	31.06	30.24	28.56	42.23	43.97	44.01	41.87	43.03	44.19	43.82	44.52	40.82
4/1/2013	31.08	30.27	28.58	42.26	44.00	44.05	41.90	43.06	44.22	43.82	44.52	40.82
4/2/2013	30.85	30.04	28.37	41.95	43.67	43.72	41.59	42.74	43.89	43.56	44.26	40.58
4/3/2013	30.33	29.54	27.89	41.25	42.94	42.99	40.90	42.02	43.16	43.04	43.73	40.09
4/4/2013	30.87	30.07	28.39	41.98	43.71	43.75	41.63	42.77	43.93	43.36	44.05	40.38
4/5/2013	31.09	30.27	28.58	42.27	44.01	44.06	41.91	43.07	44.23	43.68	44.37	40.68
4/8/2013	30.84	30.03	28.35	41.93	43.65	43.70	41.57	42.72	43.87	43.31	44.00	40.34
4/9/2013	30.54	29.74	28.08	41.53	43.24	43.28	41.18	42.31	43.45	42.53	43.21	39.62
4/10/2013	30.48	29.68	28.02	41.44	43.15	43.19	41.09	42.22	43.36	42.00	42.67	39.12
4/11/2013	30.48	29.68	28.02	41.44	43.15	43.19	41.09	42.22	43.36	42.00	42.67	39.12
4/12/2013	30.80	29.99	28.31	41.87	43.60	43.64	41.52	42.66	43.82	42.37	43.04	39.46
4/15/2013	30.58	29.78	28.12	41.58	43.29	43.34	41.23	42.37	43.51	42.21	42.88	39.32
4/16/2013	30.76	29.95	28.28	41.82	43.54	43.59	41.46	42.61	43.76	42.43	43.10	39.52
4/17/2013	30.76	29.95	28.28	41.82	43.54	43.59	41.46	42.61	43.76	42.43	43.10	39.52
4/18/2013	31.01	30.20	28.51	42.16	43.90	43.95	41.81	42.96	44.12	42.68	43.36	39.75
4/19/2013	31.16	30.34	28.65	42.37	44.11	44.16	42.01	43.17	44.34	42.78	43.46	39.85
4/22/2013	31.03	30.22	28.53	42.20	43.93	43.98	41.84	42.99	44.15	42.68	43.36	39.75
4/23/2013	30.80	29.99	28.31	41.87	43.60	43.64	41.52	42.66	43.82	42.37	43.04	39.46
4/24/2013	30.68	29.88	28.21	41.72	43.44	43.48	41.37	42.51	43.66	42.26	42.94	39.36
4/25/2013	30.68	29.88	28.21	41.72	43.44	43.48	41.37	42.51	43.66	42.26	42.94	39.36
4/26/2013	30.68	29.88	28.21	41.72	43.44	43.48	41.37	42.51	43.66	42.26	42.94	39.36
4/29/2013	31.04	30.23	28.54	42.21	43.94	43.99	41.85	43.00	44.17	42.68	43.36	39.75
4/30/2013	30.82	30.01	28.34	41.90	43.63	43.68	41.55	42.70	43.85	41.79	42.46	38.93
5/1/2013	30.82	30.01	28.34	41.90	43.63	43.68	41.55	42.70	43.85	41.79	42.46	38.93
5/2/2013	30.02	29.24	27.61	40.82	42.50	42.55	40.48	41.60	42.72	40.70	41.35	37.91
5/3/2013	30.14	29.35	27.72	40.99	42.67	42.72	40.64	41.76	42.89	40.81	41.46	38.01
5/6/2013	30.02	29.24	27.61	40.82	42.50	42.55	40.48	41.60	42.72	40.65	41.30	37.86
5/7/2013	30.14	29.35	27.72	40.99	42.67	42.72	40.64	41.76	42.89	40.75	41.40	37.96
5/8/2013	30.56	29.76	28.09	41.55	43.26	43.30	41.20	42.33	43.48	41.33	41.98	38.49
5/9/2013	30.57	29.77	28.11	41.57	43.28	43.33	41.22	42.35	43.50	41.33	41.98	38.49
5/10/2013	30.14	29.35	27.71	40.98	42.66	42.71	40.63	41.75	42.88	40.75	41.40	37.96
5/13/2013	30.50	29.70	28.04	41.47	43.18	43.22	41.12	42.26	43.40	41.12	41.77	38.30
5/14/2013	30.74	29.93	28.26	41.80	43.52	43.56	41.44	42.59	43.74	41.53	42.20	38.69
5/15/2013	30.70	29.90	28.23	41.74	43.46	43.51	41.39	42.53	43.68	41.53	42.20	38.69
5/16/2013	30.50	29.70	28.04	41.47	43.18	43.22	41.12	42.26	43.40	41.27	41.93	38.44
5/17/2013	30.60	29.79	28.13	41.60	43.31	43.36	41.25	42.39	43.53	41.27	41.93	38.44
5/20/2013	31.26	30.44	28.74	42.50	44.25	44.29	42.14	43.30	44.47	42.62	43.30	39.69
5/21/2013	31.36	30.54	28.83	42.64	44.39	44.44	42.28	43.44	44.62	42.94	43.62	39.99
5/22/2013	31.56	30.73	29.02	42.91	44.67	44.72	42.55	43.72	44.90	43.20	43.89	40.24
5/23/2013	31.76	30.92	29.20	43.18	44.96	45.00	42.81	43.99	45.18	43.46	44.15	40.48
5/24/2013	31.76	30.92	29.20	43.18	44.96	45.00	42.81	43.99	45.18	43.46	44.15	40.48
5/28/2013	31.66	30.83	29.11	43.05	44.82	44.87	42.69	43.86	45.05	43.46	44.15	40.48
5/29/2013	31.66	30.83	29.11	43.05	44.82	44.87	42.69	43.86	45.05	43.46	44.15	40.48
5/30/2013	31.34	30.52	28.82	42.62	44.37	44.42	42.26	43.42	44.60	43.05	43.74	40.10
5/31/2013	31.45	30.62	28.91	42.76	44.52	44.56	42.40	43.57	44.74	43.05	43.74	40.10
6/3/2013	31.30	30.48	28.77	42.55	44.30	44.35	42.19	43.36	44.53	42.78	43.46	39.85

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Idaho Power/102  
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MidC HL	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
6/4/2013	31.38	30.55	28.85	42.66	44.42	44.46	42.30	43.47	44.64	42.78	43.46	39.85
6/5/2013	31.38	30.55	28.85	42.66	44.42	44.46	42.30	43.47	44.64	42.78	43.46	39.85
6/6/2013	30.82	30.01	28.34	41.90	43.63	43.68	41.55	42.70	43.85	42.31	42.99	39.41
6/7/2013	30.98	30.17	28.48	42.12	43.85	43.90	41.76	42.92	44.08	42.59	43.26	39.66
6/10/2013	30.65	29.85	28.18	41.68	43.39	43.44	41.33	42.46	43.61	42.22	42.89	39.33
6/11/2013	30.29	29.50	27.85	41.19	42.89	42.93	40.84	41.97	43.10	41.74	42.41	38.88
6/12/2013	30.29	29.50	27.85	41.19	42.89	42.93	40.84	41.97	43.10	41.74	42.41	38.88
6/13/2013	30.45	29.65	27.99	41.40	43.10	43.15	41.05	42.18	43.32	41.90	42.57	39.02
6/14/2013	30.26	29.46	27.82	41.14	42.83	42.88	40.79	41.91	43.05	41.68	42.34	38.82
6/17/2013	30.26	29.46	27.82	41.14	42.83	42.88	40.79	41.91	43.05	41.68	42.34	38.82
6/18/2013	30.45	29.66	28.00	41.41	43.11	43.16	41.06	42.19	43.33	41.95	42.62	39.07
6/19/2013	30.36	29.56	27.91	41.28	42.98	43.02	40.93	42.06	43.19	41.79	42.46	38.93
6/20/2013	30.16	29.37	27.73	41.01	42.70	42.74	40.66	41.78	42.91	41.53	42.20	38.69
6/21/2013	29.96	29.18	27.55	40.74	42.41	42.46	40.39	41.51	42.63	41.27	41.93	38.44
6/24/2013	30.06	29.27	27.63	40.87	42.55	42.59	40.52	41.64	42.76	41.27	41.93	38.44
6/25/2013	29.92	29.14	27.51	40.68	42.36	42.40	40.34	41.45	42.57	41.27	41.93	38.44
6/26/2013	29.92	29.14	27.51	40.68	42.36	42.40	40.34	41.45	42.57	41.27	41.93	38.44
6/27/2013	29.60	28.83	27.22	40.25	41.91	41.95	39.91	41.01	42.12	40.87	41.52	38.06
6/28/2013	29.80	29.02	27.40	40.52	42.19	42.23	40.18	41.29	42.40	41.12	41.77	38.30
7/1/2013	29.80	29.02	27.40	40.52	42.19	42.23	40.18	41.29	42.40	41.12	41.77	38.30
7/2/2013	29.80	29.02	27.40	40.52	42.19	42.23	40.18	41.29	42.40	41.12	41.77	38.30
7/3/2013	29.74	28.96	27.34	40.43	42.10	42.14	40.09	41.20	42.31	40.97	41.62	38.16
7/5/2013	29.74	28.96	27.34	40.43	42.10	42.14	40.09	41.20	42.31	40.97	41.62	38.16
7/8/2013	29.82	29.04	27.42	40.54	42.21	42.26	40.20	41.31	42.43	41.08	41.73	38.26
7/9/2013	29.58	28.80	27.20	40.22	41.87	41.92	39.88	40.98	42.09	40.76	41.41	37.97
7/10/2013	29.58	28.80	27.20	40.22	41.87	41.92	39.88	40.98	42.09	40.76	41.41	37.97
7/11/2013	29.16	28.39	26.81	39.65	41.28	41.32	39.31	40.40	41.49	40.24	40.88	37.48
7/12/2013	29.16	28.39	26.81	39.65	41.28	41.32	39.31	40.40	41.49	40.24	40.88	37.48
7/15/2013	29.24	28.47	26.88	39.75	41.39	41.43	39.42	40.51	41.60	40.35	40.99	37.58
7/16/2013	29.44	28.67	27.06	40.02	41.67	41.72	39.69	40.78	41.88	40.61	41.25	37.82
7/17/2013	29.33	28.56	26.97	39.88	41.53	41.57	39.55	40.64	41.74	40.45	41.10	37.68
7/18/2013	29.78	29.00	27.38	40.49	42.16	42.20	40.15	41.25	42.37	40.97	41.62	38.16
7/19/2013	29.78	29.00	27.38	40.49	42.16	42.20	40.15	41.25	42.37	40.97	41.62	38.16
7/22/2013	29.56	28.78	27.17	40.19	41.84	41.88	39.85	40.95	42.05	40.71	41.36	37.92
7/23/2013	29.68	28.90	27.28	40.35	42.01	42.05	40.01	41.11	42.22	40.87	41.52	38.06
7/24/2013	29.85	29.07	27.44	40.59	42.26	42.30	40.24	41.35	42.47	41.08	41.73	38.26
7/25/2013	30.10	29.31	27.67	40.92	42.61	42.65	40.58	41.69	42.82	41.34	41.99	38.50
7/26/2013	30.32	29.52	27.88	41.22	42.92	42.97	40.88	42.00	43.14	41.60	42.26	38.74
7/29/2013	30.53	29.73	28.07	41.52	43.22	43.27	41.17	42.30	43.44	41.91	42.58	39.03
7/30/2013	30.33	29.54	27.89	41.25	42.94	42.99	40.90	42.02	43.16	41.91	42.58	39.03
7/31/2013	30.56	29.76	28.10	41.56	43.27	43.31	41.21	42.34	43.49	42.17	42.84	39.28
8/1/2013	30.17	29.38	27.74	41.02	42.71	42.75	40.67	41.79	42.92	41.65	42.31	38.79
8/2/2013	29.64	28.87	27.25	40.31	41.96	42.01	39.97	41.07	42.18	40.94	41.59	38.13
8/5/2013	29.64	28.87	27.25	40.31	41.96	42.01	39.97	41.07	42.18	40.94	41.59	38.13
8/6/2013	29.54	28.77	27.16	40.16	41.82	41.86	39.83	40.92	42.03	40.84	41.49	38.04
8/7/2013	29.33	28.56	26.97	39.88	41.53	41.57	39.55	40.64	41.74	40.87	41.52	38.06
8/8/2013	29.40	28.63	27.04	39.98	41.63	41.67	39.64	40.74	41.84	40.97	41.62	38.16
8/9/2013	29.17	28.40	26.82	39.66	41.29	41.33	39.32	40.41	41.50	40.66	41.31	37.87
8/12/2013	29.36	28.59	26.99	39.92	41.56	41.60	39.58	40.67	41.77	40.97	41.62	38.16
8/13/2013	29.21	28.45	26.86	39.72	41.36	41.40	39.39	40.47	41.57	40.82	41.47	38.02
8/14/2013	29.02	28.26	26.69	39.46	41.09	41.13	39.13	40.21	41.29	40.40	41.04	37.63
8/15/2013	29.38	28.61	27.01	39.95	41.59	41.64	39.61	40.70	41.80	40.58	41.22	37.79
8/16/2013	29.40	28.63	27.03	39.97	41.62	41.66	39.63	40.73	41.83	40.66	41.31	37.87
8/19/2013	29.40	28.63	27.03	39.97	41.62	41.66	39.63	40.73	41.83	40.66	41.31	37.87
8/20/2013	29.95	29.17	27.54	40.73	42.40	42.45	40.38	41.50	42.62	41.39	42.05	38.55
8/21/2013	29.95	29.17	27.54	40.73	42.40	42.45	40.38	41.50	42.62	41.39	42.05	38.55
8/22/2013	30.03	29.25	27.61	40.83	42.52	42.56	40.49	41.61	42.73	41.49	42.15	38.65
8/23/2013	30.03	29.25	27.61	40.83	42.52	42.56	40.49	41.61	42.73	41.63	42.29	38.77

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Idaho Power/102  
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<b>MidC HL</b>	<b>Apr-15</b>	<b>May-15</b>	<b>Jun-15</b>	<b>Jul-15</b>	<b>Aug-15</b>	<b>Sep-15</b>	<b>Oct-15</b>	<b>Nov-15</b>	<b>Dec-15</b>	<b>Jan-16</b>	<b>Feb-16</b>	<b>Mar-16</b>
<b>8/26/2013</b>	30.10	29.31	27.67	40.92	42.61	42.65	40.58	41.69	42.82	41.63	42.29	38.77
<b>8/27/2013</b>	30.10	29.31	27.67	40.92	42.61	42.65	40.58	41.69	42.82	42.20	42.87	39.31
<b>8/28/2013</b>	30.57	29.77	28.11	41.57	43.28	43.33	41.22	42.35	43.50	42.92	43.60	39.97
<b>8/29/2013</b>	30.81	30.00	28.33	41.89	43.62	43.66	41.54	42.69	43.84	42.77	43.45	39.84
<b>8/30/2013</b>	30.92	30.11	28.43	42.04	43.78	43.82	41.69	42.84	44.00	42.93	43.61	39.98
<b>9/3/2013</b>	31.42	30.60	28.89	42.73	44.48	44.53	42.36	43.53	44.71	43.55	44.25	40.57
<b>9/4/2013</b>	31.42	30.59	28.88	42.71	44.47	44.52	42.35	43.52	44.70	43.55	44.25	40.57
<b>9/5/2013</b>	31.34	30.52	28.82	42.62	44.37	44.42	42.26	43.42	44.60	42.42	43.09	39.51
<b>9/6/2013</b>	31.42	30.60	28.89	42.73	44.48	44.53	42.36	43.53	44.71	42.42	43.09	39.51
<b>9/9/2013</b>	31.42	30.60	28.89	42.73	44.48	44.53	42.36	43.53	44.71	42.42	43.09	39.51
<b>9/10/2013</b>	31.12	30.31	28.61	42.31	44.06	44.10	41.96	43.11	44.28	42.11	42.78	39.22
<b>9/11/2013</b>	30.95	30.14	28.46	42.09	43.82	43.87	41.73	42.88	44.04	41.90	42.57	39.02
<b>9/12/2013</b>	30.95	30.14	28.46	42.09	43.82	43.87	41.73	42.88	44.04	41.90	42.57	39.02
<b>9/13/2013</b>	30.91	30.10	28.42	42.03	43.76	43.81	41.68	42.83	43.99	41.90	42.57	39.02
<b>9/16/2013</b>	30.87	30.07	28.39	41.98	43.71	43.75	41.63	42.77	43.93	41.85	42.51	38.98
<b>9/17/2013</b>	30.95	30.14	28.46	42.09	43.82	43.87	41.73	42.88	44.04	41.95	42.62	39.07
<b>9/18/2013</b>	30.80	29.99	28.31	41.87	43.60	43.64	41.52	42.66	43.82	41.74	42.41	38.88
<b>9/19/2013</b>	30.80	29.99	28.31	41.87	43.60	43.64	41.52	42.66	43.82	41.74	42.41	38.88
<b>9/20/2013</b>	30.61	29.81	28.15	41.62	43.34	43.38	41.27	42.41	43.56	41.53	42.20	38.69
<b>9/23/2013</b>	30.10	29.31	27.67	40.92	42.61	42.65	40.58	41.69	42.82	40.86	41.51	38.05
<b>Average HL</b>	33.17	31.41	28.13	43.33	44.45	42.54	40.99	42.31	44.97	44.51	44.21	39.02
<b>Max HL</b>	39.08	35.73	29.78	48.55	48.83	45.70	43.48	44.68	49.82	50.00	48.24	41.60
<b>Min HL</b>	29.02	28.26	26.69	39.46	41.09	39.53	38.83	40.21	41.29	40.24	40.88	37.38
<b>Spread</b>	10.06	7.47	3.10	9.09	7.74	6.17	4.65	4.48	8.53	9.76	7.35	4.22

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MidC LL	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
9/24/2012	28.51	21.30	8.60	24.36	32.63	34.04	35.71	35.82	40.46	40.23	38.18	31.03
9/25/2012	28.76	21.49	8.67	24.58	32.91	34.34	36.02	36.14	40.81	40.52	38.45	31.25
9/26/2012	28.99	21.65	8.74	24.77	33.17	34.60	36.30	36.42	41.13	40.80	38.72	31.47
9/27/2012	29.30	21.89	8.83	25.04	33.53	34.98	36.70	36.82	41.58	41.20	39.10	31.77
9/28/2012	29.16	21.79	8.79	24.92	33.37	34.81	36.52	36.64	41.38	41.10	39.00	31.69
10/1/2012	30.18	22.54	9.10	25.79	34.53	36.02	37.79	37.91	42.82	42.36	40.20	32.67
10/2/2012	30.04	22.44	9.06	25.67	34.37	35.86	37.62	37.74	42.62	42.18	40.03	32.53
10/3/2012	29.15	21.78	8.79	24.91	33.36	34.80	36.51	36.63	41.37	41.07	38.97	31.68
10/4/2012	29.55	22.08	8.91	25.25	33.82	35.28	37.01	37.13	41.94	41.54	39.42	32.04
10/5/2012	29.63	22.13	8.93	25.32	33.90	35.37	37.11	37.23	42.04	41.70	39.57	32.16
10/8/2012	29.73	22.21	8.96	25.41	34.02	35.49	37.23	37.35	42.19	41.86	39.73	32.29
10/9/2012	30.01	22.42	9.05	25.64	34.34	35.82	37.58	37.70	42.58	42.25	40.09	32.58
10/10/2012	30.69	22.93	9.25	26.22	35.12	36.63	38.43	38.56	43.55	42.87	40.68	33.06
10/11/2012	30.97	23.13	9.34	26.46	35.44	36.97	38.78	38.91	43.94	43.25	41.05	33.36
10/12/2012	31.12	23.25	9.38	26.59	35.61	37.15	38.97	39.10	44.15	43.43	41.21	33.50
10/15/2012	30.34	22.67	9.15	25.93	34.72	36.22	38.00	38.12	43.06	42.65	40.48	32.90
10/16/2012	30.27	22.61	9.13	25.87	34.64	36.13	37.91	38.03	42.95	42.55	40.38	32.82
10/17/2012	30.63	22.88	9.24	26.18	35.05	36.57	38.36	38.49	43.47	43.06	40.86	33.21
10/18/2012	30.63	22.88	9.24	26.18	35.05	36.57	38.36	38.49	43.47	43.06	40.86	33.21
10/19/2012	29.67	22.16	8.94	25.35	33.95	35.41	37.15	37.27	42.09	41.74	39.60	32.19
10/22/2012	29.71	22.20	8.96	25.39	34.00	35.47	37.21	37.33	42.16	41.93	39.79	32.33
10/23/2012	30.13	22.51	9.08	25.75	34.48	35.97	37.73	37.86	42.75	42.49	40.32	32.77
10/24/2012	29.95	22.38	9.03	25.60	34.28	35.76	37.51	37.63	42.50	42.37	40.21	32.68
10/25/2012	29.95	22.38	9.03	25.60	34.28	35.76	37.51	37.63	42.50	42.37	40.21	32.68
10/26/2012	29.71	22.20	8.96	25.39	34.00	35.47	37.21	37.33	42.16	42.25	40.09	32.58
10/29/2012	29.80	22.27	8.99	25.47	34.11	35.58	37.33	37.45	42.29	42.36	40.20	32.67
10/30/2012	29.72	22.20	8.96	25.40	34.01	35.48	37.22	37.34	42.17	42.25	40.09	32.58
10/31/2012	29.72	22.20	8.96	25.40	34.01	35.48	37.22	37.34	42.17	42.25	40.09	32.58
11/1/2012	29.80	22.27	8.99	25.47	34.11	35.58	37.33	37.45	42.29	42.36	40.20	32.67
11/2/2012	28.89	21.58	8.71	24.69	33.06	34.49	36.19	36.30	41.00	41.10	39.00	31.69
11/5/2012	29.07	21.72	8.76	24.84	33.27	34.70	36.41	36.52	41.25	41.20	39.10	31.77
11/6/2012	29.07	21.72	8.76	24.84	33.27	34.70	36.41	36.52	41.25	41.20	39.10	31.77
11/7/2012	28.79	21.51	8.68	24.60	32.95	34.37	36.06	36.17	40.85	40.94	38.85	31.58
11/8/2012	29.02	21.68	8.75	24.80	33.21	34.65	36.35	36.47	41.18	41.11	39.01	31.70
11/9/2012	29.02	21.68	8.75	24.80	33.21	34.65	36.35	36.47	41.18	41.11	39.01	31.70
11/12/2012	29.58	22.10	8.92	25.28	33.85	35.31	37.05	37.17	41.97	41.53	39.41	32.03
11/13/2012	29.49	22.03	8.89	25.20	33.74	35.20	36.93	37.05	41.84	41.48	39.36	31.99
11/14/2012	29.67	22.16	8.94	25.35	33.95	35.41	37.15	37.27	42.09	41.72	39.59	32.18
11/15/2012	29.67	22.17	8.95	25.36	33.96	35.42	37.16	37.28	42.11	41.72	39.59	32.18
11/16/2012	29.67	22.17	8.95	25.36	33.96	35.42	37.16	37.28	42.11	41.72	39.59	32.18
11/19/2012	29.76	22.23	8.97	25.43	34.05	35.52	37.27	37.39	42.23	41.72	39.59	32.18
11/20/2012	29.95	22.38	9.03	25.60	34.28	35.76	37.51	37.63	42.50	42.12	39.97	32.48
11/21/2012	30.19	22.55	9.10	25.80	34.54	36.03	37.80	37.93	42.83	42.40	40.23	32.70
11/23/2012	30.19	22.55	9.10	25.80	34.54	36.03	37.80	37.93	42.83	42.40	40.23	32.70
11/26/2012	29.63	22.13	8.93	25.32	33.90	35.37	37.11	37.23	42.04	42.25	40.09	32.58
11/27/2012	29.54	22.06	8.91	25.24	33.80	35.26	36.99	37.11	41.91	41.95	39.81	32.35
11/28/2012	29.21	21.82	8.81	24.96	33.43	34.87	36.58	36.70	41.45	41.53	39.41	32.03
11/29/2012	28.61	21.38	8.63	24.45	32.74	34.16	35.84	35.95	40.60	40.69	38.61	31.38
11/30/2012	28.24	21.10	8.52	24.13	32.32	33.71	35.37	35.48	40.07	40.59	38.51	31.30
12/3/2012	28.74	21.47	8.67	24.56	32.89	34.31	36.00	36.11	40.79	41.10	39.00	31.69
12/4/2012	28.66	21.41	8.64	24.49	32.80	34.21	35.89	36.01	40.67	40.97	38.88	31.60
12/5/2012	28.74	21.47	8.67	24.56	32.89	34.31	36.00	36.11	40.79	41.75	39.62	32.20
12/6/2012	28.66	21.41	8.64	24.49	32.80	34.21	35.89	36.01	40.67	41.60	39.47	32.08
12/7/2012	28.66	21.41	8.64	24.49	32.80	34.21	35.89	36.01	40.67	41.30	39.19	31.85
12/10/2012	28.51	21.30	8.60	24.36	32.63	34.04	35.71	35.82	40.46	40.84	38.76	31.50
12/11/2012	28.37	21.20	8.55	24.25	32.47	33.87	35.53	35.65	40.26	40.66	38.59	31.36
12/12/2012	27.77	20.74	8.37	23.73	31.78	33.15	34.78	34.89	39.40	40.66	38.59	31.36
12/13/2012	27.54	20.57	8.30	23.53	31.51	32.87	34.48	34.60	39.07	40.20	38.15	31.01

Mid-Columbia Heavy Load and Light Load Daily Forward Curves  
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Idaho Power/102  
Wright/7

MidC LL	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
12/14/2012	27.20	20.32	8.20	23.24	31.13	32.47	34.07	34.17	38.60	40.43	38.37	31.18
12/17/2012	27.40	20.47	8.26	23.41	31.35	32.70	34.31	34.42	38.87	40.61	38.54	31.32
12/18/2012	27.50	20.54	8.29	23.50	31.47	32.83	34.44	34.55	39.02	40.78	38.70	31.45
12/19/2012	27.40	20.47	8.26	23.42	31.36	32.71	34.32	34.43	38.89	40.78	38.70	31.45
12/20/2012	27.59	20.61	8.32	23.58	31.57	32.94	34.55	34.67	39.15	41.01	38.91	31.63
12/21/2012	28.37	21.20	8.55	24.25	32.47	33.87	35.53	35.65	40.26	41.23	39.12	31.79
12/24/2012	28.37	21.20	8.55	24.25	32.47	33.87	35.53	35.65	40.26	41.23	39.12	31.79
12/26/2012	28.20	21.07	8.50	24.10	32.28	33.67	35.32	35.44	40.02	41.11	39.01	31.70
12/27/2012	27.88	20.83	8.41	23.82	31.90	33.28	34.92	35.03	39.56	40.65	38.58	31.35
12/28/2012	27.94	20.87	8.42	23.87	31.97	33.35	34.99	35.10	39.64	40.69	38.61	31.38
12/31/2012	27.86	20.81	8.40	23.81	31.88	33.26	34.89	35.00	39.53	40.69	38.61	31.38
1/2/2013	27.53	20.56	8.30	23.52	31.50	32.86	34.47	34.58	39.06	40.46	38.39	31.20
1/3/2013	27.36	20.44	8.25	23.38	31.31	32.66	34.26	34.37	38.82	40.34	38.28	31.11
1/4/2013	27.77	20.74	8.37	23.73	31.78	33.15	34.78	34.89	39.40	40.46	38.39	31.20
1/7/2013	27.77	20.74	8.37	23.73	31.78	33.15	34.78	34.89	39.40	40.46	38.39	31.20
1/8/2013	27.57	20.60	8.31	23.56	31.55	32.91	34.53	34.64	39.12	40.34	38.28	31.11
1/9/2013	27.29	20.39	8.23	23.32	31.23	32.58	34.18	34.29	38.73	39.99	37.95	30.84
1/10/2013	27.29	20.39	8.23	23.32	31.23	32.58	34.18	34.29	38.73	40.24	38.19	31.04
1/11/2013	27.81	20.78	8.39	23.77	31.83	33.20	34.83	34.95	39.47	40.71	38.64	31.40
1/14/2013	27.59	20.61	8.32	23.58	31.57	32.94	34.55	34.67	39.15	40.71	38.64	31.40
1/15/2013	27.42	20.49	8.27	23.43	31.38	32.74	34.34	34.46	38.91	40.71	38.64	31.40
1/16/2013	27.42	20.49	8.27	23.43	31.38	32.74	34.34	34.46	38.91	40.71	38.64	31.40
1/17/2013	27.66	20.66	8.34	23.63	31.65	33.01	34.64	34.75	39.24	40.82	38.73	31.48
1/18/2013	27.66	20.66	8.34	23.63	31.65	33.01	34.64	34.75	39.24	40.82	38.73	31.48
1/22/2013	27.94	20.87	8.42	23.87	31.97	33.35	34.99	35.10	39.64	40.82	38.73	31.48
1/23/2013	27.94	20.87	8.42	23.87	31.97	33.35	34.99	35.10	39.64	40.82	38.73	31.48
1/24/2013	27.84	20.80	8.39	23.79	31.86	33.24	34.87	34.98	39.51	40.82	38.73	31.48
1/25/2013	27.80	20.76	8.38	23.75	31.81	33.18	34.81	34.92	39.44	40.82	38.73	31.48
1/28/2013	27.14	20.28	8.18	23.20	31.06	32.40	34.00	34.10	38.52	40.22	38.16	31.02
1/29/2013	26.79	20.01	8.08	22.89	30.66	31.98	33.55	33.66	38.02	39.86	37.82	30.74
1/30/2013	27.05	20.21	8.16	23.12	30.96	32.29	33.88	33.99	38.38	40.04	37.99	30.88
1/31/2013	24.93	18.62	7.52	21.30	28.53	29.76	31.22	31.32	35.38	37.10	35.21	28.61
2/1/2013	27.05	20.21	8.16	23.12	30.96	32.29	33.88	33.99	38.38	40.04	37.99	30.88
2/4/2013	27.25	20.35	8.22	23.28	31.18	32.53	34.12	34.23	38.66	40.04	37.99	30.88
2/5/2013	27.25	20.35	8.22	23.28	31.18	32.53	34.12	34.23	38.66	38.92	36.93	30.01
2/6/2013	27.25	20.35	8.22	23.28	31.18	32.53	34.12	34.23	38.66	38.92	36.93	30.01
2/7/2013	26.81	20.03	8.08	22.91	30.68	32.00	33.58	33.68	38.04	38.52	36.55	29.71
2/8/2013	27.08	20.23	8.16	23.14	30.99	32.33	33.91	34.02	38.42	38.84	36.86	29.95
2/11/2013	27.05	20.21	8.16	23.12	30.96	32.29	33.88	33.99	38.38	38.84	36.86	29.95
2/12/2013	27.15	20.29	8.19	23.20	31.07	32.41	34.01	34.12	38.53	38.84	36.86	29.95
2/13/2013	27.32	20.41	8.24	23.35	31.26	32.61	34.22	34.33	38.77	39.16	37.16	30.20
2/14/2013	26.98	20.15	8.13	23.05	30.87	32.20	33.79	33.89	38.28	38.52	36.55	29.71
2/15/2013	27.08	20.23	8.16	23.14	30.99	32.33	33.91	34.02	38.42	38.65	36.67	29.81
2/19/2013	27.03	20.20	8.15	23.10	30.93	32.27	33.86	33.96	38.36	38.65	36.67	29.81
2/20/2013	19.89	15.86	14.56	28.57	31.58	32.02	35.50	35.38	36.20	35.41	34.78	33.17
2/21/2013	27.03	20.20	8.15	23.10	30.93	32.27	33.86	33.96	38.36	38.65	36.67	29.81
2/22/2013	19.89	15.86	14.56	28.57	31.58	32.02	35.50	35.38	36.20	35.41	34.78	33.17
2/25/2013	20.36	16.23	14.91	29.25	32.33	32.78	36.34	36.22	37.06	36.81	36.16	34.49
2/26/2013	20.47	16.33	14.99	29.42	32.51	32.97	36.55	36.43	37.27	36.81	36.16	34.49
2/27/2013	20.44	16.30	14.97	29.37	32.46	32.91	36.49	36.37	37.21	36.81	36.16	34.49
2/28/2013	20.84	16.62	15.26	29.95	33.10	33.56	37.21	37.09	37.94	37.11	36.45	34.76
3/1/2013	20.76	16.56	15.20	29.83	32.97	33.43	37.07	36.94	37.79	37.11	36.45	34.76
3/4/2013	20.98	16.73	15.36	30.15	33.31	33.78	37.46	37.33	38.19	37.52	36.85	35.14
3/5/2013	20.98	16.73	15.36	30.15	33.31	33.78	37.46	37.33	38.19	37.52	36.85	35.14
3/6/2013	20.91	16.68	15.31	30.05	33.21	33.67	37.33	37.21	38.07	37.40	36.73	35.03
3/7/2013	20.89	16.66	15.30	30.02	33.17	33.64	37.30	37.17	38.03	37.40	36.73	35.03
3/8/2013	20.69	16.50	15.15	29.72	32.85	33.31	36.93	36.81	37.65	37.16	36.50	34.81
3/11/2013	20.64	16.46	15.11	29.65	32.77	33.23	36.85	36.72	37.57	37.16	36.50	34.81

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Idaho Power/102  
Wright/8

MidC LL	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
3/12/2013	20.33	16.21	14.89	29.21	32.28	32.74	36.30	36.17	37.01	37.11	36.45	34.76
3/13/2013	20.06	15.99	14.69	28.82	31.85	32.30	35.81	35.68	36.51	37.22	36.56	34.87
3/14/2013	20.13	16.05	14.74	28.93	31.97	32.42	35.94	35.82	36.65	37.34	36.67	34.98
3/15/2013	20.55	16.39	15.05	29.53	32.63	33.09	36.69	36.56	37.41	37.87	37.19	35.47
3/18/2013	20.21	16.11	14.80	29.03	32.09	32.54	36.08	35.95	36.78	37.28	36.62	34.92
3/19/2013	20.62	16.44	15.10	29.62	32.74	33.20	36.81	36.68	37.53	37.40	36.73	35.03
3/20/2013	20.52	16.36	15.02	29.48	32.58	33.04	36.63	36.50	37.34	37.11	36.45	34.76
3/21/2013	20.34	16.22	14.90	29.23	32.30	32.76	36.32	36.20	37.03	36.99	36.33	34.65
3/22/2013	20.22	16.12	14.81	29.05	32.11	32.56	36.10	35.98	36.81	36.68	36.03	34.37
3/25/2013	20.05	15.99	14.68	28.81	31.84	32.29	35.79	35.67	36.50	37.15	36.49	34.80
3/26/2013	20.26	16.15	14.83	29.10	32.16	32.62	36.16	36.04	36.87	37.50	36.84	35.13
3/27/2013	20.29	16.18	14.86	29.15	32.22	32.67	36.22	36.10	36.93	37.39	36.72	35.02
3/28/2013	19.94	15.90	14.60	28.65	31.66	32.11	35.60	35.48	36.30	37.09	36.43	34.75
4/1/2013	19.96	15.92	14.62	28.68	31.70	32.14	35.64	35.51	36.33	37.09	36.43	34.75
4/2/2013	19.76	15.76	14.47	28.40	31.38	31.82	35.28	35.16	35.97	36.80	36.15	34.47
4/3/2013	19.32	15.40	14.15	27.76	30.67	31.11	34.49	34.37	35.16	36.22	35.57	33.93
4/4/2013	20.30	16.18	14.86	29.16	32.23	32.68	36.23	36.11	36.94	36.92	36.26	34.58
4/5/2013	20.42	16.28	14.95	29.34	32.42	32.88	36.45	36.33	37.17	37.16	36.50	34.81
4/8/2013	20.19	16.10	14.79	29.01	32.07	32.52	36.05	35.93	36.76	36.76	36.10	34.43
4/9/2013	19.95	15.91	14.61	28.66	31.67	32.12	35.61	35.49	36.31	35.88	35.24	33.61
4/10/2013	19.78	15.78	14.49	28.42	31.41	31.86	35.32	35.20	36.01	35.28	34.65	33.05
4/11/2013	19.78	15.78	14.49	28.42	31.41	31.86	35.32	35.20	36.01	35.28	34.65	33.05
4/12/2013	19.89	15.86	14.57	28.58	31.59	32.03	35.51	35.39	36.21	35.40	34.77	33.16
4/15/2013	19.71	15.72	14.43	28.32	31.29	31.73	35.18	35.06	35.87	35.22	34.60	33.00
4/16/2013	19.86	15.84	14.54	28.53	31.53	31.98	35.45	35.33	36.15	35.47	34.84	33.23
4/17/2013	19.86	15.84	14.54	28.53	31.53	31.98	35.45	35.33	36.15	35.47	34.84	33.23
4/18/2013	20.08	16.01	14.70	28.85	31.88	32.33	35.84	35.72	36.55	35.75	35.11	33.49
4/19/2013	20.21	16.11	14.80	29.03	32.09	32.54	36.08	35.95	36.78	35.87	35.23	33.60
4/22/2013	20.09	16.02	14.71	28.87	31.90	32.35	35.87	35.75	36.57	35.75	35.11	33.49
4/23/2013	19.89	15.86	14.56	28.57	31.58	32.02	35.50	35.38	36.20	35.40	34.77	33.16
4/24/2013	19.80	15.79	14.50	28.44	31.43	31.88	35.34	35.22	36.04	35.28	34.65	33.05
4/25/2013	19.80	15.79	14.50	28.44	31.43	31.88	35.34	35.22	36.04	35.28	34.65	33.05
4/26/2013	19.80	15.79	14.50	28.44	31.43	31.88	35.34	35.22	36.04	35.28	34.65	33.05
4/29/2013	20.11	16.03	14.72	28.89	31.92	32.37	35.89	35.77	36.60	35.75	35.11	33.49
4/30/2013	19.91	15.88	14.58	28.61	31.62	32.07	35.55	35.43	36.25	34.76	34.14	32.56
5/1/2013	19.91	15.88	14.58	28.61	31.62	32.07	35.55	35.43	36.25	34.76	34.14	32.56
5/2/2013	19.30	15.39	14.13	27.73	30.64	31.07	34.45	34.33	35.13	33.53	32.93	31.41
5/3/2013	19.40	15.47	14.21	27.87	30.80	31.24	34.63	34.52	35.31	33.65	33.05	31.52
5/6/2013	19.30	15.39	14.13	27.73	30.64	31.07	34.45	34.33	35.13	33.47	32.87	31.35
5/7/2013	19.40	15.47	14.21	27.87	30.80	31.24	34.63	34.52	35.31	33.59	32.99	31.46
5/8/2013	19.75	15.75	14.46	28.38	31.36	31.80	35.26	35.14	35.95	34.23	33.62	32.07
5/9/2013	19.77	15.76	14.48	28.41	31.39	31.83	35.29	35.17	35.99	34.23	33.62	32.07
5/10/2013	19.39	15.46	14.20	27.86	30.79	31.23	34.62	34.50	35.30	33.59	32.99	31.46
5/13/2013	19.71	15.72	14.43	28.32	31.29	31.73	35.18	35.06	35.87	34.00	33.39	31.85
5/14/2013	19.91	15.88	14.58	28.61	31.62	32.07	35.55	35.43	36.25	34.46	33.85	32.28
5/15/2013	19.88	15.85	14.56	28.56	31.57	32.01	35.49	35.37	36.18	34.46	33.85	32.28
5/16/2013	19.69	15.70	14.42	28.29	31.26	31.70	35.15	35.03	35.84	34.17	33.56	32.01
5/17/2013	19.77	15.76	14.48	28.41	31.39	31.83	35.29	35.17	35.99	34.17	33.56	32.01
5/20/2013	20.34	16.22	14.89	29.22	32.29	32.75	36.31	36.18	37.02	35.67	35.03	33.41
5/21/2013	20.36	16.23	14.91	29.25	32.33	32.78	36.34	36.22	37.06	35.93	35.29	33.65
5/22/2013	20.53	16.37	15.03	29.50	32.60	33.06	36.65	36.53	37.37	36.22	35.57	33.93
5/23/2013	20.70	16.51	15.16	29.74	32.87	33.33	36.96	36.83	37.68	36.51	35.86	34.20
5/24/2013	20.70	16.51	15.16	29.74	32.87	33.33	36.96	36.83	37.68	36.51	35.86	34.20
5/28/2013	20.62	16.44	15.10	29.62	32.74	33.20	36.81	36.68	37.53	36.51	35.86	34.20
5/29/2013	20.62	16.44	15.10	29.62	32.74	33.20	36.81	36.68	37.53	36.51	35.86	34.20
5/30/2013	20.34	16.22	14.90	29.23	32.30	32.76	36.32	36.20	37.03	36.05	35.41	33.77
5/31/2013	20.43	16.29	14.96	29.36	32.45	32.90	36.48	36.35	37.19	36.05	35.41	33.77
6/3/2013	20.34	16.22	14.89	29.22	32.29	32.75	36.31	36.18	37.02	35.81	35.17	33.54

Mid-Columbia Heavy Load and Light Load Daily Forward Curves  
April 2015 - March 2016

Idaho Power/102  
Wright/9

MidC LL	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
6/4/2013	20.18	16.09	14.78	29.00	32.04	32.50	36.03	35.90	36.73	35.81	35.17	33.54
6/5/2013	20.18	16.09	14.78	29.00	32.04	32.50	36.03	35.90	36.73	35.81	35.17	33.54
6/6/2013	19.70	15.71	14.43	28.31	31.28	31.72	35.17	35.05	35.86	35.27	34.64	33.04
6/7/2013	19.86	15.84	14.54	28.53	31.53	31.98	35.45	35.33	36.15	35.45	34.81	33.20
6/10/2013	19.57	15.61	14.33	28.12	31.08	31.51	34.94	34.82	35.62	35.04	34.41	32.82
6/11/2013	19.26	15.36	14.11	27.68	30.59	31.02	34.39	34.27	35.06	34.50	33.88	32.32
6/12/2013	19.28	15.38	14.12	27.71	30.62	31.05	34.43	34.31	35.10	34.50	33.88	32.32
6/13/2013	19.48	15.53	14.26	27.98	30.92	31.36	34.77	34.65	35.45	34.79	34.17	32.59
6/14/2013	19.19	15.30	14.05	27.57	30.47	30.90	34.26	34.14	34.93	34.37	33.76	32.20
6/17/2013	19.19	15.30	14.05	27.57	30.47	30.90	34.26	34.14	34.93	34.37	33.76	32.20
6/18/2013	19.36	15.44	14.18	27.82	30.74	31.17	34.56	34.44	35.24	34.67	34.06	32.48
6/19/2013	19.27	15.37	14.11	27.69	30.60	31.03	34.40	34.28	35.08	34.50	33.88	32.32
6/20/2013	19.10	15.23	13.99	27.44	30.33	30.75	34.10	33.98	34.76	34.21	33.60	32.04
6/21/2013	18.93	15.09	13.86	27.20	30.05	30.48	33.79	33.68	34.45	33.91	33.31	31.77
6/24/2013	19.02	15.17	13.93	27.33	30.21	30.63	33.96	33.85	34.63	33.91	33.31	31.77
6/25/2013	18.91	15.08	13.85	27.17	30.02	30.45	33.75	33.64	34.42	33.91	33.31	31.77
6/26/2013	18.91	15.08	13.85	27.17	30.02	30.45	33.75	33.64	34.42	33.91	33.31	31.77
6/27/2013	18.86	15.04	13.81	27.10	29.95	30.37	33.67	33.55	34.33	33.81	33.21	31.67
6/28/2013	19.03	15.18	13.94	27.34	30.22	30.64	33.97	33.86	34.64	34.09	33.48	31.93
7/1/2013	19.03	15.18	13.94	27.34	30.22	30.64	33.97	33.86	34.64	34.09	33.48	31.93
7/2/2013	19.03	15.18	13.94	27.34	30.22	30.64	33.97	33.86	34.64	34.09	33.48	31.93
7/3/2013	19.00	15.15	13.91	27.29	30.16	30.59	33.91	33.80	34.58	33.91	33.31	31.77
7/5/2013	19.00	15.15	13.91	27.29	30.16	30.59	33.91	33.80	34.58	33.91	33.31	31.77
7/8/2013	19.06	15.20	13.96	27.39	30.27	30.70	34.04	33.92	34.70	34.03	33.43	31.88
7/9/2013	18.91	15.08	13.85	27.18	30.03	30.46	33.77	33.65	34.43	33.68	33.08	31.55
7/10/2013	18.91	15.08	13.85	27.18	30.03	30.46	33.77	33.65	34.43	33.68	33.08	31.55
7/11/2013	18.59	14.82	13.61	26.70	29.51	29.93	33.18	33.07	33.83	33.10	32.51	31.00
7/12/2013	18.45	14.71	13.51	26.51	29.29	29.71	32.94	32.82	33.58	32.86	32.28	30.78
7/15/2013	18.52	14.77	13.56	26.61	29.40	29.82	33.06	32.95	33.71	32.98	32.39	30.89
7/16/2013	18.70	14.91	13.69	26.86	29.69	30.10	33.38	33.26	34.03	33.27	32.68	31.17
7/17/2013	18.61	14.84	13.63	26.73	29.54	29.96	33.22	33.10	33.87	33.10	32.51	31.00
7/18/2013	18.99	15.14	13.91	27.28	30.15	30.58	33.90	33.79	34.57	33.68	33.08	31.55
7/19/2013	18.99	15.14	13.91	27.28	30.15	30.58	33.90	33.79	34.57	33.68	33.08	31.55
7/22/2013	18.80	14.99	13.77	27.01	29.85	30.27	33.56	33.44	34.22	33.39	32.79	31.28
7/23/2013	18.90	15.07	13.84	27.16	30.01	30.43	33.74	33.63	34.40	33.56	32.97	31.44
7/24/2013	19.05	15.19	13.95	27.37	30.25	30.68	34.01	33.90	34.68	33.80	33.20	31.66
7/25/2013	19.06	15.20	13.96	27.38	30.26	30.69	34.02	33.91	34.69	33.74	33.14	31.61
7/26/2013	19.25	15.35	14.10	27.66	30.57	31.00	34.37	34.25	35.04	34.03	33.43	31.88
7/29/2013	19.64	15.66	14.38	28.22	31.19	31.62	35.06	34.94	35.75	35.43	34.80	33.19
7/30/2013	19.37	15.44	14.18	27.83	30.75	31.18	34.57	34.46	35.25	35.26	34.63	33.03
7/31/2013	19.48	15.54	14.27	27.99	30.94	31.37	34.78	34.66	35.46	35.43	34.80	33.19
8/1/2013	19.14	15.26	14.02	27.50	30.39	30.82	34.17	34.05	34.84	34.85	34.23	32.65
8/2/2013	18.76	14.96	13.74	26.95	29.78	30.20	33.49	33.37	34.14	34.16	33.55	32.00
8/5/2013	18.77	14.97	13.75	26.97	29.81	30.23	33.51	33.40	34.17	34.16	33.55	32.00
8/6/2013	18.69	14.90	13.69	26.85	29.67	30.09	33.36	33.25	34.02	34.04	33.44	31.89
8/7/2013	18.61	14.84	13.63	26.74	29.56	29.97	33.23	33.12	33.88	33.91	33.31	31.77
8/8/2013	18.67	14.89	13.68	26.83	29.65	30.07	33.34	33.23	33.99	34.03	33.43	31.88
8/9/2013	18.61	14.84	13.63	26.73	29.54	29.96	33.22	33.10	33.87	33.91	33.31	31.77
8/12/2013	18.77	14.97	13.75	26.97	29.81	30.23	33.51	33.40	34.17	34.27	33.65	32.10
8/13/2013	18.64	14.86	13.65	26.78	29.60	30.02	33.28	33.16	33.93	34.09	33.48	31.93
8/14/2013	18.34	14.62	13.43	26.35	29.12	29.53	32.74	32.63	33.38	33.39	32.79	31.28
8/15/2013	18.65	14.87	13.66	26.79	29.61	30.03	33.29	33.18	33.94	33.56	32.97	31.44
8/16/2013	18.67	14.89	13.67	26.82	29.64	30.06	33.33	33.21	33.98	33.67	33.07	31.54
8/19/2013	18.67	14.89	13.67	26.82	29.64	30.06	33.33	33.21	33.98	33.67	33.07	31.54
8/20/2013	19.08	15.21	13.97	27.41	30.29	30.72	34.06	33.94	34.73	34.37	33.76	32.20
8/21/2013	19.08	15.21	13.97	27.41	30.29	30.72	34.06	33.94	34.73	34.37	33.76	32.20
8/22/2013	19.15	15.27	14.02	27.51	30.40	30.83	34.18	34.07	34.85	34.49	33.87	32.31
8/23/2013	19.09	15.22	13.98	27.42	30.30	30.73	34.07	33.96	34.74	34.64	34.02	32.45

Mid-Columbia Heavy Load and Light Load Daily Forward Curves  
April 2015 - March 2016

Idaho Power/102  
Wright/10

<b>MidC LL</b>	<b>Apr-15</b>	<b>May-15</b>	<b>Jun-15</b>	<b>Jul-15</b>	<b>Aug-15</b>	<b>Sep-15</b>	<b>Oct-15</b>	<b>Nov-15</b>	<b>Dec-15</b>	<b>Jan-16</b>	<b>Feb-16</b>	<b>Mar-16</b>
<b>8/26/2013</b>	19.14	15.26	14.02	27.50	30.39	30.82	34.17	34.05	34.84	34.64	34.02	32.45
<b>8/27/2013</b>	19.14	15.26	14.02	27.50	30.39	30.82	34.17	34.05	34.84	35.28	34.65	33.05
<b>8/28/2013</b>	19.55	15.59	14.32	28.09	31.04	31.48	34.90	34.78	35.59	36.09	35.45	33.81
<b>8/29/2013</b>	19.76	15.75	14.47	28.39	31.37	31.81	35.27	35.15	35.96	35.94	35.30	33.66
<b>8/30/2013</b>	19.52	15.56	14.29	28.04	30.99	31.43	34.84	34.72	35.52	35.59	34.95	33.34
<b>9/3/2013</b>	19.95	15.91	14.61	28.67	31.68	32.13	35.62	35.50	36.32	36.29	35.64	33.99
<b>9/4/2013</b>	19.67	15.69	14.41	28.27	31.24	31.68	35.12	35.00	35.81	35.82	35.18	33.55
<b>9/5/2013</b>	19.41	15.48	14.22	27.89	30.83	31.26	34.66	34.54	35.34	34.56	33.94	32.37
<b>9/6/2013</b>	19.48	15.54	14.27	27.99	30.94	31.37	34.78	34.66	35.46	34.56	33.94	32.37
<b>9/9/2013</b>	19.48	15.54	14.27	27.99	30.94	31.37	34.78	34.66	35.46	34.56	33.94	32.37
<b>9/10/2013</b>	19.23	15.33	14.08	27.63	30.53	30.96	34.33	34.21	35.00	34.21	33.60	32.04
<b>9/11/2013</b>	19.22	15.33	14.08	27.62	30.52	30.95	34.32	34.20	34.99	33.97	33.37	31.82
<b>9/12/2013</b>	19.22	15.33	14.08	27.62	30.52	30.95	34.32	34.20	34.99	33.97	33.37	31.82
<b>9/13/2013</b>	19.19	15.30	14.05	27.57	30.47	30.90	34.26	34.14	34.93	33.97	33.37	31.82
<b>9/16/2013</b>	19.32	15.41	14.15	27.77	30.69	31.12	34.50	34.38	35.18	34.21	33.60	32.04
<b>9/17/2013</b>	19.39	15.46	14.20	27.86	30.79	31.23	34.62	34.50	35.30	34.32	33.71	32.15
<b>9/18/2013</b>	19.09	15.22	13.98	27.42	30.30	30.73	34.07	33.96	34.74	33.80	33.20	31.66
<b>9/19/2013</b>	19.09	15.22	13.98	27.42	30.30	30.73	34.07	33.96	34.74	33.80	33.20	31.66
<b>9/20/2013</b>	18.93	15.09	13.86	27.20	30.05	30.48	33.79	33.68	34.45	33.56	32.97	31.44
<b>9/23/2013</b>	18.55	14.79	13.59	26.66	29.46	29.87	33.12	33.01	33.77	32.92	32.33	30.84
<b>Average LL</b>	23.26	17.96	12.01	26.63	31.76	32.60	35.31	35.29	37.66	37.51	36.28	32.36
<b>Max LL</b>	31.12	23.25	15.36	30.15	35.61	37.15	38.97	39.10	44.15	43.43	41.21	35.47
<b>Min LL</b>	18.34	14.62	7.52	21.30	28.53	29.53	31.22	31.32	33.38	32.86	32.28	28.61
<b>Spread</b>	12.78	8.62	7.85	8.84	7.08	7.61	7.75	7.77	10.77	10.57	8.94	6.86

Idaho Power/103  
Witness: Scott Wright

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**IDAHO POWER COMPANY**

Exhibit Accompanying Testimony of Scott Wright

Producer Price Index for Electric Power

October 18, 2013

<b>Mnemonic:</b>	<b>FXPPIFU4.US</b>
<b>Description:</b>	<b>PPI: Electric Power - Total, (Index 1982=100, NSA) for United States</b>
<b>Source:</b>	<b>U.S. Bureau of Labor Statistics (BLS); Moody's Analytics (ECCA) Forecast</b>
<b>Native Frequency:</b>	<b>QUARTERLY</b>
<b>Geography:</b>	<b>United States</b>
2010 Q1	178.2667
2010 Q2	184.6333
2010 Q3	192.2000
2010 Q4	182.4000
2011 Q1	184.0333
2011 Q2	188.1667
2011 Q3	195.4000
2011 Q4	187.9334
2012 Q1	185.8333
2012 Q2	188.8333
2012 Q3	196.8667
2012 Q4	190.4000
2013 Q1	189.1667
2013 Q2	193.0667
2013 Q3	199.8909
2013 Q4	192.1114
2014 Q1	192.8683
2014 Q2	197.3758
2014 Q3	204.4846
2014 Q4	196.4357
2015 Q1	197.2364
2015 Q2	202.0075
2015 Q3	209.3256
2015 Q4	201.2219
2016 Q1	202.1110
2016 Q2	207.0567
2016 Q3	214.7100
2016 Q4	206.4170
2017 Q1	207.2224
2017 Q2	212.1436
2017 Q3	219.7589
2017 Q4	211.0816
2018 Q1	211.8152
2018 Q2	216.7713
2018 Q3	224.4520
2018 Q4	215.4881
2019 Q1	216.0927
2019 Q2	220.9881
2019 Q3	228.6579
2019 Q4	219.3857
2020 Q1	219.8746
2020 Q2	224.7485
2020 Q3	232.4612
2020 Q4	222.9649

Idaho Power/104  
Witness: Scott Wright

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**IDAHO POWER COMPANY**

Exhibit Accompanying Testimony of Scott Wright

**Idaho Power Company's Forward Price Curves Discounted for Inflation  
Used to Re-Price Purchased Power  
and Surplus Sales for the October Update**

October 18, 2013

**IDAHO POWER COMPANY**  
**MidC Forward Price Curves Discounted for Inflation**  
**Used to Re-Price Purchased Power and Surplus Sales for the October Update**

Line		Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
1	<b>Forward Curve Prices</b>												
2	Relevant Quarter	2015 Q2	2015 Q2	2015 Q2	2015 Q3	2015 Q3	2015 Q3	2015 Q4	2015 Q4	2015 Q4	2016 Q1	2016 Q1	2016 Q1
3	Deflator	2.0201	2.0201	2.0201	2.0933	2.0933	2.0933	2.0122	2.0122	2.0122	2.0211	2.0211	2.0211
4	<b>Water Year</b>	<b>Apr-14</b>	<b>May-14</b>	<b>Jun-14</b>	<b>Jul-14</b>	<b>Aug-14</b>	<b>Sep-14</b>	<b>Oct-14</b>	<b>Nov-14</b>	<b>Dec-14</b>	<b>Jan-15</b>	<b>Feb-15</b>	<b>Mar-15</b>
5	Relevant Quarter	2014 Q2	2014 Q2	2014 Q2	2014 Q3	2014 Q3	2014 Q3	2014 Q4	2014 Q4	2014 Q4	2015 Q1	2015 Q1	2015 Q1
6	Inflator	1.9738	1.9738	1.9738	2.0448	2.0448	2.0448	1.9644	1.9644	1.9644	1.9724	1.9724	1.9724
7	<b>Average Prices</b>	<b>Apr-15</b>	<b>May-15</b>	<b>Jun-15</b>	<b>Jul-15</b>	<b>Aug-15</b>	<b>Sep-15</b>	<b>Oct-15</b>	<b>Nov-15</b>	<b>Dec-15</b>	<b>Jan-16</b>	<b>Feb-16</b>	<b>Mar-16</b>
8	MidC HL	33.17	31.41	28.13	43.33	44.45	42.54	40.99	42.31	44.97	44.51	44.21	39.02
9	MidC LL	23.26	17.96	12.01	26.63	31.76	32.60	35.31	35.29	37.66	37.51	36.28	32.36
10	<b>Inflation Adjusted</b>	<b>Apr-14</b>	<b>May-14</b>	<b>Jun-14</b>	<b>Jul-14</b>	<b>Aug-14</b>	<b>Sep-14</b>	<b>Oct-14</b>	<b>Nov-14</b>	<b>Dec-14</b>	<b>Jan-15</b>	<b>Feb-15</b>	<b>Mar-15</b>
11	MidC HL	32.41	30.69	27.48	42.33	43.43	41.55	40.01	41.30	43.90	43.44	43.15	38.08
12	MidC LL	22.73	17.55	11.73	26.01	31.03	31.84	34.47	34.45	36.76	36.60	35.41	31.58
13	<b>Difference</b>	<b>Apr-15</b>	<b>May-15</b>	<b>Jun-15</b>	<b>Jul-15</b>	<b>Aug-15</b>	<b>Sep-15</b>	<b>Oct-15</b>	<b>Nov-15</b>	<b>Dec-15</b>	<b>Jan-16</b>	<b>Feb-16</b>	<b>Mar-16</b>
14	MidC HL	0.76	0.72	0.64	1.00	1.03	0.98	0.97	1.01	1.07	1.07	1.07	0.94
15	MidC LL	0.53	0.41	0.28	0.62	0.73	0.75	0.84	0.84	0.90	0.90	0.88	0.78
16	<b>Reallocated Prices</b>	<b>Apr-14</b>	<b>May-14</b>	<b>Jun-14</b>	<b>Jul-14</b>	<b>Aug-14</b>	<b>Sep-14</b>	<b>Oct-14</b>	<b>Nov-14</b>	<b>Dec-14</b>	<b>Jan-15</b>	<b>Feb-15</b>	<b>Mar-15</b>
17	<b>HL Purchased Power</b>												
18	103.9%	33.67	31.88	28.55	43.98	45.12	43.17	41.58	42.91	45.61	45.13	44.83	39.56
19	<b>LL Purchased Power</b>												
20	107.1%	24.34	18.80	12.56	27.86	33.23	34.11	36.92	36.89	39.38	39.20	37.92	33.82
21	<b>HL Surplus Sales</b>												
22	96.4%	31.24	29.58	26.49	40.81	41.86	40.06	38.57	39.81	42.32	41.87	41.59	36.70
23	<b>LL Surplus Sales</b>												
24	93.4%	21.23	16.39	10.96	24.29	28.98	29.74	32.20	32.17	34.34	34.19	33.07	29.50

Idaho Power/105  
Witness: Scott Wright

BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON

IDAHO POWER COMPANY

Exhibit Accompanying Testimony of Scott Wright

Idaho Power Company's Power Supply Expenses for April 1, 2014 – March 31, 2015  
(Multiple Gas Prices – 85 Years of Hydro)

October 18, 2013

IPCO POWER SUPPLY EXPENSES FOR APRIL 1, 2014 -- MARCH 31, 2015 (Multiple Gas Prices/85 Years of Hydro Conditions)

Repriced Using UE 195 Settlement Methodology - October Update

AVERAGE

	April	May	June	July	August	September	October	November	December	January	February	March	Annual
Hydroelectric Generation (MWh)	852,208.0	935,956.8	894,784.8	676,572.5	507,298.0	540,092.4	551,497.9	468,580.3	673,213.8	753,542.0	825,731.1	844,213.0	8,523,690.7
Bridger													
Energy (MWh)	208,161.3	280,964.7	283,378.6	473,492.8	484,176.6	458,325.8	482,786.1	467,109.2	485,075.4	454,980.0	382,781.3	380,627.4	4,841,859.1
Expense (\$ x 1000)	\$ 4,931.7	\$ 6,608.2	\$ 6,633.2	\$ 10,753.3	\$ 10,976.0	\$ 10,416.8	\$ 10,950.7	\$ 10,595.9	\$ 10,991.8	\$ 10,035.9	\$ 8,481.4	\$ 8,420.3	\$ 109,795.1
Boardman													
Energy (MWh)	1,737.5	2,968.6	11,159.6	31,566.2	34,821.6	29,852.6	34,457.6	30,903.5	35,111.3	20,094.6	13,229.9	17,833.1	263,736.0
Expense (\$ x 1000)	\$ 47.9	\$ 81.2	\$ 311.9	\$ 819.9	\$ 896.4	\$ 777.1	\$ 886.8	\$ 803.3	\$ 904.1	\$ 586.9	\$ 393.5	\$ 526.2	\$ 7,035.3
Valmy													
Energy (MWh)	5,067.0	7,748.4	4,627.7	57,130.9	68,926.2	39,944.9	61,583.0	59,772.2	90,612.8	34,308.1	17,888.1	23,385.1	470,994.4
Expense (\$ x 1000)	\$ 183.9	\$ 283.7	\$ 167.7	\$ 2,002.5	\$ 2,409.0	\$ 1,398.8	\$ 2,150.7	\$ 2,097.1	\$ 3,136.6	\$ 1,309.8	\$ 684.2	\$ 896.9	\$ 16,721.0
Langley Gulch													
Energy (MWh)	13,371.3	31,445.7	15,778.1	128,009.0	140,533.7	116,327.9	127,126.8	71,121.9	116,343.6	34,883.9	14,312.2	29,776.8	839,031.0
Expense (\$ x 1000)	\$ 437.0	\$ 963.9	\$ 491.5	\$ 3,757.9	\$ 4,198.7	\$ 3,461.5	\$ 3,855.6	\$ 2,376.9	\$ 4,180.3	\$ 1,308.4	\$ 549.2	\$ 1,097.1	\$ 26,678.0
Danskin													
Energy (MWh)	1.8	0.3	29.1	1,545.7	1,115.6	351.8	204.2	10.8	17.5	22.6	1.2	3.2	3,303.8
Expense (\$ x 1000)	\$ 0.1	\$ 0.0	\$ 1.5	\$ 74.0	\$ 53.1	\$ 17.9	\$ 10.1	\$ 0.6	\$ 1.0	\$ 1.4	\$ 0.1	\$ 0.2	\$ 159.9
Bennett Mountain													
Energy (MWh)	-	-	2.8	167.2	158.9	95.1	4.7	-	0.5	0.1	-	-	429.3
Expense (\$ x 1000)	\$ -	\$ -	\$ 0.1	\$ 7.8	\$ 8.0	\$ 5.0	\$ 0.2	\$ -	\$ 0.0	\$ 0.0	\$ -	\$ -	\$ 21.3
Fixed Capacity Charge - Gas Transportation (\$ x 100C	\$ 737.7	\$ 761.7	\$ 746.7	\$ 780.3	\$ 780.3	\$ 755.7	\$ 761.7	\$ 737.7	\$ 761.7	\$ 761.7	\$ 689.6	\$ 761.7	\$ 9,036.3
Purchased Power (Excluding CSPP)													
Market Energy (MWh)	3,141.3	11,955.1	96,932.1	184,027.2	173,842.9	23,530.6	45.5	4,432.5	6,564.5	31,744.4	1,774.0	1,047.2	539,037.2
Elkhorn Wind Energy (MWh)	20,502.0	18,304.0	22,117.6	31,551.7	24,405.1	19,545.2	19,382.1	32,298.0	26,193.4	33,933.8	24,180.5	38,239.2	310,652.6
Neal Hot Springs Energy (MWh)	15,867.9	16,396.9	15,867.9	15,867.9	16,396.9	15,867.9	16,396.9	15,867.9	16,396.9	7,825.8	14,810.1	16,396.9	183,959.8
Raft River Geothermal Energy (MWh)	5,360.0	5,316.0	5,323.0	5,726.0	5,998.0	6,111.0	7,004.0	6,939.0	7,199.0	7,056.0	6,662.0	5,674.0	74,367.9
Total Energy Excl. CSPP (MWh)	44,871.2	51,972.0	140,240.6	237,172.8	220,642.8	65,054.7	42,828.5	59,537.4	56,353.8	80,559.9	47,426.6	61,357.3	1,108,017.5
Market Expense (\$ x 1000)	\$ 95.3	\$ 325.2	\$ 2,213.6	\$ 7,033.2	\$ 7,104.7	\$ 939.6	\$ 1.8	\$ 180.7	\$ 284.8	\$ 1,365.3	\$ 75.1	\$ 39.3	\$ 19,658.7
Elkhorn Wind Expense (\$ x 1000)	\$ 835.8	\$ 746.2	\$ 1,226.8	\$ 2,100.1	\$ 1,624.4	\$ 1,084.1	\$ 1,075.1	\$ 2,149.8	\$ 1,743.5	\$ 1,938.7	\$ 1,381.5	\$ 1,605.7	\$ 17,511.7
Neal Hot Springs Expense (\$ x 1000)	\$ 1,195.5	\$ 1,235.3	\$ 1,630.9	\$ 1,957.1	\$ 2,022.3	\$ 1,630.9	\$ 1,685.3	\$ 1,957.1	\$ 2,022.3	\$ 835.7	\$ 1,581.6	\$ 1,283.5	\$ 19,037.4
Raft River Geothermal Expense (\$ x 1000)	\$ 239.2	\$ 237.2	\$ 323.2	\$ 417.2	\$ 437.0	\$ 371.1	\$ 425.3	\$ 505.6	\$ 524.5	\$ 437.5	\$ 413.0	\$ 258.6	\$ 4,589.5
Total Expense Excl. CSPP (\$ x 1000)	\$ 2,365.8	\$ 2,544.0	\$ 5,394.5	\$ 11,507.6	\$ 11,188.5	\$ 4,025.7	\$ 3,187.4	\$ 4,793.1	\$ 4,575.1	\$ 4,577.2	\$ 3,451.2	\$ 3,187.1	\$ 60,797.3
Surplus Sales													
Energy (MWh)	292,939.0	300,214.9	125,544.1	47,732.4	26,775.1	150,639.2	404,347.8	207,150.9	200,423.5	145,291.3	349,247.7	416,156.4	2,666,462.4
Revenue Including Transmission Costs (\$ x 1000)	\$ 8,058.3	\$ 7,403.8	\$ 2,598.4	\$ 1,653.9	\$ 992.2	\$ 5,454.6	\$ 14,635.4	\$ 7,657.2	\$ 7,884.8	\$ 5,667.1	\$ 13,416.4	\$ 14,156.0	\$ 89,577.9
Transmission Costs (\$ x 1000)	\$ 292.9	\$ 300.2	\$ 125.5	\$ 47.7	\$ 26.8	\$ 150.6	\$ 404.3	\$ 207.2	\$ 200.4	\$ 145.3	\$ 349.2	\$ 416.2	\$ 2,666.5
Revenue Excluding Transmission Costs (\$ x 1000)	\$ 7,765.3	\$ 7,103.6	\$ 2,472.9	\$ 1,606.1	\$ 965.4	\$ 5,304.0	\$ 14,231.1	\$ 7,450.0	\$ 7,684.3	\$ 5,521.8	\$ 13,067.1	\$ 13,739.8	\$ 86,911.4
Net Hedges													
Energy (MWh)	-	-	-	-	-	-	-	-	-	-	-	-	-
Cost(\$ X 1000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Power Supply Expenses (\$ x 1000)	\$ 938.7	\$ 4,139.0	\$ 11,274.3	\$ 28,097.1	\$ 29,544.6	\$ 15,554.5	\$ 7,572.3	\$ 13,954.6	\$ 16,866.3	\$ 13,059.6	\$ 1,182.0	\$ 1,149.6	\$ 143,332.7
PURPA (\$ x 1000)	\$ 13,489.0	\$ 15,812.9	\$ 17,352.5	\$ 17,887.4	\$ 15,766.8	\$ 12,890.1	\$ 12,590.5	\$ 13,715.1	\$ 12,653.4	\$ 10,911.0	\$ 12,046.2	\$ 10,832.7	\$ 165,947.6
Total Net Power Supply Expenses (\$ x 1000)	\$ 14,427.6	\$ 19,951.9	\$ 28,626.8	\$ 45,984.6	\$ 45,311.4	\$ 28,446.4	\$ 20,162.8	\$ 27,669.7	\$ 29,519.7	\$ 23,970.7	\$ 13,228.2	\$ 11,982.4	\$ 309,280.3
Sales at Customer Level (In 000s MWH)	1,010,832	1,012,151	1,176,591	1,409,063	1,489,186	1,357,073	1,089,640	1,014,602	1,147,387	1,259,103	1,157,423	1,063,478	14,186,526
Hours in Month	720	744	720	744	744	720	744	720	744	744	672	744	8760
Unit Cost / MWH (for PCAM)	\$14.27	\$19.71	\$24.33	\$32.63	\$30.43	\$20.96	\$18.50	\$27.27	\$25.73	\$19.04	\$11.43	\$11.27	\$21.80
<b>Prices Used in Purchased Power &amp; Surplus Sales Above:</b>													
<b>Heavy Load</b>													
Portion of Purchased Power considered HL	<b>64.25%</b>	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%	64.25%
Purchased Power HL Price	33.67	31.88	28.55	43.98	45.12	43.17	41.58	42.91	45.61	45.13	44.83	39.56	
Portion of Surplus Sales considered HL Sui	<b>62.70%</b>	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%	62.70%
Surplus Sales HL Price	31.24	29.58	26.49	40.81	41.86	40.06	38.57	39.81	42.32	41.87	41.59	36.70	
<b>Light Load</b>													
Portion of Purchased Power considered LL	<b>35.75%</b>	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%	35.75%
Purchased Power LL Price	24.34	18.80	12.56	27.86	33.23	34.11	36.92	36.89	39.38	39.20	37.92	33.82	
Portion of Surplus Sales considered LL Sui	<b>37.30%</b>	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%	37.30%
Surplus Sales LL Price	21.23	16.39	10.96	24.29	28.98	29.74	32.20	32.17	34.34	34.19	33.07	29.50	

Idaho Power/106  
Witness: Scott Wright

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**IDAHO POWER COMPANY**

Exhibit Accompanying Testimony of Scott Wright  
AURORA Developed Results versus Re-priced Methodology

October 18, 2013

**COMPARISON OF AURORA DEVELOPED RESULTS VERSUS REPRICED METHODOLOGY**

Line No		<b>AURORA DEVELOPED RESULTS</b>		<b>REPRICED USING FORWARD MARKET PRICES</b>		<b>DIFFERENCES</b>			
		<b>GENERATION</b>		<b>GENERATION</b>		<b>GENERATION</b>		<b>GENERATION</b>	
		A	B	C	D	E	F	G	H
	Resource Type	2013 October Update	2014 October Update	Resource Type	2013 October Update	2014 October Update	(B-A)	(D-C)	(C-A)
1	Hydro (MWh)	8,545,169	8,523,691	Hydro (MWh)	8,545,169	8,523,691	(21,479)	(21,479)	-
2	Coal (MWh)	5,093,220	5,576,589	Coal (MWh)	5,093,220	5,576,589	483,370	483,370	-
3	Natural Gas (MWh)	1,285,258	842,764	Natural Gas (MWh)	1,285,258	842,764	(442,494)	(442,494)	-
	Purchased Power			Purchased Power					
4	Agreements (MWh)	946,659	1,108,018	Agreements (MWh)	946,659	1,108,018	161,359	161,359	-
5	PURPA (MWh)	2,339,445	2,208,282	PURPA (MWh)	2,339,445	2,208,282	(131,163)	(131,163)	-
6	Surplus Sales (MWh)	2,755,315	2,666,462	Surplus Sales (MWh)	2,755,315	2,666,462	(88,853)	(88,853)	-
7	System Load (MWh)	15,454,436	15,592,882	System Load (MWh)	15,454,436	15,592,882	138,446	138,446	-
8	System Load (aMW)	1,764	1,780	System Load (aMW)	1,764	1,780	16	16	-
	<b>NET POWER SUPPLY EXPENSES</b>			<b>NET POWER SUPPLY EXPENSES</b>			<b>NET POWER SUPPLY EXPENSES</b>		
	<b>A</b>		<b>B</b>	<b>C</b>		<b>D</b>	<b>E</b>	<b>F</b>	<b>H</b>
	Resource Type	2013 October Update	2014 October Update	Resource Type	2013 October Update	2014 October Update	(B-A)	(D-C)	(C-A)
9	Hydro (\$ x 1000)	\$ -	\$ -	Hydro (\$ x 1000)	\$ -	\$ -	\$ -	\$ -	-
10	Coal (\$ x 1000)	\$ 128,035.5	\$ 133,551.4	Coal (\$ x 1000)	\$ 128,035.5	\$ 133,551.4	\$ 5,515.9	\$ 5,515.9	-
11	Natural Gas (\$ x 1000)	\$ 54,485.1	\$ 35,895.4	Natural Gas (\$ x 1000)	\$ 54,485.1	\$ 35,895.4	\$ (18,589.6)	\$ (18,589.6)	-
	Purchased Power			Purchased Power					
12	Agreements (\$ x 1000)	\$ 70,289.6	\$ 61,753.7	Agreements (\$ x 1000)	\$ 54,536.1	\$ 60,797.3	\$ (8,535.9)	\$ 6,261.2	\$ (15,753.4)
13	PURPA (\$ x 1000)	\$ 172,911.4	\$ 165,947.6	PURPA (\$ x 1000)	\$ 172,911.4	\$ 165,947.6	\$ (6,963.8)	\$ (6,963.8)	-
14	Surplus Sales (\$ x 1000)	\$ (109,880.2)	\$ (72,458.7)	Surplus Sales (\$ x 1000)	\$ (84,789.9)	\$ (86,911.4)	\$ 37,421.5	\$ (2,121.6)	\$ 25,090.4
15	Total System (\$ x 1000)	\$ 315,841.3	\$ 324,689.4	Total System (\$ x 1000)	\$ 325,178.3	\$ 309,280.3	\$ 8,848.1	\$ (15,898.0)	\$ 9,336.9

Idaho Power/107  
Witness: Scott Wright

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**IDAHO POWER COMPANY**

Exhibit Accompanying Testimony of Scott Wright  
Idaho Power Company's Rate Spread for October APCU Update

October 18, 2013

**Idaho Power Company**  
**Rate Spread Exhibit for October Update APCU**

General Rate Case (UE 233): Marginal Cost-of-Service Study and Stipulated Revenue Spread 2011 Test Period														
Line	Description	(A) TOTAL SYSTEM	(B) RESIDENTIAL (1)	(C) GEN SRV (7)	(D) GEN SRV SECONDARY (9-S)	(E) GEN SRV PRIMARY (9-P)	(F) GEN SRV TRANS (9-T)	(G) AREA LIGHTING (15)	(H) LG POWER PRIMARY (19-P)	(I) LG POWER TRANS (19-T)	(J) IRRIGATION SECONDARY (24-S)	(K) UNMETERED GEN SERVICE (40)	(L) MUNICIPAL ST LIGHT (41)	(M) TRAFFIC CONTROL (42)
1	Normalized Sales (kWh)	650,158,581	198,842,419	17,842,896	114,256,218	15,099,088	2,832,509	483,936	179,189,047	74,155,867	46,649,265	12,900	778,108	16,328
2	Current Revenue	\$39,873,591	\$15,355,932	\$1,559,400	\$6,975,915	\$798,102	\$154,997	\$112,462	\$8,213,065	\$3,123,393	\$3,454,271	\$972	\$123,851	\$1,231
3	Demand Related Marginal Cost													
4	Generation - Staff Adj.	\$11,049,450	\$4,082,443	\$268,043	\$1,671,178	\$207,813	\$35,425	\$625	\$1,790,415	\$1,483,718	\$1,508,400	\$158	\$1,035	\$200
5	Transmission - Staff Adj.	\$12,432,118	\$4,593,297	\$301,584	\$1,880,300	\$233,817	\$39,858	\$703	\$2,014,458	\$1,669,382	\$1,697,153	\$177	\$1,165	\$225
6	Distribution	\$6,945,625	\$3,215,110	\$181,233	\$1,319,947	\$100,783	\$0	\$5,738	\$798,946	\$0	\$1,314,267	\$161	\$9,350	\$89
7	Energy Related Marginal Cost													
8	Generation	\$28,547,004	\$8,940,577	\$802,452	\$5,140,232	\$649,911	\$117,743	\$21,383	\$7,662,010	\$3,097,424	\$2,079,568	\$570	\$34,414	\$722
9	Transmission - Staff Adj.	\$4,144,040	\$1,297,563	\$116,488	\$746,184	\$94,345	\$17,092	\$3,104	\$1,112,259	\$449,639	\$301,881	\$83	\$4,996	\$105
10	Simple-Summed Energy-Related and Demand-Related Marginal Costs													
11	Generation Marginal Costs - Staff Adj.	\$39,596,454	\$13,023,020	\$1,070,495	\$6,811,410	\$857,724	\$153,168	\$22,008	\$9,452,425	\$4,581,142	\$3,587,968	\$728	\$35,449	\$922
12	Transmission Marginal Costs - Staff Adj.	\$16,576,157	\$5,891,160	\$418,072	\$2,626,484	\$328,162	\$56,950	\$3,807	\$3,126,717	\$2,119,021	\$1,999,034	\$260	\$6,160	\$330
13	Customer Related Marginal Cost													
14	Generation - Staff Adj.	\$2,805,903	\$1,967,110	\$385,570	\$177,410	\$6,719	\$1,390	\$0	\$15,208	\$2,535	\$246,967	\$228	\$1,892	\$873
15	Transmission	\$4,272,366	\$1,518,397	\$107,755	\$676,954	\$84,581	\$14,678	\$981	\$805,885	\$546,160	\$515,234	\$67	\$1,588	\$85
16	Distribution													
17	Demand-Related	\$8,930,530	\$4,133,917	\$233,025	\$1,697,158	\$129,585	\$0	\$7,378	\$1,027,267	\$0	\$1,689,855	\$207	\$12,022	\$114
18	Customer-Related													
19	Allocated	\$2,859,472	\$2,004,665	\$392,931	\$180,797	\$6,847	\$1,417	\$0	\$15,498	\$2,583	\$251,682	\$232	\$1,928	\$890
20	Direct Assignment	\$419,424	\$188,447	\$34,356	\$12,375	\$69	\$14	\$78,778	\$83	\$14	\$21,953	\$42	\$83,209	\$83
21	Total: Staff-Adjusted Allocation	\$41,684,482	\$16,134,429	\$1,449,425	\$6,902,669	\$767,013	\$113,599	\$101,145	\$7,865,094	\$3,464,601	\$4,762,425	\$1,011	\$121,310	\$1,759
22	Revenue Deficiency - Staff Adj. Allocation	\$1,810,890	\$778,497	(\$109,975)	(\$73,246)	(\$31,089)	(\$41,398)	(\$11,317)	(\$347,971)	(\$341,208)	\$1,308,154	\$39	(\$2,541)	\$528
23	% Increase Required by Staff Adj. Alloc. Approach	4.54%	5.07%	-7.05%	-1.05%	-3.90%	-26.71%	-10.06%	-4.24%	10.92%	37.87%	4.02%	-2.05%	42.91%
24	% Increase Recommended per Stipulation	\$1,810,890	\$862,348	\$44,153	\$197,517	\$22,598	\$0	\$0	\$232,545	\$212,777	\$235,318	\$44	\$3,507	\$84
25	% Increase Recommended per Stipulation	4.54%	5.62%	2.83%	2.83%	0.00%	0.00%	2.83%	6.81%	6.81%	4.56%	2.83%	2.83%	6.81%
26	Average Rate Given Stipulation (\$/kWh)	0.0641	0.0816	0.0899	0.0628	0.0544	0.0547	0.2324	0.0471	0.0450	0.0791	0.0788	0.1637	0.0805
27	Final Revenue Allocation	\$41,684,481	\$16,218,280	\$1,603,553	\$7,173,432	\$820,700	\$154,997	\$112,462	\$8,445,610	\$3,336,170	\$3,689,589	\$1,016	\$127,358	\$1,315
28	Spread Floors and Ceilings:													
29	No increase for those warranting a decrease greater than 8%													
30	2.83% increase for those warranting a decrease less than 8%													
31	No increase greater than one-and-one-half times the average increase													
32	<b>2012 October Update APCU ( UE 242): Baseline Revenue Requirement Spread and Rates Development Employing the UE 233 Test Period Figures</b>													
33	2012 October Update APCU Cost of Service (UE 242)	\$1,298,993	\$427,230	\$35,118	\$223,454	\$28,138	\$5,025	\$722	\$310,094	\$150,288	\$117,706	\$24	\$1,163	\$30
34	<b>2013 October Update APCU ( UE 257): Baseline Revenue Requirement Spread and Rates Development Employing the UE 233 Test Period Figures</b>													
35	2013 October Update APCU Cost of Service (UE 257)	\$2,298,531	\$755,972	\$62,141	\$395,395	\$49,790	\$8,891	\$1,278	\$548,703	\$265,930	\$208,278	\$42	\$2,058	\$54
36	<b>2014 October Update APCU: Baseline Revenue Requirement Spread and Rates Development Employing the UE 233 Test Period Figures</b>													
37	2014 October Update APCU Cost of Service (Allocator -- Line 14)	-\$848,788	-\$279,161	-\$22,947	-\$146,009	-\$18,386	-\$3,283	-\$472	-\$202,622	-\$98,201	-\$76,912	-\$16	-\$760	-\$20
38	% Increase Required Due to APCU (Proposed) (Line 44/Line 36)	-2.04%	-1.72%	-1.43%	-2.04%	-2.24%	-2.12%	-0.42%	-2.40%	-2.94%	-2.08%	-1.53%	-0.60%	-1.50%
39	Proposed Combined Revenue Spread (Line 36 + Line 42 + Line 43 + Line 44)	\$44,433,216	\$17,122,321	\$1,677,865	\$7,646,271	\$880,242	\$165,630	\$113,990	\$9,101,786	\$3,654,187	\$3,938,661	\$1,067	\$129,819	\$1,379
40	Loss-Adjusted 2011 Normalized Sales (kWh)	650,158,581	198,842,419	17,842,896	114,256,218	15,099,088	2,832,509	483,936	179,189,047	74,155,867	46,649,265	12,900	778,108	16,328
41	2014 October Update APCU Incremental Rate given 2011 Test Period Sales (Mills per kWh) (1000*(Line 44/Line 47))	-1.306	-1.404	-1.286	-1.278	-1.218	-1.159	-0.975	-1.131	-1.324	-1.649	-1.209	-0.977	-1.210
42	<b>APCU Incremental Rate for 2014 October Update (Mills per kWh) (Line 48*(Column A:Line 47/Line 50))</b>	<b>-1.330</b>	<b>-1.487</b>	<b>-1.275</b>	<b>-1.262</b>	<b>-1.191</b>	<b>-1.275</b>	<b>-1.007</b>	<b>-1.110</b>	<b>-1.386</b>	<b>-1.750</b>	<b>-1.439</b>	<b>-0.924</b>	<b>-0.952</b>
43	Loss-Adjusted 2014-2015 Normalized Sales (kWh)	638,186,407	187,728,292	18,001,989	115,721,622	15,433,562	2,574,944	468,706	182,614,623	70,834,664	43,953,874	10,836	822,531	20,764
44	Projected October Update APCU 2014-2015 Revenues (Line 49 * Line 50)	-\$848,788	-\$279,161	-\$22,947	-\$146,009	-\$18,386	-\$3,283	-\$472	-\$202,622	-\$98,201	-\$76,912	-\$16	-\$760	-\$20

Notes:

- 1 2014 October Update APCU Revenues = (\$1.33/MWh x 638,186,407 MW's = \$ (848,788) (Line 42, Column A)  
2 (\$1.33) = \$21.80 (2014 October APCU Rate) - \$23.13 (2013 October APCU Rate)

Idaho Power/108  
Witness: Scott Wright

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**IDAHO POWER COMPANY**

Exhibit Accompanying Testimony of Scott Wright  
  
Idaho Power Company's Current Billed Revenue to  
Proposed Billed Revenue

October 18, 2013

**Idaho Power Company**  
**Calculation of Revenue Impact**  
**State of Oregon**  
**2014 APCU October Update Filing**  
**Effective June 1, 2014**

**Summary of Revenue Impact**  
**Current Billed Revenue to Proposed Billed Revenue <sup>(1)</sup>**

Line No	Tariff Description	Rate Sch. No.	Average Number of Customers <sup>(2)</sup>	Normalized Energy (kWh) <sup>(2)</sup>	Current Billed Revenue	Mills Per kWh	Total Adjustments to Billed Revenue	Proposed Total Billed Revenue	Mills Per kWh	Percent Change Billed to Billed Revenue
<u>Uniform Tariff Rates:</u>										
1	Residential Service	1	13,620	187,728,292	\$18,842,741	100.37	(\$279,152)	\$18,563,589	98.89	(1.48%)
2	Small General Service	7	2,500	18,001,989	\$1,919,430	106.62	(\$22,953)	\$1,896,477	105.35	(1.20%)
3	Large General Service	9	922	133,730,130	\$10,425,526	77.96	(\$167,705)	\$10,257,821	76.71	(1.61%)
4	Dusk to Dawn Lighting	15	0	468,706	\$115,998	247.49	(\$472)	\$115,526	246.48	(0.41%)
5	Large Power Service	19	7	253,449,287	\$15,871,693	62.62	(\$300,879)	\$15,570,814	61.44	(1.90%)
6	Agricultural Irrigation Service	24	1,627	43,953,874	\$4,321,169	98.31	(\$76,919)	\$4,244,250	96.56	(1.78%)
7	Unmetered General Service	40	2	10,836	\$1,036	95.57	(\$16)	\$1,020	94.13	(1.51%)
8	Street Lighting	41	21	822,531	\$140,347	170.63	(\$762)	\$139,585	169.70	(0.54%)
9	Traffic Control Lighting	42	7	20,764	\$1,979	95.29	(\$20)	\$1,959	94.34	(1.00%)
10	Total Uniform Tariffs		18,706	638,186,409	\$51,639,918	80.92	(\$848,877)	\$50,791,040	79.59	(1.64%)
12	Total Oregon Retail Sales		18,706	638,186,409	\$51,639,918	80.92	(\$848,877)	\$50,791,040	79.59	(1.64%)

<sup>(1)</sup> Current Billed to Proposed Bill Revenues Reflect the October Update and the current March Forecast (unchanged)

<sup>(2)</sup> Updated April 2014 - March 2015 Test Year

## **CERTIFICATE OF SERVICE**

2 I hereby certify that I served a true and correct copy of the foregoing document in  
3 Docket UE \_\_\_\_ on the following named person(s) on the date indicated below by email  
4 addressed to said person(s) at his or her last-known address(es) indicated below.

5

6 OPUC Dockets Robert Jenks  
Citizens' Utility Board of Oregon  
7 dockets@oregoncub.org bob@oregoncub.org

10 John Crider  
Public Utility Commission of Oregon  
11 john.crider@state.or.us

13 DATED: October 18, 2013

14

15 Wendy McIndoo  
16 Wendy McIndoo  
Office Manager

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