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**LISA D. NORDSTROM**  
Lead Counsel  
[lnordstrom@idahopower.com](mailto:lnordstrom@idahopower.com)

October 19, 2015

**VIA HAND DELIVERY**

Jean D. Jewell, Secretary  
Idaho Public Utilities Commission  
472 West Washington Street  
Boise, Idaho 83702

Re: Case No. IPC-E-15-19  
2015 Integrated Resource Plan – Idaho Power Company's Reply Comments

Dear Ms. Jewell:

Enclosed for filing in the above matter please find an original and seven (7) copies of Idaho Power Company's Reply Comments.

Very truly yours,

Lisa D. Nordstrom

LDN:csb  
Enclosures

LISA D. NORDSTROM (ISB No. 5733)  
Idaho Power Company  
1221 West Idaho Street (83702)  
P.O. Box 70  
Boise, Idaho 83707  
Telephone: (208) 388-5825  
Facsimile: (208) 388-6936  
[lnordstrom@idahopower.com](mailto:lnordstrom@idahopower.com)

Attorney for Idaho Power Company

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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER )  
COMPANY'S 2015 INTEGRATED ) CASE NO. IPC-E-15-19  
RESOURCE PLAN )  
) IDAHO POWER COMPANY'S  
) REPLY COMMENTS  
)  
\_\_\_\_\_ )

Idaho Power Company ("Idaho Power" or "Company") respectfully submits the following Reply Comments pursuant to Order No. 33381 in response to comments filed by the Idaho Public Utilities Commission ("Commission" or "IPUC") Staff ("Staff"), the Idaho Conservation League ("ICL"), Snake River Alliance ("SRA"), and Sierra Club on October 5, 2015. Their comments recommend, or do not object to, acknowledgement of Idaho Power's 2015 Integrated Resource Plan ("IRP"). In these Reply Comments, Idaho Power clarifies or responds to several topics raised by the parties.

**I. BACKGROUND**

On June 30, 2015, Idaho Power applied to the Commission requesting that the Company's 2015 IRP be accepted for filing. As required by Commission Order No.

22299 and the Public Utility Commission of Oregon's ("OPUC") Order Nos. 89-507, 07-002, 07-042, and 12-013, the Company prepares and files a biennial IRP with both the IPUC and the OPUC setting forth how Idaho Power intends to serve the electric requirements of its customers. Idaho Power's 2015 IRP addresses available supply-side and demand-side resource options, planning period load forecasts, potential resource portfolios, a risk analysis, and an action plan that details the steps the Company plans to take to implement the 2015 IRP.

Idaho Power's resource planning process has four primary goals:

1. Identify sufficient resources to reliably serve the growing demand for energy within Idaho Power's service area throughout the 20-year planning period.
2. Ensure the selected resource portfolio balances cost, risk, and environmental concerns.
3. Give equal and balanced treatment to supply-side resources, demand-side measures, and transmission resources.
4. Involve the public in the planning process in a meaningful way.

The resource planning process does not necessarily result in the lowest cost plan, or a plan with the least amount of risk, or even a plan with the least amount of environmental impact. Rather, as stated above, the process strives to identify a portfolio of supply-side, demand-side, and transmission resources which together *balance* the impacts of cost, risk, and environmental concerns while enabling Idaho Power to continue to meet its regulatory obligation to *reliably serve* customers' growing demand for energy. While the assumptions and forecasts included throughout the nearly one and a half year planning process reflect a snapshot in time, the process is not static. Idaho Power files a new and updated IRP every two years, complete with

updated assumptions for costs and forecasts, advancements in technologies and efficiencies, changes in environmental regulations and regulatory requirements, and a new set of opportunities and challenges to be met.

As evidence of the ongoing IRP planning process and public involvement, Idaho Power recently hosted public meetings with customers to discuss the 2015 IRP in Boise, Twin Falls, and Pocatello, Idaho, as well as Ontario, Oregon. As noticed in press releases and advertisements, these meetings began with a short presentation and were followed by a question and answer period with the Company's subject matter experts. In addition, on October 1, 2015, Idaho Power hosted a special meeting of the IRP Advisory Council ("IRPAC") and gave the group an update of the Environmental Protection Agency's final Clean Air Act Section 111(d) regulation, Idaho Power's continued assessment of potential models for a community-shared solar project, and the status of the Company's current solar integration study.

Idaho Power appreciates the number of comments received complimenting the Company's efforts throughout the 2015 IRP planning process. Staff stated that it supported the "variety of portfolios developed and modeled for this IRP, which included a host of resource retirement and replacement scenarios, alternatives to Boardman to Hemingway ("B2H"), and expanded energy-efficiency and demand-response resources." Staff Comments at 3. ICL commented that the 2015 IRP contains a "robust consideration of future coal plant operations, uses better data for future supply-side options, and considers a range of compliance options for the Clean Air Act 111(d) rule" and commended the Company for working "collaboratively with stakeholders and thinking creatively about analytical inputs and methods." ICL Comments at 1. With regard to coal unit analysis, ICL stated that Idaho Power developed "a methodology to

consider this issue that should be a best practice for utilities around the country.” ICL Comments at 2. For the performance and cost of solar power, Idaho Power “worked with stakeholders to develop a robust method for assigning a peak capacity contribution for solar.” *Id.* at 3 (footnote omitted). The Sierra Club commented that the 2015 IRP is “the latest step along a path of continuous improvement in the Company’s recent resource planning activities” and that the “2015 iteration is the best IRP yet.” Sierra Club Comments at 1-2. The SRA commended Idaho Power for its IRPAC planning process as being “increasingly transparent and accessible to the public.” SRA Comments at 1. Idaho Power appreciates all of these positive comments and intends to continue these efforts in the ongoing development of future IRPs.

There were, however, some comments filed with the Commission that the Company believes require a response in order to assist the Commission in its review of the 2015 IRP. Specifically, there were a number of comments suggesting that the preferred portfolio identified in the 2015 IRP planning process was not the “best” scenario to be chosen and suggested a portfolio design that had an earlier termination date for the North Valmy Unit 1 coal-fired generation plant. There were also comments regarding how the Company chose to address the treatment and modeling of energy efficiency in the 2015 planning process, the Company’s assumptions for the costs of solar photovoltaic resources, and the energy imbalance market. The Company addresses these issues below to provide further explanation and clarification.

## **II. PREFERRED PORTFOLIO**

A number of public comments were filed with the Commission suggesting that resource portfolio P9 should be the Company’s preferred portfolio and stated that it would save the customers approximately \$75 million over the preferred portfolio P6(b)

identified in the 2015 IRP. Resource portfolio P9 reflects the retirement of North Valmy Unit 1 at the end of 2019, the addition of 60 megawatts (“MW”) of demand response in 2021-2024 (above and beyond the 390 MW of summer demand response included as an existing resource in all portfolios), 54 MW of reciprocating engines in 2024, the B2H transmission line in 2025, an additional 18 MW of reciprocating engines in 2031 and a 170 MW simple cycle combustion turbine in 2032. P9 also reflects the retirement of the North Valmy Unit 2 in 2025. In comparison, the preferred portfolio P6(b) identified in the 2015 IRP anticipates retirement of both North Valmy Units 1 and 2 in 2025, and the addition of B2H in 2025 (prior to the retirement of the North Valmy units), includes 60 MW of additional demand response and 20 MW of ice-based thermal energy storage in 2030, and a 300 MW combined cycle combustion turbine in 2031.

Many of the public comments suggested the perception that the P9 portfolio was “superior” to the P6(b) portfolio based on a relative cost difference of \$74.6 million in the total net present value (“NPV”) portfolio cost over the 20-year study period. However, the evaluation of cost alone is not enough. It also is important to consider the near-term impact to customer rates. The portfolio analysis between P9 and P6(b) compares the coal-fired generation plant retirements and the associated cost differences by retiring the North Valmy Units 1 and 2 earlier than their fully depreciated lives of 2031 and 2034, respectively. Accelerating the depreciation of the existing North Valmy plant investment will require an immediate increase in customer rates during the shortened recovery period. Using a December 31, 2014, net book value, accelerating the end of life to 2025 for North Valmy Units 1 and 2 would increase annual depreciation expense by nearly \$9.0 million, while an end of life for Valmy Unit 1 of 2019, as modeled in portfolio P9, would increase annual depreciation expense by an additional \$6 million,

totaling nearly \$15 million of incremental expense. Moreover, with either a 2019 or 2025 retirement of Valmy, customer rates would need to be adjusted to include incremental capital additions required to keep the plant operational during its remaining life. This adjustment would require even more acceleration if North Valmy's closure was in 2019 rather than 2025.

While the NPV of the total fixed and variable costs over the 20-year planning period are approximately 1.6 percent lower for P9 as compared to P6(b), those cost savings must also be balanced along with the qualitative risks discussed in the IRP. On pages 125-130, the IRP explains these qualitative risks in qualifying the favorable economics for portfolios with retirement of North Valmy Unit 1 as early as 2019. Among the risks, the IRP notes the uncertainty related to the 320 MW (as of April 2015) of yet-to-be-constructed Public Utility Regulatory Policies Act of 1978 ("PURPA") solar and the effect of possible further project cancellations on capacity additions in the early 2020s. This uncertainty remains relevant, even with the Commission's recent decision in Case No. IPC-E-15-01 (Order No. 33357). As an illustration, with the complete removal of the PURPA solar from the load and resource balance, capacity deficits with an earlier 2019 retirement of North Valmy Unit 1 are projected to reach approximately 140 MW in July 2020 and grow to nearly 300 MW by 2023. By comparison, delaying the retirement of North Valmy Unit 1 to 2025, including the complete removal of PURPA solar, results in more manageable and moderate deficits (provided the availability of Valmy units exist) of approximately 5 MW in 2020 and less than 160 MW through 2023.

In addition, the qualitative risk analysis also considers the uncertainty related to retirement planning for a jointly-owned power plant. 2015 IRP at 125-130, 141-143. A 2019 North Valmy 1 shutdown date is not within the complete control of Idaho Power.

NV Energy, Idaho Power's co-owner and the operating partner of the North Valmy plant, has not indicated that 2019 is an acceptable date to discontinue operations of North Valmy Unit 1. Once an agreed upon retirement date between the parties is determined, other actions are needed in order to facilitate the plant retirement, such as regulatory approval of an accelerated depreciation life of an asset. Idaho Power and NV Energy will continue to work toward synchronized depreciation dates and formalizing a mutually agreed-upon retirement date.

As stated in the 2015 IRP, the goal of the qualitative risk analysis is to select a portfolio likely to withstand unforeseen events. 2015 IRP at 125. In addition to the risks associated with the earlier retirement of a coal-fired generation unit, the qualitative analysis included considerations for risks associated with long-term sustainability of the Snake River Basin, the relicensing of the Hells Canyon Complex, eventual ramifications of the final Clean Air Act Rule 111(d) ruling, regulatory risk of future resource additions and removals and associated allowance for return on investment, resource commitment risk of developing PURPA projects and the permitting of transmission lines, resource adequacy of regional power supply, implementation of demand-side management ("DSM") programs, and the development of new technologies. In performing that analysis, along with the relative magnitude of the financial cost between portfolios and the potential immediate impact on customer rates associated with an earlier North Valmy retirement, Idaho Power's 2015 IRP identified portfolio P6(b) as the preferred portfolio; the Company considers it to be preferred choice in balancing cost, risk, and environmental concerns. 2015 IRP at 130.

Given the uncertainty that exists with the assumptions included in all of the resource portfolios analyzed as part of this IRP, the Company does not believe it would

be reasonable or prudent to retire an existing resource with known fixed costs resulting in an immediate need for additional cost recovery from customers. The planned retirement of both North Valmy units in 2025 is a lower risk option than a planned retirement of the Valmy unit in 2019 that will contribute to near-term rate stability and represents a reasonable glide path toward reduced coal generation on Idaho Power's system.

### **III. ENERGY EFFICIENCY**

Staff and ICL each expressed two areas of concern with the Company's assessment of energy efficiency used in the 2015 IRP—the amount of “achievable” potential and the modeling of energy efficiency in the IRP. For the 2015 IRP, Idaho Power contracted with a third-party, Applied Energy Group (“AEG”), to conduct an energy efficiency potential study that resulted in a forecast of energy savings over the 20-year IRP planning period.

While Staff and ICL support the use of a third-party efficiency study that forecasts the technical, cost-effective, and achievable energy efficiency potentials, Staff disagrees with the screening for cost-effective energy efficiency based on a measure's Total Resource Cost (“TRC”). Staff Comments at 4-5. Staff states that it believes Idaho Power should have used the Utility Cost Test (“UCT”) for screening cost-effectiveness in its energy efficiency potential study. *Id.* However, it is only recently, on August 28, 2015, in Case No. IPC-E-15-6, that the Commission clarified that “the Company may (but need not exclusively) emphasize the UCT.” Order No. 33365 at 9-10. When the Company contracted with AEG for the 2014 Energy Efficiency Potential Study, it believed it was complying with prior Commission orders and used the TRC for screening measures. Idaho Power was adhering to the Memorandum of Understanding

signed by Staff and Idaho's investor-owned utilities in January of 2010 and Order No. 28894 by using the TRC for cost-effectiveness. Additionally, the OPUC directs program administrators to use the TRC in determining cost-effectiveness of energy efficiency programs. Order No. 94-590 at 14. Because the IRP addresses system-wide planning, it would not be prudent to determine two levels of cost-effective energy efficiency between Idaho and Oregon. More importantly, the IPUC has not precluded the use of the TRC for determination of cost-effectiveness. The Company believes that in using the TRC to determine cost-effectiveness, the 2014 Energy Efficiency Potential Study identified an appropriate level of cost-effective energy efficiency and is compliant with commission orders in Oregon and Idaho.

ICL disagrees with the level of energy efficiency used in setting the load and resource balance. In its Comments, ICL states that Idaho Power could identify the amount of efficiency between the achievable and cost-effective (economic) level and that is the amount of energy efficiency the Company should strive to acquire. ICL Comments at 6.

Not all cost-effective energy efficiency is achievable. There is some level of energy efficiency measures that, regardless if they are cost-effective, will not be adopted by everyone. Idaho Power believes that the achievable potential as determined by AEG is just that, achievable, or "the upper limit for cost-effective energy efficiency savings."<sup>1</sup> There is no more "achievable" energy efficiency that is still cost-effective. Additional energy efficiency potential is a dynamic metric. If the cost of acquiring a cost-effective resource increases, it can become no longer cost-effective.

In its Comments, ICL encourages Idaho Power to improve program design, marketing, and customer engagement to go beyond the achievable energy efficiency

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<sup>1</sup> American Council for an Energy-Efficient Economy ("ACEEE"), August 2014 report, "Cracking the TEAPOT: Technical, Economic, and Achievable Energy Efficiency Potential Studies," page 8.

potential. ICL Comments at 6. Idaho Power currently strives for continuous program improvement in its program design and operation while keeping costs in check. The Company does this through program evaluations and interaction with stakeholder groups including the Energy Efficiency Advisory Group (“EEAG”). Idaho Power believes that the 2014 Energy Efficiency Potential Study identifies an appropriate level of achievable cost-effective energy, which is included in all of the 2015 IRP portfolios.

Both the Staff and ICL criticize Idaho Power for the method in which the Company models energy efficiency in its IRP and suggest that the PacifiCorp method more equally compares demand-side and supply-side resources. Staff Comments at 5; ICL Comments at 6. The method in which PacifiCorp models DSM resource (and supply-side resources) is different than how Idaho Power models portfolios for the IRP. Idaho Power does not use the System Optimizer software used by PacifiCorp to model resources. For demand-side resources, Idaho Power uses a third party to determine all achievable energy efficiency potential based on the Northwest Power and Conservation Council’s acquisition ramp rates and includes this level of energy efficiency in every portfolio prior to the acquisition of any supply-side resources. Staff Comments at 5-6. Staff believes that the PacifiCorp method of modeling provides more equal treatment to both supply-side and demand-side resources. Idaho Power believes that by committing all achievable energy efficiency potential to every portfolio regardless of need, the Company gives preferential treatment to energy efficiency over supply-side resources. In fact, the identification of the need for additional supply-side resources is not made until after applying all cost-effective energy efficiency to the load and resource balance. This method used by Idaho Power to model energy efficiency in the 2015 IRP is

consistent with Idaho policy and Commission orders requiring utilities to pursue all cost-effective energy efficiency.

ICL also recommends that Idaho Power work with the EEAG to develop a multi-year implementation plan to identify specific strategies to acquire DSM resources. ICL Comments at 6. Idaho Power believes that planning and reporting on DSM activities is comprehensive and adequate. The Company uses the IRP for long-term DSM planning, including the near-term action plan. Idaho Power regularly updates the EEAG on current and future activities, including new potential DSM activities identified by the Company. Idaho Power's demand-side management annual report filed with the Commission in March of each year includes outlines of all of the activities the Company is pursuing regarding DSM programs as well as strategies for the upcoming year. The annual DSM Report identifies the Company's current and continued pursuit of cost-effective energy efficiency activities. The Commission previously addressed a similar ICL request in Case No. IPC-E-14-03 in which the Commission stated "that such a plan would unnecessarily duplicate existing reporting. We note that the Company's annual DSM report, in particular, already outline the Company's DSM program and strategies for each upcoming year." Order No. 33047 at 7. Idaho Power believes a separate plan, as requested by ICL, is not necessary and would just create additional administrative burden.

#### **IV. SOLAR COST ESTIMATE**

Several comments express concern with the IRP's assumed costs for solar photovoltaic ("PV") resources. The rapid evolution of these costs over recent years has been the subject of frequent reporting by industry analysts, and continues to receive considerable attention as part of the IRPAC meetings. Page 50 of the 2015 IRP, in the

chapter titled Supply-Side Generation and Storage Resources, explains that “Idaho Power used the 2017 forecast provided by Lazard of \$1,250 per kW for PV with a single-axis tracking system” in the IRP’s portfolios.

To account for the decreasing cost trend seen in PV resources over the past few years, the 2015 IRP assumes solar PV costs remain fixed over the 20-year planning period. In comparison, other resource costs are escalated at 2.2 percent over the same 20 years. Therefore, in real-dollar terms, solar PV costs decline over the 20-year planning period. Idaho Power will continue to closely follow the decreasing price trend of solar PV as this technology continues to become more cost competitive with more traditional resource alternatives.

2015 IRP at 50.

The discussion in the IRP explains the Company’s efforts to more accurately account for declining project resource costs for solar PV. In making these cost projections, the Company relies on information from a third-party report on resource costs. The Company also discussed the costs of solar PV resources, as well as other resources, extensively with the IRPAC and public participants in the IRP process. The Company anticipates the costs of solar PV will justifiably continue to receive considerable attention during the development of the 2017 IRP to properly reflect changes in the PV solar market.

#### **V. ENERGY IMBALANCE MARKET**

On page 10 of its Comments, the SRA requested the Commission direct Idaho Power to supply additional information on its plans for possible participation in one of the West’s energy imbalance markets (“EIM”). On September 24, 2015, Idaho Power announced its withdrawal from Northwest Power Pool efforts to establish an EIM, and correspondingly, its plans to study the costs and benefits associated with participation in

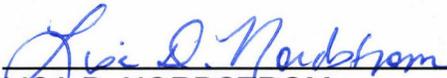
the California ISO's EIM (Cal-ISO EIM). The Company anticipates making a final decision on the Cal-ISO EIM in 2016.

The Company recognizes that Cal-ISO EIM benefits include the flexibility of 5- to 15-minute dispatch transactions, which provides additional opportunities for system balancing. While an understanding of these EIM benefits is increasingly critical in a future with continued regional expansion of variable generation sources such as wind and solar, it is less pertinent to IRP analysis focused fundamentally on the adequacy of system resources. Thus, it is the Company's view that detailed analysis of EIM participation is outside the scope of the IRP and that more limited reporting of high-level EIM developments is appropriate for the 2017 IRP.

## **VI. CONCLUSION**

Through the IRP Advisory Committee's collaborative process, Idaho Power attempted to address stakeholder concerns as the IRP was formulated. No party objects to acceptance of the 2015 IRP, which meets the reporting requirements set forth in prior Commission orders. Therefore, Idaho Power respectfully requests that the Commission approve its 2015 IRP.

Respectfully submitted this 19<sup>th</sup> day of October 2015.

  
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LISA D. NORDSTROM  
Attorney for Idaho Power Company

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 19<sup>th</sup> day of October 2015 I served a true and correct copy of IDAHO POWER COMPANY'S REPLY COMMENTS upon the following named parties by the method indicated below, and addressed to the following:

### **Commission Staff**

Karl T. Klein  
Deputy Attorney General  
Idaho Public Utilities Commission  
472 West Washington (83702)  
P.O. Box 83720  
Boise, Idaho 83720-0074

Hand Delivered  
 U.S. Mail  
 Overnight Mail  
 FAX  
 Email [karl.klein@puc.idaho.gov](mailto:karl.klein@puc.idaho.gov)

### **Idaho Conservation League**

Benjamin J. Otto  
Idaho Conservation League  
710 North 6<sup>th</sup> Street  
Boise, Idaho 83702

Hand Delivered  
 U.S. Mail  
 Overnight Mail  
 FAX  
 Email [botto@idahoconservation.org](mailto:botto@idahoconservation.org)

### **Snake River Alliance**

Ken Miller, Clean Energy Program  
Director  
Snake River Alliance  
P.O. Box 1731  
Boise, Idaho 83701

Hand Delivered  
 U.S. Mail  
 Overnight Mail  
 FAX  
 Email [kmiller@snakeriveralliance.org](mailto:kmiller@snakeriveralliance.org)

### **Sierra Club**

Zack Waterman, Director  
Sierra Club  
503 West Franklin Street  
Boise, Idaho 83702

Hand Delivered  
 U.S. Mail  
 Overnight Mail  
 FAX  
 Email [zack.waterman@sierraclub.org](mailto:zack.waterman@sierraclub.org)

  
Christa Beary, Legal Assistant