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February 11, 2015

Public Utility Commission of Oregon Filing Center 550 Capitol Street NE, Suite 215 P. O. Box 2148 Salem, OR 97308-2148

RE: UM 1710, Idaho Power Company's Request for Cost-Effective Exceptions for Specific Demand-Side Management Electric Measures and Programs

#### Attention Filing Center:

Public Utility Commission of Oregon ("Commission") Order No. 94-590, issued in UM 551, provides for the inclusion of non cost-effective measures in utility Demand-Side Management ("DSM") programs if those measures meet specific conditions. Idaho Power Company ("Idaho Power" or "Company"), after reviewing the impact of updated DSM alternative costs from the 2013 Integrated Resource Plan, concluded there are certain measures within its DSM program portfolio that are currently not cost-effective but yet meet these conditions. With this filling, Idaho Power is requesting approval of exceptions articulated in Order No. 94-590 for these measures so they may continue to be offered to Oregon customers through the Company's DSM program portfolio.

Idaho Power has determined that there are four DSM measures that are currently not costeffective and is seeking approval for exceptions for those measures. Idaho Power is not requesting changes to any specific program tariffs with this filing.

One program, the Weatherization Assistance for Qualified Customers ("WAQC") program, funds weatherization assistance to customers who have limited incomes. Although this program is currently not cost-effective, Idaho Power does not believe the cost-effectiveness requirement in Order No. 94-590 applies to the WAQC program. Idaho Power would like to continue to offer this program to its Oregon customers and requests clarity from the Commission on this issue.

The Company is working with Commission Staff to determine the most appropriate timing for Idaho Power to make cost-effective exception filings in the future (if needed) in order to capture changes that may be caused by new DSM alternative costs, changes in the Regional Technical Forum's savings and cost assumptions, results of impact evaluations, etc., but that also reflect the natural cycle of the utility DSM program and measure review.

Public Utility Commission of Oregon Filing Center February 11, 2015 Page 2

If you have any questions regarding this filing, please contact Darlene Nemnich at (208) 388-2505 or <a href="mailto:dnemnich@idahopower.com">dnemnich@idahopower.com</a>.

Sincerely,

Lisa D. Nordstrom Lead Counsel

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**Enclosures** 

cc: RA Files

Legal Files

# Idaho Power Company's Cost-Effectiveness Exceptions Request for Specific Electric Measures Residential and Irrigation sectors

### Re-filed February 11, 2015

#### I. BACKGROUND

In June 2013, Idaho Power Company ("Idaho Power or Company") filed its 2013 Integrated Resource Plan ("IRP") in Docket No. LC 58 with the Public Utility Commission of Oregon ("Commission"). The IRP included updated electric Demand-Side Management ("DSM") alternative cost assumptions used to calculate the cost-effectiveness of Idaho Power's energy efficiency programs and measures.

In anticipation of the Commission issuing its order acknowledging the 2013 IRP, Idaho Power reviewed the impacts of the updated DSM alternative cost assumptions from the IRP, electric savings, and participant costs to the cost-effectiveness of commercial and industrial measures within Idaho Power's DSM portfolio. The Company filed Advice No. 14-06 for measure exceptions to comply with Order No. 94-590 on June 19, 2014, for those non cost-effective measures offered through the Easy Upgrades Program, which was approved by the Commission on August 19, 2014. Advice No.14-10 for the Building Efficiency Program measure exceptions was filed on September 30, 2014, and approved by the Commission on November 13, 2014.

In fall 2014, Idaho Power completed reviewing the impacts of the updated DSM alternative cost assumptions from the IRP, electric savings, and participant costs to the cost-effectiveness of electric residential and irrigation measures within Idaho Power's DSM portfolio. For Idaho Power's irrigation program and many of the residential programs, the Company relies on the Regional Technical Forum ("RTF") as the primary source of savings and cost assumptions for each measure. When possible, the Company uses actual historical participant cost information gathered from past program participants rather than the regional cost assumptions from the RTF. The RTF meets to review and provide comments on energy savings and costs for a variety of energy efficiency measures. The RTF evaluates cost-effectiveness for each measure or group of measures on a periodic basis. For the purpose of this filing, the cost-effectiveness analyses incorporate energy savings and cost assumptions published by the RTF as of September 30, 2014.

This request was originally filed November 4, 2014. It included a request for one measure exception and one program exception that have since been modified and no longer need an exception. On November 21, 2014, Idaho Power filed Advice No. 14-11 proposing to suspend the Home Products Program negating the need for the requested exception of the ENERGY STAR® refrigerators. On December 9, 2014, Idaho Power filed Advice No. 14-13 proposing to modify the program such that a need for the requested exception was no longer relevant for the See ya later, refrigerator® program. Both of these advice filings were approved by the Commission on January 13, 2015. Commission Staff requested Idaho Power to modify this exceptions request to reflect these actions. Consequently, while this filing no longer includes a request for an exception from cost-effectiveness requirements for ENERGY STAR® refrigerators or the See ya later, refrigerator® program reflecting the approval of Advice Nos. 14-11 and 14-13, it is otherwise the same as that filed November 4, 2014.

This request describes the actions Idaho Power is recommending for the residential and irrigation measures that are no longer determined to be cost-effective, and seeks clarity for one weatherization assistance program this is no longer cost-effective.

#### II. MEASURE GROUPING

In Order No. 94-590, issued in Docket No. UM 551, the Commission outlines specific cost-effectiveness guidelines for energy efficiency measures and programs managed by program administrators. It is the expectation of the Commission that measures and programs pass both the Utility Cost ("UC") and Total Resource Cost ("TRC") tests. Measures and programs which do not pass these tests may be offered by the utility if they meet one or more of the following additional conditions specified by Section 13 of Order No. 94-590:

- A. The measure produces significant non-quantifiable non-energy benefits. In this case, the incentive payment should be set no greater than the cost-effectiveness limit less the perceived value of bill savings, e.g., two years of bill savings;
- B. Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure:
- C. The measure is included for consistency with other DSM programs in the region;
- D. Inclusion of the measure helps to increase participation in a cost-effective program;
- E. The package of measures cannot be changed frequently, and the measure will be cost-effective during the period the program is offered;
- F. The measure or package of measures is included in a pilot or research project intended to be offered to a limited number of customers;
- G. The measure is required by law or is consistent with Commission policy and/or direction.

Idaho Power is seeking an exception to cost-effectiveness for four measures (representing seven total measure combinations due to weather zone and installation differences) that do not pass the TRC and/or UC test within the Company's residential and irrigation program offerings. The measures were previously cost-effective, but due to updated savings, costs, and DSM alternative cost assumptions, the measures do not currently pass the TRC and/or UC test.

The Company believes that these measures meet at least one of the conditions identified in Order No. 94-590. The Company's explanation of how each measure qualifies as an exception under Order No. 94-590 is outlined below.

Although some measures cited here have limited participation in Oregon, Idaho Power endeavors to keep consistency of the programs across its Idaho and Oregon service areas. The importance of offering consistent program designs across the Idaho Power service area cannot be overstated. Trade allies (contractors/suppliers) serve Idaho Power customers in both states. Oregon contractors and professionals cross over to Idaho and vice versa. Customers in Idaho Power's irrigation program often have service locations in both states. Offering different program designs would create confusion in the marketplace, could inhibit participation, and would add to administration costs. In addition, program infrastructure is designed to implement consistent programs across the service area.

The Company has divided its request into two categories:

- Measures that are no longer cost-effective that meet an exception criteria in Order No. 94-590, and:
- A program that is not cost-effective but Order No. 94-590 standards do not apply.

# III. MEASURES THAT ARE NO LONGER COST-EFFECTIVE THAT MEET AN EXCEPTION CRITERIA IN ORDER NO. 94-590

- 1. Ductless heat pumps (three weather zone combinations)
- 2. Water source heat pumps (two installation combinations)
- 3. Heat pump conversion to 8.50 Heat Seasonal Performance Factor ("HSPF") (one weather zone combination)
- 4. Rebuilt or new brass impact sprinklers

### 1. <u>Ductless Heat Pump Pilot (three weather zone combinations)</u>

For ductless heat pumps ("DHP"), some weather zones are still cost-effective under the UC benefit cost ratio ("BCR"); however, all three weather zone combinations in Idaho Power's Oregon service area currently fail the TRC BCR. The UC BCRs range from 0.36 to 3.83. The TRC BCRs range from 0.63 to 0.89. In 2013, Idaho Power paid incentives for four projects in the Oregon service area.

Idaho Power joined other utilities in the region to offer DHP pilots in partnership with the Northwest Energy Efficiency Alliance ("NEEA"). NEEA and the RTF have spent the past several years researching the electric savings and non-energy benefits ("NEBs") of the DHPs installed in the region.

In December 2013, the RTF updated the electric savings assumptions for DHPs by lowering the annual savings from the previously deemed 3,500 kilowatt-hour ("kWh") value used across all weather zones to the estimated annual savings of 292, 2,585, and 3,131 kWh for the three weather zone combinations in Idaho Power's Oregon service area.

The RTF is still reviewing the savings for DHPs and attempting to quantify NEBs. NEBs currently being studied by the RTF include the health and environmental benefits from reduced wood smoke. At this time, entities such as the Energy Trust of Oregon, Rocky Mountain Power ("RMP"), and the Bonneville Power Administration ("BPA") offer DHPs.

Idaho Power recommends that DHPs remain in the Ductless Heat Pump Pilot for all three weather zone combinations in its Oregon service area. The measure produces significant non-energy benefits and is included for consistency with other DSM programs in the region. This is consistent with Order No. 94-590 conditions A and C.

- A: The measure produces significant non-quantifiable non-energy benefits.
- C: The measure is included for consistency with other DSM programs in the region.

#### 2. Water-source heat pumps (two installation combinations)

For open loop water-source heat pumps replacing an electric, oil, or propane forced air furnace, the UC BCR is 10.51 and the TRC BCR is 0.92. For open loop water source heat pumps replacing an air-source heat pump, the UC BCR is 6.23 and the TRC BCR is 0.70. In 2013, Idaho Power did not pay an incentive on any open loop water source heat pump project in Oregon; however, the Company wants to continue to offer this measure in Oregon.

Open loop water source heat pumps appeal to a unique market. The measure produces significant energy savings for customers and is cost-effective from the UC perspective. However, the cost to purchase and install these heat pumps varies significantly for each customer due to site differences and contractor installation costs. Idaho Power's 2012-2013

median contractor cost was used for the analysis and reflects the median of actual costs of the 44 projects completed in the Idaho Power service area.

Many heating, ventilation, & air conditioning ("HVAC") contractors serve both Idaho and Oregon customers. These contractors offer and install both water-source and air-source heat pumps. To remove this measure could cause customer and contractor confusion and dissatisfaction. Air-source heat pumps (with one exception) remain cost-effective and the Heating and Cooling Efficiency Program is cost-effective overall.

Open loop water-source heat pumps are a subset of geothermal heat pumps. Geothermal heat pumps are included in BPA's, RMP's, and Snohomish County Public Utility District's programs.

Idaho Power recommends that open loop water-source heat pumps remain in the Heating and Cooling Efficiency Program. This measure is included for consistency with other DSM programs in the region and inclusion of the measure helps to increase participation in a cost-effective program. This is consistent with Order No. 94-590 conditions C and D.

- C: The measure is included for consistency with other DSM programs in the region.
- D: Inclusion of the measure helps to increase participation in a cost-effective program.

# 3. <u>Heat pump conversion to 8.50 Heating Seasonal Performance Factor ("HSPF")</u> (one weather zone combination)

Heat pump conversion from a forced air furnace with central air conditioning to an 8.50 HSPF air-source heat pump in heating zone 1 and cooling zone 3 has a UC BCR of 6.45 and a TRC BCR of 0.81. In 2013, Idaho Power paid incentives on two 9.0 and higher HSPF air-source heat pump projects in Oregon; and, due to the higher HSPF of these heat pumps, those projects claimed higher energy savings than the 8.50 HSPF heat pumps and were cost-effective. However, if a customer sought incentives for an 8.50 HSPF heat pump, the conversion would not be cost-effective.

Air-source heat pumps are cost-effective in all other heating and cooling zones and the Heating and Cooling Efficiency Program remains cost-effective overall. The measure under this heating and cooling zone combination is also offered in the Company's Idaho service area. Excluding a heating and cooling zone in one state while including it in the other could cause confusion and dissatisfaction with the program for both customers and participating HVAC contractors.

Additionally, RMP offers incentives for heat pumps that are 8.50 HSPF.

Idaho Power recommends that heat pump conversions to an 8.50 HSPF in heating zone 1 and cooling zone 3 remain in the Heating and Cooling Efficiency Program. This measure is included for consistency with other DSM programs in the region and inclusion of the measure helps to increase participation in a cost-effective program. This is consistent with Order No. 94-590 conditions C and D.

- C: The measure is included for consistency with other DSM programs in the region.
- D: Inclusion of the measure helps to increase participation in a cost-effective program.

#### 4. Rebuilt or new brass impact sprinklers

Rebuilt or new brass impact sprinklers have a UC BCR of 4.74 and TRC BCR of 0.90. The measure produces significant non-quantifiable NEBs. Worn and damaged sprinklers can cause

excess water use and overwatering due to leaks and loss of water pressure. These leaks can impact irrigation uniformity and cause crop damage. The installation of new or rebuilt brass impact sprinklers reduces water usage and increases crop yield.<sup>1</sup>

Several irrigators in Oregon have service locations in Idaho as well. To offer this measure in one state but not the other would cause program confusion and dissatisfaction with the Irrigation Efficiency Program for both customers and participating retailers. The Irrigation Efficiency Program remains cost-effective. Inclusion of this measure will help to increase participation in a cost-effective program.

Additionally, BPA offers incentives for rebuilt or new brass impact sprinklers.

Idaho Power recommends that rebuilt or new brass impact sprinklers remain in the Irrigation Efficiency Program. The measure produces significant non-quantifiable NEBs, is included for consistency with other DSM programs in the region, and inclusion of the measure helps to increase participation in a cost-effective program. This is consistent with Order No. 94-590 conditions A, C, and D.

- A: The measure produces significant non-quantifiable non-energy benefits.
- C: The measure is included for consistency with other DSM programs in the region.
- D: Inclusion of the measure helps to increase participation in a cost-effective program.

# IV. PROGRAM THAT IS NOT COST-EFFECTIVE BUT ORDER NO. 94-590 STANDARDS DO NOT APPLY

### Weatherization Assistance for Qualified Customers Program ("WAQC")

The WAQC Program provides financial assistance to Community Action Partnership ("CAP") agencies in Idaho Power's service area. This assistance helps fund weatherization costs of electrically heated homes occupied by qualified customers who have limited incomes. The program is modeled after the U.S. Department of Energy's weatherization program and is managed in Oregon by the Oregon Housing and Community Services. The two CAP agencies that administer the WAQC Program for Idaho Power in its Oregon service area are Community Connection of Northeast Oregon, Inc. and Community in Action.

In light of the Legislature's recognition in ORS 757.612(a)(C) of the public policy supporting the funding of low-income weatherization independent of cost-effectiveness, Idaho Power does not believe the cost-effectiveness requirement set forth in Order No. 94-590 is applicable to the WAQC program. This position is consistent with the discussion of low-income weatherization in Docket No. UM 1622 and Order No. 14-332 at 41. Additionally, on page 71, Order No. 14-332, Staff recommended that "low income weatherization programs are not intended to meet UM 551 [i.e., Order No. 94-590] cost effectiveness standard...." The Commission adopted Staff's recommendation.

However, if the Commission determines that Order No. 94-590 does apply to the WAQC program, Idaho Power requests an exception from cost-effectiveness requirements based on criteria A, C, and G. Idaho Power did include quantifiable NEBs in its cost-effectiveness calculations; however, there are additional NEBs from the program that are non-quantifiable.

5

<sup>&</sup>lt;sup>1</sup> Demand-Side Management 2012 Annual Report, Supplement 2: Evaluation, p. 141. https://www.idahopower.com/pdfs/AboutUs/RatesRegulatory/Reports/60.pdf

For the utility, these non-quantifiable NEBs could include reduced payment arrearages, lower bad debt write-offs, and lower collection costs. For the participant, unquantifiable NEBs include increased comfort, improved air quality, improved home durability, and reduced equipment repair and maintenance.

Additionally, weatherization assistance programs for qualified customers are offered in every state in the country. In the region, this program is offered by other utilities such as Avista, Portland General Electric, PacifiCorp, and Northwest Natural Gas.

Idaho Power recommends that the WAQC program continue to be offered in its Oregon service area. The program produces significant non-quantifiable NEBs, is included for consistency with other DSM programs in the region, and is required by law or is consistent with Commission policy and/or direction. This is consistent with Order No. 94-590 conditions A, C, and G.

- A: The measure produces significant non-quantifiable non-energy benefits.
- C: The measure is included for consistency with other DSM programs in the region.
- G: The measure is required by law or is consistent with Commission policy and/or direction.

#### V. DSM EXCEPTIONS FILINGS

Idaho Power is working with the Commission Staff to establish an annual cost-effectiveness exception filing (if needed) that would include any measure or program requiring an exception from cost-effectiveness requirements. The annual request would cover programs in all customer classes and would not be filed if all measures or programs were cost-effective. Idaho Power is working with the Commission Staff to delineate the proposed annual filing.

#### VI. SUMMARY

Idaho Power is requesting authority to continue offering the following non cost-effective electric measures that meet one or more exception criteria in Order No. 94-590:

- 1. Ductless heat pumps (three weather zone combinations)
- 2. Water source heat pumps (two installation combinations)
- 3. Heat pump conversion to 8.50 HSPF (one weather zone combination)
- 4. Rebuilt or new brass impact sprinklers

Finally, Idaho Power requests clarification that the cost-effectiveness requirement in Order No. 94-590 does not apply to WAQC, Idaho Power's low-income weatherization program.