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November 4, 2014

**Attention: Filing Center**

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

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

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 alternate 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 filing, 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 five DSM measures and one program that are currently not cost-effective and is seeking approval for exceptions for those measures and the program. Idaho Power is not requesting changes to any specific program tariffs. However, for one measure and the program, Idaho Power is requesting an exception for a specified period of time to provide time to redesign the programs in an effort to make them cost-effective. Idaho Power intends to make filings with the Commission to modify these programs as soon as the programs' changes are solidified.

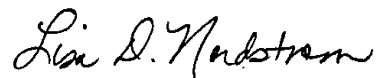
Another program, the Weatherization Assistance for Qualified Customers ("WAQC") program, funds weatherization assistance to customers who have limited incomes. Although this program is currently not cost-effective, Idaho Power does not believe the cost-effectiveness requirement in Order No. 94-590 applies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

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The Company is working with Commission Staff to determine the most appropriate timing for Idaho Power to make DSM measure exception filings in the future (if needed) in order to capture changes that may be caused by new DSM alternate 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.

If you have any questions regarding this filing, please contact Darlene Nemnich at (208) 388-2505 or [dnemnich@idahopower.com](mailto:dnemnich@idahopower.com).

Sincerely,

A handwritten signature in black ink that reads "Lisa D. Nordstrom". The signature is written in a cursive, flowing style.

Lisa D. Nordstrom  
Lead Counsel

LDN:kkt

Enclosures

cc: RA Files  
Legal Files

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

**November 4, 2014**

**I. BACKGROUND**

In June 2013, Idaho Power Company ("Idaho Power or Company") filed its 2013 Integrated Resource Plan ("IRP") in 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 as envisioned by 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 is still pending.

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 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 memo describes the actions Idaho Power is recommending for the residential and irrigation measures and program that are no longer determined to be cost-effective.

**II. MEASURE GROUPING**

In Order No. 94-590, issued in 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 five measures (representing 8 total measure combinations due to weather zone and installation differences) and one program 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 four of these measures meet at least one of the conditions identified in Order No. 94-590. For one additional measure and a program, the Company is requesting an exception to cost-effectiveness to allow time for the Company to address the cost-effectiveness issues and to make modifications to program design. The Company's explanation of how each measure and program 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. Idaho contractors and professionals cross over to Oregon 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 three categories:

- Measures that are no longer cost-effective that meet an exception criteria in Order No. 94-590;
- A measure and a program that are no longer cost-effective for which the Company requests an exception to cost-effectiveness for a specified period of time; 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. Ductless Heat Pump Pilot (three weather zone combinations)**

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 Oregon in one of the three weather zone combinations 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, there may be opportunity to do so in the future.

Open loop water source heat pumps are a niche 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 also install both water source and air source heat pumps. To remove this measure will 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. Heat pump conversion to 8.50 Heating Seasonal Performance Factor (“HSPF”) (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 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 would cause confusion and dissatisfaction with the Heating and Cooling Efficiency 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>

Many 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.*

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

- 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. A MEASURE AND A PROGRAM THAT ARE NO LONGER COST-EFFECTIVE FOR WHICH THE COMPANY REQUESTS AN EXCEPTION TO COST-EFFECTIVENESS FOR A SPECIFIC PERIOD OF TIME**

- 5. ENERGY STAR® refrigerators
- 6. See ya later, refrigerator® Program

**5. ENERGY STAR® refrigerators**

ENERGY STAR® refrigerators currently have a UC BCR of 0.87 and TRC BCR of 1.74. Under the Home Products Program, customers qualify for an incentive with the purchase of any ENERGY STAR® refrigerator.

The Company is currently monitoring this measure. As discussed in its August 19, 2014, Energy Efficiency Advisory Group (“EEAG”) meeting, the Company is exploring options to modify the current structure of the Home Products Program to address cost-effectiveness issues.

Idaho Power is requesting an exception to the cost-effectiveness for this measure through 2015 to allow the Company time to make programmatic changes to the Home Products Program to address the cost-effectiveness issues.

**6. See ya later, refrigerator® Program**

The See ya later, refrigerator® Program offers only two measures, freezer recycling and refrigerator recycling. Individually, each of the measures is cost-effective from both the UC and TRC perspective when analyzed without including program administrative costs. Per Order No. 94-590, Section 10, administrative costs should not be applied to individual measures within a program except for those instances where the program consists of a single DSM measure or where a single DSM measure had identifiable incremental administrative costs that the utility could avoid by not including that measure. However, when program administrative costs are included in the cost-effective tests at the measure level, all the benefit cost ratios, except one, dip below 1.0. Consequently, the UC BCR for the whole program is below 1.0 resulting in an overall program that is not cost-effective. The See ya later, refrigerator® Program currently has a UC BCR of 0.78 and a TRC BCR of 1.03.

The Company is currently monitoring these measures. As discussed in its August 19, 2014, EEAG meeting, the Company is exploring options to modify the current structure of the See ya later, refrigerator® Program to address cost-effectiveness issues.

Idaho Power is requesting an exception to the cost-effectiveness for the See ya later, refrigerator® Program through 2015 to allow the Company time to make programmatic changes to address the cost-effectiveness issues.

**V. 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.

If the Commission determines that Order No. 94-590 does apply to the WAQC program, Idaho Power requests an exemption 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. For the utility, these non-quantifiable NEBs 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.*

## **VI. SUMMARY**

Idaho Power is requesting authority to continue offering the following non cost-effective electric measures that meet an exception criterion 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

Idaho Power is requesting authority to continue offering the following measure and program that are no longer cost-effective through 2015 to allow Idaho Power time to make programmatic changes to address the cost-effectiveness issues.

5. ENERGY STAR® refrigerators
6. See ya later refrigerator® Program

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.