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October 27, 2017

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
Filing Center
201 High Street SE, Suite 100
P.O. Box 1088
Salem, Oregon 97301

RE: Tariff Advice No. 17-09
Modifications to Schedule 72 – Heating and Cooling Efficiency Program and New
Cost-Effectiveness Exceptions

Attention Filing Center:

Idaho Power Company (“Idaho Power” or Company”) herewith transmits for filing its Fourth Revised Sheet Nos. 72-1 and 72-2 requesting an effective date of January 1, 2018. The purpose of this filing is to obtain approval of two changes to Schedule 72, Heating and Cooling Efficiency Program (“HCE Program”). The proposed modifications seek to add an incentive for one new energy savings measure and to reduce the contractor incentive available on another. In this tariff advice, the Company also seeks approval of a new Cost-Effectiveness Exception pursuant to Order No. 94-590, issued in Docket No. UM 551.

Background

Up to 50 percent of a home’s energy costs may be going directly to heating and cooling. Initially established in 2007 in the Company’s Idaho jurisdiction and expanded to the Company’s Oregon jurisdiction in August 2008, the HCE Program was developed to motivate customers and contractors to install forms of residential heating and cooling equipment and services that save energy. The HCE Program is currently available to residential customers and owners of rental properties that are served under a residential schedule, as well as home builders and developers who construct homes in Idaho Power’s service area. While the measures for which incentives are available have evolved over time, the HCE Program currently provides cash incentives to customers and contractors for the proper sizing and installation of energy efficient heat pump equipment, duct sealing, and for the purchase and installation of evaporative cooling equipment, an Electronically Commutated Air Handler Motor, a whole house fan, a ductless heat pump, or a smart thermostat. More information about the Program can be found at www.idahopower.com/heatingcooling.

Idaho Power continues to experience an increase in the number of projects for which the Company pays an incentive each year, processing incentives for 12 Oregon projects in 2015, 17 Oregon projects in 2016, and 7 Oregon projects to date in 2017. In an attempt to continue offering a cost-effective program of interest to customers, Idaho Power is proposing to add a new measure to the HCE Program that incents the installation of heat pump water heaters (“HPWH”).

Heat Pump Water Heaters

A HPWH uses electricity to move heat from one place to another instead of generating heat directly. To move the heat, heat pumps work like a refrigerator in reverse. While a refrigerator absorbs heat from its inside compartment and dissipates it into the surrounding room, a HPWH absorbs heat from the surrounding air and dissipates it – at a higher temperature – into its tank of water. As a result, they can be several times more energy efficient than a conventional electric resistance water heater.

The HPWH market transformation initiative has been led by the Northwest Energy Efficiency Alliance (“NEEA”) since 2011 and Idaho Power has been actively involved with the initiative since NEEA’s efforts began. Currently there are 88 northwest utilities offering an incentive for HPWHs, including Rocky Mountain Power, Bonneville Power Administration, the Energy Trust of Oregon, Avista, Seattle City Light, and Snohomish County PUD. Idaho Power is proposing to offer the HPWH incentive across its service territory as well.

Eligibility

Similar to the eligibility requirements that exist currently in Schedule 72, Idaho Power proposes that the HPWH measure be available to all qualified homeowners and rental property owners served by the Company. The eligible home can be a primary residence, vacation home, or rental and can be single family site built, manufactured, duplex, triplex, or fourplex. To qualify, the customer must be replacing an existing electric resistance water heater in an existing home; therefore, new construction does not qualify for the HPWH measure.

Process and Incentive

The HPWH can be professionally installed or installed by the homeowner. All equipment and materials must be new, purchased, and installed prior to submitting incentive paperwork to Idaho Power. Idaho Power will review the documents to ensure the application meets the rules of the HCE Program. Upon approval by the Company, the documents are processed and the incentive check is mailed to the participant. Participants are eligible for an incentive of \$300 for installing a HPWH and there is a maximum of one incentive per home.

Marketing Plan

The 2018 HCE Program marketing plan will include information about the HPWH measure. Idaho Power will perform targeted demographic and broad base marketing. Idaho Power will market the HCE Program using a number of tactics including face-to-face supply chain meetings, direct mail, bill inserts, trade show displays, behavioral ads, and Company publications. The Company is targeting a January 1, 2018, offering to customers in both the Oregon and Idaho jurisdictions.

Cost-Effectiveness

To determine cost-effectiveness, the Company has used the deemed savings value and costs from the Regional Technical Forum’s (“RTF”) version 3.4 HPWH workbook. The savings for HPWH vary depending on the location of the installation within a home (i.e., conditioned or unconditioned space) and the climate zone. Because the location of the installation can vary by

participant, Idaho Power has used the “any location” values from the RTF for Tier 2 and Tier 3 HPWH efficiency levels. The breakdown by climate zones is based on the Company’s year-to-date participation levels in the HCE Program. The inclusion of HPWH measure may increase the potential energy savings in the HCE Program without significantly increasing administrative costs. The following summarizes the assumptions used and cost-effectiveness ratios:

- Measure life: 13 years
- Incremental Participant Cost: \$985
- Incentive: \$300
- Average Savings: 1,563 annual kWh
- Cost-Effectiveness Ratios (not including administration costs):
 - Utility Cost Test (“UCT”) = 3.04
 - Total Resource Cost Test (“TRC”) = 1.02

Idaho Power will track the location of each HPWH installation and the Company will calculate annual cost-effectiveness based on the weighted average of deemed savings from that year’s installations.

Reduced Contractor Incentives

For the past year, the Company has continued to explore ways to improve the HCE Program’s overall cost-effectiveness. These tactics include reducing the overall administration costs, including the proposed contractor incentive reduction. When Idaho Power first offered the HCE Program, the contractor incentive of \$150 was proposed to encourage participating contractors to perform quality commissioning controls and sizing of the heat pump installations. The intent of the contractor’s incentive was to offset the additional costs associated with those quality installations and the cost of the contractor to complete the paperwork for the customer. In reviewing the current practices in Idaho Power’s service area, it was determined that these quality installations are common practice even absent a contractor incentive. To help reduce the overall administrative costs of the HCE Program, Idaho Power proposes to reduce the contractor incentive on the heat pump measure from \$150 to \$50. Idaho Power does not anticipate the change will significantly lower contractor participation and plans to disseminate the rationale for the reduction in the incentive in advance of the change to ensure continued support of HCE Program measures.

Cost-Effective Exceptions for Specific Demand-Side Management Electric Measures and Programs

Update on Program Cost-Effectiveness

On October 31, 2016, Idaho Power filed a “Cost-Effectiveness Exceptions Request for Specific Demand-Side Management Electric Measures and Programs” in Docket No. UM 1710, requesting to continue to offer the HCE Program under the conditions specified by Section 13 of Order No. 94-590. In its filing, the Company recommended that the HCE Program continue to be offered in its Oregon service area as the measures within the program produce significant non-quantifiable non-energy benefits. In addition, continuing the HCE Program in Oregon would provide consistency with other demand-side management (“DSM”) programs offered throughout the region. The recommendation was consistent with Order No. 94-590 conditions A and C that allows for continued offering of a program if the utility meets one or more of the conditions.

Condition A provides an exception if the measure produces significant non-quantifiable non-energy benefits and condition C provides an exception if the measure is included for consistency with other DSM programs in the region.

In its filing, the Company explained that ductless heat pumps (“DHP”) were primarily responsible for lowering the cost-effectiveness of the HCE Program. To improve the cost-effectiveness for DHPs, Idaho Power has joined other utilities in the region to offer DHP pilots in partnership with NEEA. The Company has analyzed the HCE Program with the DHPs included in the overall cost-effectiveness of the program, as well as excluding DHP measures. The results are as follows:

Program Name	UCT	TRC
Heating & Cooling Efficiency Program	1.62	0.94
<i>Non-DHP measures</i>	1.77	1.03
<i>DHP measure only</i>	1.29	0.79

Idaho Power proposes to continue to offer the DHP incentives as part of the HCE Program. The Company believes that the addition of the proposed measure and the reduction of the contractor fees will have a positive effect on cost-effectiveness and are within the scope of the current cost-effectiveness exception authorized in Order No. 17-060.

Request for New Cost-Effectiveness Exception

On January 20, 2016, Idaho Power filed Tariff Advice No. 16-02 to add smart thermostats as a new measure in the HCE Program. At the time of the filing, the savings and cost-effectiveness of the new measure was unknown because the RTF had not yet published any data for smart thermostats. In its advice letter, the Company explained that it planned to offer the measure for about two years before conducting an impact evaluation using third-party data to further inform the cost-effectiveness analysis.

In November 2016, the RTF added connected thermostats as a planning measure and proposed a research strategy for the measure. To determine cost-effectiveness of smart thermostats, the Company used the deemed savings value and costs from the RTF version 1.2 connected thermostat workbook dated April 2017. The direct install energy savings assumptions vary by heating source and heating zone. Minimal cooling energy savings are included in the deemed energy savings values. While these energy savings are higher than what the Company originally assumed in its January 2016 filing, the participant costs are also higher. Additionally, the RTF assumes the measure life of a smart thermostat to be five years instead of the Company's original assumption of 10 years which further impacts the measure's cost-effectiveness.

Smart thermostats are an emerging technology. Other utilities such as the Avista, Rocky Mountain Power, and the Energy Trust of Oregon include smart thermostats in their energy efficiency offerings. Idaho Power will be participating in an upcoming workshop with NEEA, the Bonneville Power Administration, and other utilities in the region to discuss the challenges around smart thermostats and share best practices. Idaho Power recommends that the smart thermostats measure remain in the HCE Program as the Company continues investigating this technology and its savings potential. In addition to meeting conditions A and C of Order No. 94-590, this

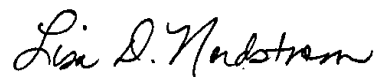
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measure meets condition F that requires the measure be included in a pilot or research project intended to be offered to a limited number of customers.

The Company respectfully requests that the proposed modifications to Schedule 72 become effective on January 1, 2018. In addition, the Company requests approval of exceptions articulated in Order No. 94-590 for the DHP measure within the HCE Program.

If you have any questions regarding this filing, please contact Senior Regulatory Analyst Courtney Waites at (208) 388-5612 or cwaites@idahopower.com.

Sincerely,



Lisa D. Nordstrom
Lead Counsel

LDN/kkt
Enclosure

SCHEDULE 72
HEATING AND COOLING
EFFICIENCY PROGRAM

AVAILABILITY

Service under this schedule is available to residential Customers and owners or managers of rental properties throughout the Company’s service area within the State of Oregon that are served under a residential electric service schedule. This schedule is also available to home builders and developers who construct homes in the Company’s service area within the State of Oregon that take service under a residential electric service schedule upon completion.

APPLICABILITY

This program is applicable to site-built or manufactured homes served under a residential electric service schedule and sited in the Company’s Oregon service territory.

PROGRAM DESCRIPTION

The Heating and Cooling Efficiency Program provides incentives for the installation of qualified heating and cooling equipment and for having energy saving services performed.

INCENTIVE STRUCTURE

To be eligible for an incentive for heat pumps and single family home duct sealing, the installation must be performed by an Idaho Power authorized participating contractor who has received program training and has signed an agreement with the Company. Eligibility for an incentive for evaporative coolers or heat pump water heaters does not require a contractor. To be eligible for an incentive for the electronically commutated air handler motor (“ECM”), the smart thermostat, and the residential whole house fan, a licensed contractor must perform the services, but not necessarily an Idaho Power authorized participating contractor. Products and services performed must meet the requirements of the Heating and Cooling Efficiency Program as outlined in the Program Requirements Manual and individual measure worksheets. To view a list of the participating contractors, a current Program Requirements Manual, and individual measure worksheets, visit www.idahopower.com/heatingcooling.

(N)

Equipment/Service	Eligibility Requirements	Participant Incentive	Contractor Incentive	Notes
High Efficiency Air Source or Open Loop Water Source Heat Pump: Proper Sizing & Installation	A. <u>Replacing an Existing Air Source Heat Pump</u>			
	Minimum 8.5 HSPF for air source	\$250.00	\$150.00	1
	Minimum 3.5 COP for water source	\$500.00	\$150.00	1
	B. <u>Replacing an Existing Electric Forced Air Furnace or Non-ducted Electric Resistance System</u>			
	Minimum 8.5 HSPF for air source	\$800.00	\$150.00	1
	Minimum 3.5 COP for water source	\$1,000.00	\$150.00	1
	C. <u>Replacing an Existing Oil Forced Air Furnace or Propane Forced Air Furnace</u>			
	Minimum 8.5 HSPF for air source	\$400.00	\$150.00	1, 2
Minimum 3.5 COP for water source	\$1,000.00	\$150.00	1, 2	
D. <u>New Construction</u>				
Minimum 8.5 HSPF for air source	\$400.00	\$150.00	2	
Minimum 3.5 COP for water source	\$1,000.00	\$150.00	2	

SCHEDULE 72
HEATING AND COOLING
EFFICIENCY PROGRAM
(Continued)

INCENTIVE STRUCTURE (Continued)

Evaporative Cooler: Purchase & Installation	Unit must be equal to or greater than 2500 CFM	\$150.00	n/a	1	
Single Family Home Duct Sealing	Homes must have electric forced-air heat or a heat pump	\$350.00	\$0	3	
Electronically Commutated Air Handler Motor (ECM)	Homes must have electric forced-air heat, oil or propane or natural gas forced-air heat, or a heat pump	\$50.00	\$50.00	1	(R)
Residential Whole House Fan	Homes must have central air conditioning, zonal cooling, or a heat pump	\$200.00	\$0	3	
Ductless Heat Pump	Homes must have electric baseboards, electric ceiling cable, or electric wall units	\$750.00	\$0	1	
Smart Thermostat	Homes must have electric forced air heat (with or without central air conditioning) or a ducted heat pump	\$75.00	\$0	3	
Heat Pump Water Heaters	Homes must have an existing electric storage water heater	\$300.00	\$0	1	(N) (N)

Notes:

1. Must be an existing, single-family, site-built home, an existing multi-family home with 4 or fewer units, or an existing manufactured home.
2. Natural gas must not be available.
3. Must be existing single-family site-built home.

QUALIFICATIONS

In order to receive a financial incentive under this program, each participating customer must complete the following steps:

1. Read and understand all website information found on www.idahopower.com/heatingcooling for the incentives of interest.
2. Hire participating contractor or licensed contractor where required.
3. Have equipment installed or services performed.
4. Submit or assist in the contractor's submittal of incentive forms.