## PacifiCorp's Planned Changes to Home Energy Savings Program in Washington Proposed Effective Date of January 1, 2021

PacifiCorp (Company) is planning to make changes to the Washington Home Energy Savings program (Program), administered under the Company's Wattsmart Home Energy Savings program which offers incentives and services for residential energy efficiency equipment and projects.

Consistent with the approved change process for the Program, after receiving and addressing feedback from the Company's Washington Demand-side Management Advisory Group the proposed changes will be posted on the Program website 45 days prior to becoming effective and implemented. The changes will be effective January 1, 2021.

### **Background**

The Program, which is offered through Schedule 118, was approved by the Washington Utilities and Transportation Commission (Commission) and began operating in September 2006. The Program became effective on September 14, 2006 (UE-061297). The change process for the Program is described in advice letter 06-004, through which the program was introduced. Language describing the program change process is found on page 3 of Advice No. 06-004, which is copied below.

"...the Company would present information on proposed changes to its Advisory Group and seek comments prior to making changes. Changes in equipment specifications or incentive levels would be clearly posted on the Web site and emailed to the appropriate Commission staff person with at least 45 days advance notice."

The Program change process is also described in provision of service no. 5 in the program tariff (Schedule 118). Provision of service no. 5 states:

"All changes will occur with a minimum of 45 days-notice, be prominently displayed as a change, include a minimum 45 day grace period for processing prior offers (except for manufacturer buy-down incentive delivery) and be communicated at least once to retailers who have participated within the last year."

Program website: <a href="https://wattsmartsavings.net/washington-residential/">https://wattsmartsavings.net/washington-residential/</a>

Annual reports and Program evaluation reports are available online at: <a href="https://www.pacificorp.com/environment/demand-side-management.html">https://www.pacificorp.com/environment/demand-side-management.html</a>

#### **Description of Planned Home Energy Savings Changes**

Changes are part of the adaptive management strategy for the Home Energy Savings program during the 2020-2021 biennium.

- Remove mail-by-request Wattsmart Starter Kits from the program as the result of Regional Technical Forum (RTF) deactivating the showerhead measure.
- Align with the latest unit energy savings (UES) from the RTF.
- Remove measures with deemed savings recently deactivated by the RTF.
- Add measure for multifamily new construction.
- Add NEEM+ new manufactured homes to the program offering.
- Add heat pump measure for new manufactured homes.

#### Regional Technical Forum (RTF) review

A review of the RTF updates was performed. Updates approved as of October 1, 2020 were incorporated. Measure specific information is included in the RTF Alignment Review HES attachment.

### **Cost-Effectiveness**

Cost effectiveness for the Home Energy Savings program with these changes is sub-optimal over the 2020-2021 period. The Total Resource Cost benefit-cost ratio, including the 10% conservation adder (PTRC) of 0.78. The addition of non-energy impacts increases the PTRC to 0.88. The downward trend in unit energy savings and deactivation of the showerhead measures by the RTF have contributed to lower available energy savings and sub-optimal benefit cost ratios. The portfolio is cost effective from a utility cost perspective with a benefit cost ratio of 1.07. Program-level cost-effectiveness results are provided in the table below (which is also found in Tables 11 and 12 of Exhibit C). The overall portfolio is cost effective. Additional information on inputs and results is provided in Exhibit C.

Home Energy Savings Cost-Effectiveness Results - PY2020 and PY2021

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1652	\$9,303,642	\$7,244,981	(\$2,058,661)	0.78
Total Resource Cost Test (TRC) No Adder	\$0.1652	\$9,303,642	\$6,586,346	(\$2,717,296)	0.71
Utility Cost Test (UCT)	\$0.1097	\$6,179,544	\$6,586,346	\$406,802	1.07
Participant Cost Test (PCT)		\$6,092,601	\$8,636,034	\$2,543,433	1.42
Rate Impact Test (RIM)		\$11,847,074	\$6,586,346	(\$5,260,728)	0.56
Lifecycle Revenue Impacts (\$/kWh)					\$0.0002271
Discounted Participant Payback (years)					7.82

# Home Energy Savings Including NEIs Cost-Effectiveness Results - PY2020 and PY2021

Cost-Effectiveness Test	Levelized \$/kWh	Costs	Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1652	\$9,303,642	\$8,159,841	(\$1,143,801)	0.88
Total Resource Cost Test (TRC) No Adder	\$0.1652	\$9,303,642	\$7,501,207	(\$1,802,435)	0.81
Utility Cost Test (UCT)	\$0.1097	\$6,179,544	\$6,586,346	\$406,802	1.07
Participant Cost Test (PCT)		\$6,092,601	\$9,550,894	\$3,458,293	1.57
Rate Impact Test (RIM)		\$11,847,074	\$6,586,346	(\$5,260,728)	0.56
Lifecycle Revenue Impacts (\$/kWh)					\$0.0002271
Discounted Participant Payback (years)					6.75

Proposed changes are summarized in the modification tables below.

# **Exhibits Provided**

Exhibit 1 - Washington HES Incentive Tables - Red-lined

Exhibit C - Cost-Effectiveness memo from AEG – September 15, 2020.

Program Modifications					
Measure Name	Description of Changes	Current Offering	Revised Offerings		
Wattsmart Starter Kits	Remove from the program.	N/A	N/A		
	Major components of the mail-by-request kit have significantly less savings based on the latest study by the Regional Technical Forum (RTF). The showerhead measure is deactivated due to insufficient data. Claimed savings from LED light bulbs are reduced because of the new 45 lumen/watt standard in Washington.				

Program Modifications – Single Family HVAC Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Central Air Conditioner	Remove the "with Best Practice Installation and Sizing" stipulation to align with the latest workbook from the RTF.	\$156	No change
Heat Pump Commissioning Controls Sizing	Remove from the program because the RTF deactivated the "Commissioning, Control & Sizing" workbook. The program will no longer claim savings for this measure.	\$312	N/A
Federal Standard Heat Pump Conversion	Remove the "with Best Practice Installation and Sizing" stipulation because the RTF deactivated the "Commissioning, Control & Sizing" workbook. The program will no longer claim this portion of the savings.	\$1,625	No change
9.0+ HSPF Heat Pump Conversion	Remove the "with Best Practice Installation and Sizing" stipulation because the RTF deactivated the "Commissioning, Control & Sizing" workbook. The program will no longer claim this portion of the savings.	\$1,625	No change
Heat Pump Upgrade	Remove the "with Best Practice Installation and Sizing" stipulation because the RTF deactivated the "Commissioning, Control & Sizing" workbook. The program will no longer claim this portion of the savings.	\$1,625	No change

Program Modifications – Single Family Water Heating Incentives				
Measure Name	Description of Changes	Current Offering	Revised Offerings	

Heat Pump Water Heater	Add clarifying language that heat pump water heater must be less than 55 gallons to be eligible.  Federal code requires residential water heater 55 gallons or more to be heat pump water heaters.	\$750	No change
Heat Pump Water Heater (CTA-2045)	Remove from the program as the latest NEEA Advanced Heating Water Specification requires CTA_2045 or equivalent demand response capability for equipment designated as tier 3 or higher.	\$50	N/A
Low-Flow Showerheads	Remove from the program because the showerhead measure is deactivated by the RTF due to insufficient data.	Up to \$15	N/A
Low-Flow Aerators	Remove from the program because aerators are offered as part of the mail-by-request kits, which are being removed from the program.	Up to \$5	N/A

Program Modifications – Manufactured Homes Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Central Air Conditioner	Remove the "with Best Practice Installation and Sizing" stipulation to align with the latest workbook from the RTF.	\$156	No change
Heat Pump Commissioning Controls Sizing	Remove from the program because the RTF deactivated the "Commissioning, Control & Sizing" workbook. The program will no longer claim savings for this measure.	\$312	N/A
Federal Standard Heat Pump Conversion	Remove the "with Best Practice Installation and Sizing" stipulation because the RTF deactivated the "Commissioning, Control & Sizing" workbook. The program will no longer claim this portion of the savings.	\$1,625	No change
9.0+ HSPF Heat Pump Conversion	Remove the "with Best Practice Installation and Sizing" stipulation because the RTF deactivated the "Commissioning, Control & Sizing" workbook. The program will no longer claim this portion of the savings.	\$1,625	No change
Heat Pump Upgrade	Remove the "with Best Practice Installation and Sizing" stipulation because the RTF deactivated the "Commissioning, Control & Sizing" workbook. The program will no	\$1,625	No change

	longer claim this portion of the savings.		
New Homes, Eco-rated Homes	Remove from the program because the latest RTF workbook on manufactured homes does not include deemed savings for Eco-rated homes.	\$,2750	N/A
New Homes, NEEM+ Homes	Add measure to the program offering.	N/A	\$3,000
Heat Pump, New Manufactured Homes	Add measure to the program offering.	N/A	\$1,300

Program Modifications – Multifamily Homes Incentives				
Measure Name	<b>Description of Changes</b>	Current Offering	Revised Offerings	
Multifamily New Construction	Add measure to the program offering.	N/A	Exceeding code by 5% to 14.99%: \$0.15/kWh  Exceeding code by	
			15% or more: \$0.25/kWh	