PacifiCorp's Planned Changes to Home Energy Savings Program in Washington Proposed Effective Date of January 1, 2022

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, 2022.

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: https://wattsmartsavings.net/washington-residential/

Annual reports and Program evaluation reports are available online at: https://www.pacificorp.com/environment/demand-side-management.html

Description of Planned Home Energy Savings Changes

Changes are part of the adaptive management strategy for the Home Energy Savings program for the 2022-2023 biennium and are designed to increase residential energy savings and help achieve the Energy Independence Act targets. Higher customer and trade ally incentives are intended to offset increased equipment costs and labor shortages that have developed over the last two years. Changes are also intended increase the equitable distribution of benefits and inform utility actions specific to the Clean Energy Transformation ACT (CETA).

- Applicable rate schedules are added to the content managed on the web in concert with the proposed removal of listed from Schedule 118.
- Add new measures:
 - o Direct install duct sealing measure for single family homes
 - o Load or occupancy sensing advanced power strips (retail)
 - o Multifamily attic insulation: R-0 to R-49
 - o Multifamily floor insulation: R-19 to R-30
 - o Multifamily windows (pre-condition baseline): U-22 or lower
- Increase customer and trade ally incentives for;
 - o HVAC
 - o Building Shell,
 - Water Heating measures.
- Expand baselines for electric heat installations in in targeted communities
 - O Single family, manufactured homes and multi-family homes in targeted communities with non- electric fuel heating sources (wood, propane, oil, etc.) will be eligible for installation of ductless heat pumps. Natural gas system will continue to not be eligible. This measure will be offered at the same incentive rate as the ductless heat pumps measure installed in single family homes. RTF values for ductless heat umps installed in place of zonal electric heat will be utilized since the RTF does not have value for a non-electric baseline.
- Changes to incentive structures:
 - o Permit weatherization incentives to be split between the customer and market partner.
 - o Differentiate direct install lighting in Lighting Incentives table to specify different incentives.
- Increased targeting for measure delivery
 - o Maintain retail lighting lamp buy down for general service lamps in "dollar stores" in Highly Impacted Communities.
 - o Remove other retail lighting buy down offers due to high cost, low savings, and/or discontinuation in the RTF.
- Align with the latest unit energy savings (UES) from the RTF.

Regional Technical Forum (RTF) review

A review of the RTF updates was performed. Updates approved as of June 1, 2021 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 2022-2023 period. The Total Resource Cost benefit-cost ratio, including the 10% conservation adder (PTRC) is 0.82. The addition of non-energy impacts increases the PTRC ratio to 1.02. The portfolio is cost effective from a utility cost perspective with a benefit cost ratio of 1.27. 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 – PY 2022 and PY 2023

Cost-Effectiveness Test	Levelized \$/kWh	NPV Costs	NPV Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1609	\$31,581,260	\$25,754,430	(\$5,826,830)	0.82
Total Resource Cost Test (TRC) No Adder	\$0.1609	\$31,581,260	\$23,413,118	(\$8,168,142)	0.74
Utility Cost Test (UCT)	\$0.0938	\$18,415,710	\$23,413,118	\$4,997,409	1.27
Participant Cost Test (PCT)		\$25,603,473	\$32,326,206	\$6,722,732	1.26
Rate Impact Test (RIM)		\$38,303,992	\$23,413,118	(\$14,890,874)	0.61
Lifecycle Revenue Impacts (\$/kWh)					\$0.0006884
Discounted Participant Payback (years)					15.84

Home Energy Savings Including NEIs Cost-Effectiveness Results – PY 2022 and PY 2023

Cost-Effectiveness Test	Levelized \$/kWh	NPV Costs	NPV Benefits	Net Benefits	Benefit/Cost Ratio
Total Resource Cost Test (PTRC) + Conservation Adder	\$0.1609	\$31,581,260	\$32,304,751	\$723,491	1.02
Total Resource Cost Test (TRC) No Adder	\$0.1609	\$31,581,260	\$29,963,439	(\$1,617,821)	0.95
Utility Cost Test (UCT)	\$0.0938	\$18,415,710	\$23,413,118	\$4,997,409	1.27
Participant Cost Test (PCT)		\$25,603,473	\$32,748,688	\$7,145,215	1.28
Rate Impact Test (RIM)		\$38,303,992	\$23,413,118	(\$14,890,874)	0.61
Lifecycle Revenue Impacts (\$/kWh)					\$0.0006884
Discounted Participant Payback (years)					15.54

Exhibits Provided

Exhibit 1 - Washington HES Incentive Tables – Red-lined

 $Cost\ Effectiveness-FINAL_PacifiCorp_BCP_PY2022-2023_CE$

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RTF Alignment Review HES_Nexant for 01-01-2022_clean

Program Modifications – Lighting Incentives				
Measure Name	Description of Changes	Current Offering	Revised Offerings	
LED Bulbs (General Purpose) – Direct Install	Add new measure.	Up to \$3.00	Up to \$6.00	
LED Bulbs (Specialty) – Direct Install	Add new measure.	Up to \$3.00	Up to \$9.00	
LED Lamps – Direct Install	Add new measure.	N/A	Up to \$12.00	

Program Modifications – Single Family HVAC Incentives				
Measure Name	Description of Changes	Current Offering	Revised Offerings	
Duct Sealing (not Direct Install)	Specify that this measure is not for direct install, and increase the "up to" incentive.	Up to \$375	Up to \$500	
Duct Sealing (Direct Install)	Add new measure for direct install duct sealing in single family homes.	N/A	Up to \$500	
Ductless Heat Pump	Increase incentive. Add further eligibility for non-gas, non-electric customers residing in named communities.	\$1,625	\$1,800	
Federal Standard Heat Pump Conversion	Increase incentive.	\$1,625	\$2,250	
9.0+ HSPF Heat Pump Conversion	Increase incentive.	\$2,500	\$3,500	
Smart thermostat	Increase incentive.	\$62	\$100	

Program Modifications – Single Family Weatherization Incentives				
Measure Name	Description of Changes	Current Offering	Revised Offerings	
Insulation – Attic	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the	\$0.06/sq-ft for electrically cooled home \$0.37/sq-ft for electrically heated	\$0.07/sq-ft for electrically cooled home \$0.46/sq-ft for electrically heated home	
Insulation – Floor (to R-19)	program website. Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	home \$0.25/sq-ft	\$0.31/sq-ft	
Insulation – Floor (to R-30)	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.37/sq-ft	\$0.46/sq-ft	
Insulation – Wall	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.50/sq-ft	\$0.62/sq-ft	
Windows	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.81/sq-ft	\$1.00/sq-ft	

Program Modifications – Single Family Water Heating Incentives				
Measure Name Description of Changes Current Offering Revised Offering				
Heat Pump Water Heater	Increase incentives.	\$750	\$900	

Program Modifications – Manufactured Homes Incentives					
Measure Name	Description of Changes	Current Offering	Revised Offerings		
Central Air Conditioner	Reduce up to incentive listed in tables to align with current program offering.	\$375	\$156		
Duct Sealing (not Direct Install)	Increase "up to" incentive.	Up to \$375	Up to \$500		
Federal Standard Heat Pump Conversion	Increase incentive.	\$1,625	\$2,250		
9.0+ HSPF Heat Pump Conversion	Increase incentive.	\$1,625	\$2,250		
Ductless Heat Pumps	Increase incentive. Add further eligibility for non-gas, non-electric customers residing in named communities.	\$1,625	\$1,800		
Insulation – Attic (R0 to R-22)	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.62/sq-ft	\$0.77/sq-ft		
Insulation – Attic (R11 to R-30)	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.75/sq-ft	\$0.94/sq-ft		
Insulation – Floor	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.37/sq-ft	\$0.46/sq-ft		
Smart Thermostat	Increase incentive.	\$62	\$100		
Windows	Increase incentive.	\$0.81/sq-ft	\$1.00/sq-ft		

Program Modifications – Multifamily Homes Incentives				
Measure Name	Description of Changes	Current Offering	Revised Offerings	
Ductless Heat Pump	Increase incentive. Add further eligibility for non-gas, non-electric customers residing in named communities.	\$1,625	\$1,800	
Insulation - Attic (R-19 to R-49)	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.37/sq-ft	\$0.46/sq-ft	
Insulation – Attic (R-0 to R-49)	Add new measure. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	N/A	\$0.62/sq-ft	
Insulation – Floor (R-0 to R-19)	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.25/sq-ft	\$0.31/sq-ft	
Insulation – Floor (R-19 to R-30)	Add new measure. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	N/A	\$0.20/sq-ft	
Insulation – Floor (R-0 to R-30)	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.37/sq-ft	\$0.46/sq-ft	
Insulation – Wall	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	\$0.50/sq-ft	\$0.62/sq-ft	
Windows (U-factor 0.25 or lower)	Increase incentives. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit	\$0.81/sq-ft	\$1.00/sq-ft	

	will be clearly displayed on the program website.		
Windows (pre-condition baseline)	Add new measure. Add note explaining that weatherization incentives may be split between different market actors, and that the sum of incentive payments per unit will be clearly displayed on the program website.	N/A	Up to \$25/sq-ft