

Pacific Power's Planned Changes to Home Energy Savings Program in Washington Effective January 1, 2023

Pacific Power (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, 2023.

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>

Summary 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 as a result of the COVID-19 pandemic. Changes are also intended to increase the equitable distribution of benefits and inform utility actions specific to the Clean Energy Transformation ACT (CETA).

- Increase customer and trade ally incentives for HVAC measures
- Expand and modify the ductless heat pump measure replacing heating oil/wood/propane heating that is currently available only for single family, manufactured homes and multi-family homes in Highly Impacted Communities.
 - Single family, manufactured homes, and multi-family homes with non- electric fuel heating sources (wood, propane, and heating oil) will be eligible for installation of ductless heat pumps. Natural gas system replacements will continue to not be eligible.
 - Update the savings calculation to reflect the prior heating fuel source: For 2023, the deemed savings are calculated by comparing NEEA Residential Building Stock Assessment data for heating oil, propane, and wood heated homes against RTF data for efficient heat pumps.
 - This measure will be targeted to and have increased incentive rates for customers living in Highly Impacted Communities.
 - For customers currently using heating oil (or wood or propane) with existing ducting in their homes, adding air source heat pump conversion options.
- Add new measures:
 - Air Purifiers
 - Engine Block Heater Controls
- End measures:
 - CTA-2045 Heat Pumps.
 - Advanced Power Strips.
- Expand New Homes Incentives.
 - Pay for Savings measures.
 - Standalone New Construction measures.
- Expand single family window incentives.
 - Add efficiency tiers and increase incentives for windows replacing specified baselines of single pane wood, single pane metal, or double pane metal windows.

- Clarify eligibility requirements for measures:
 - Electric Line Voltage Thermostats.
 - Smart Thermostats.
 - Heat Pump Water Heaters.
 - Ductless Heat Pumps.
- Align with the latest unit energy savings (UES) from the RTF.
- Update the list of eligible rate schedules

For more detail on the planned changes, see the Explanation of Changes section below and Exhibit A containing the incentive tables redlined to show the changes for 2023.

Explanation of Changes

Applicable	
Description of Change	Reason for Change
<u>Revise list of eligible rate schedules to add Schedule 19.</u>	<u>Schedule 19 is a new rate schedule for Residential Time-of-Use Pilot customers. Customers on Schedule 19 are paying the System Benefits Charge (Schedule 191) and this rate schedule is added so these customers are eligible to participate in Home Energy Savings.</u>

Program Modifications – Single Family HVAC Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Central Air Conditioner	Split out the customer and market partner incentives.	\$155 combined	\$93 customer incentive and \$62 market partner incentive
Duct Sealing and Insulation	Split out the customer and market partner incentives and	\$1,000 combined	\$750 customer incentive and \$250 market partner incentive
Duct Sealing (not Direct Install)	Remove the “up to” clause in the incentive offering since the only non-Direct Install duct sealing measure is a set amount.	Up to \$500	\$500
Duct Sealing (Direct Install)	Break out the “Test and Seal” and “Test Only” measures within the direct install duct sealing offering.	Up to \$500 market partner incentive.	Test and Seal: \$500 market partner incentive Test only: \$80 market partner

Program Modifications – Single Family HVAC Incentives			
			incentive
Ductless Heat Pump	Break out the ductless heat pump measures replacing electric baselines and non-electric/non-gas baselines. Increase incentives for all DHP measures, with the highest incentive increases for fuel switching measures. Add note that customers may self-install DHPs.	\$1,800 combined incentive.	Electric baseline: \$1,600 customer incentive and \$400 market partner incentive. Non-electric/non-gas baseline: \$1,800 customer incentive and \$400 market partner incentive.
Electric Line Voltage Connected Thermostat	Add new measure offering for direct install delivery. Break out measures for retail and direct install. Specify program requirements based on RTF measures.	\$56	Retail: \$56 Direct Install: \$100
Federal Standard Heat Pump Conversion	Increase incentive and split out customer and market partner incentives. Create new incentive for fuel switching heat pump conversions.	\$2,250 combined incentive	Electric baseline: \$2,000 customer incentive and \$500 market partner incentive. Non-electric/non-gas baseline: \$2,250 customer incentive and \$500 market partner incentive.
9.0+ HSPF Heat Pump Conversion	Separate 9.0+ and 12.0+ HSPF conversion measures which were previously only separated out on the program website. Split out customer and market partner incentives. Create new incentive for fuel switching heat pump conversions.	Up to \$3,500	Electric baseline: \$2,500 customer incentive and \$750 market partner incentive. Non-electric/non-gas baseline: \$2,750 customer incentive and \$500 market partner incentive.
12.0 HSPF Heat Pump Conversion	Separate 9.0+ and 12.0+ HSPF conversion measures which were previously only separated out on the program website. Increase and split out customer and market partner incentives. Create new incentive for fuel switching heat pump conversions.	Up to \$3,500	Electric baseline: \$3,000 customer incentive and \$750 market partner incentive.

Program Modifications – Single Family HVAC Incentives			
			Non-electric/non-gas baseline: \$3,250 customer incentive and \$500 market partner incentive.
Heat Pump Upgrade	Split out the customer and market partner incentives.	\$375	\$250 customer incentive and \$125 market partner incentive.
Heat Pump (CTA-2045)	End measure. This measure was added to the program in 2020. At the time, House Bill 1444 in Washington required that CTA-2045 capability would be incorporated into all new heat pump water heaters starting 1/1/2021. The Home Energy Savings program added a measure to encourage early adoption in heat pump water heaters before the mandated date. The program also sought to promote demand response capability in other potential equipment, and it was not clear at the time of measure development if or how CTA-2045 enablement would apply outside of water heating. It now seems unlikely that demand response will be managed through CTA-2045 ports for space heating.	\$100	\$0
Smart Thermostat	Edit eligibility requirements to clarify that measure is available in retail and direct install delivery.	\$100	\$100

Program Modifications – Single Family New Homes Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Single Family Pay for Savings	Create new offering for single family “pay for savings” to re-engage residential builders and to encourage energy efficiency. This measure will provide an incentive per kWh savings based on modeled home performance and verified by an independent third-party home energy rater. The program will maintain the current Performance Path incentives for builders that exceed energy code by at least 10% for new single-family homes.	N/A	\$0.50/kWh
Standalone New Construction Heat Pump	Create new offering for equipment that exceeds code and is installed in new single-family homes. Incentive cannot be combined with Performance Path or Pay for Savings	N/A	\$250

Program Modifications – Single Family New Homes Incentives			
	incentives.		
Standalone New Construction Heat Pump Water Heater.	Create new offering for equipment in new single-family homes. Incentive cannot be combined with Performance Path or Pay for Savings incentives.	N/A	\$900

Program Modifications – Single Family Water Heating Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Heat Pump Water Heater	Remove eligibility requirement specification that heat pump water heater must be between 0 and 55 gallons. Remove specification that HPWH must be “Tier 3 or higher”. Clarify that incentives are available for single family and manufactured homes, but not for multifamily homes.	\$900	\$900

Program Modifications – Other Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Advanced Power Strips	Remove measure because it was discontinued by RTF. Update table from “Single Family Power Strip Incentives” to “Other Incentives”.	Up to \$40	\$0
Air Purifier	Add new measure.	N/A	\$30
Engine Block Heater Control	Add new measure.	N/A	\$100

Program Modifications – Manufactured Homes Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Advanced Power Strip	Remove measure because it was discontinued by RTF.	Up to \$40	\$0
Central Air Conditioner	Split out the customer and market partner incentives.	\$155 combined	\$93 customer incentive and \$62 market partner incentive.

Program Modifications – Manufactured Homes Incentives			
Duct Sealing (Not Direct Install)	Remove the “up to” clause in the incentive offering since the only non-Direct Install duct sealing measure is a set amount.	Up to \$500	\$500
Duct Sealing (Direct Install)	Break out the “Test and Seal” and “Test Only” measure within the direct install duct sealing offering.	Up to \$500 market partner incentive	Test and Seal: \$500 market partner incentive Test only: \$80 market partner incentive
Electronic Line Voltage Connected Thermostat	Add new measure offering for direct install delivery. Break out measures for retail and direct install. Specify program requirements based on RTF measures.	\$56	Retail: \$56 Direct Install: \$100
Federal Standard Heat Pump Conversion	Increase incentive and split out customer and market partner incentives. Create new incentive for fuel switching heat pump conversion.	\$2,250 combined incentive	Electric baseline: \$2,000 customer incentive and \$500 market partner incentive. Non-electric/non-gas baseline: \$2,250 customer incentive and \$500 market partner incentive.
9.0+ HSPF Heat Pump Conversion	Separate 9.0+ and 12.0+ HSPF conversion measures which were previously only separated out on the program website. Increase and split out customer and market partner incentives. Create new incentive for fuel switching heat pump conversion.	Up to \$2,500	Electric baseline: \$2,250 customer incentive and \$500 market partner incentive. Non-electric/non-gas baseline: \$2,500 customer incentive and \$500 market partner incentive.
12.0+ HSPF Heat Pump Conversion	Separate 9.0+ and 12.0+ HSPF conversion measures which were previously only separated out on the program website. Increase and split out customer and market partner incentive. Create new incentive for fuel switching heat pump conversion.	Up to \$2,500	Electric baseline: \$2,500 customer incentive and \$500 market partner incentive. Non-electric/non-gas baseline: \$2,750 customer incentive and \$500 market partner incentive.

Program Modifications – Manufactured Homes Incentives			
Ductless Heat Pump	Break out the ductless heat pump measures replacing electric baselines and non-electric/non-gas baselines. Increase incentives for all DHP measures, with the highest incentive increases for fuel switching measures. Add note that customers may self-install DHPs.	\$1,800 combined incentive	Electric baseline: \$1,600 customer incentive and \$400 market partner incentive. Non-electric/non-gas baseline: \$1,800 customer incentive and \$400 market partner incentive.
Heat Pump Upgrade	Split out the customer and market partner incentives.	\$375	\$250 customer incentive and \$125 market partner incentive.
Heat Pump (CTA-2045)	End measure. This measure was added to the program in 2020. At the time, House Bill 1444 in Washington required that CTA-2045 capability would be incorporated into all new heat pump water heaters starting 1/1/2021. The Home Energy Savings program added a measure to encourage early adoption in heat pump water heaters before the mandated date. The program also sought to promote demand response capability in other potential equipment, and it was not clear at the time of measure development if or how CTA-2045 enablement would apply outside of water heating. It now seems unlikely that demand response will be managed through CTA-2045 ports for space heating.	\$100	\$0
New Homes, ENERGY STAR Homes	Split out the customer and market partner incentives.	\$2,500 combined incentive.	\$2,250 customer incentive and \$250 market partner incentive.
New Homes, NEEM+ Homes	Split out the customer and market partner incentives.	\$3,000 combined incentive.	\$2,750 customer incentive and \$250 market partner incentive.
Heat Pump, New Manufactured Homes	Split out the customer and market partner incentives.	\$1,300	\$1,000 customer incentive and \$300 market partner incentive.
Smart Thermostat	Edit eligibility requirements to clarify that measure is available in retail and direct install delivery.	\$100	\$100

Program Modifications – Multifamily Homes Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Advanced Power Strip	Remove measure because it was discontinued by RTF.	Up to \$40	\$0
Ductless Heat Pump	Break out the ductless heat pump measures replacing electric baselines and non-electric/non-gas baselines. Increase incentives for all DHP measures, with the highest incentive increases for fuel switching measures. Add note that customers may self-install DHPs.	\$1,800 combined incentive	Electric baseline: \$1,600 customer incentive and \$400 market partner incentive. Non-electric/non-gas baseline: \$1,800 customer incentive and \$40 market partner incentive.
Heat Pump (CTA-2045)	End measure. This measure was added to the program in 2020. At the time, House Bill 1444 in Washington required that CTA-2045 capability would be incorporated into all new heat pump water heaters starting 1/1/2021. The Home Energy Savings program added a measure to encourage early adoption in heat pump water heaters before the mandated date. The program also sought to promote demand response capability in other potential equipment, and it was not clear at the time of measure development if or how CTA-2045 enablement would apply outside of water heating. It now seems unlikely that demand response will be managed through CTA-2045 ports for space heating.	\$100	\$0
Electronic Line Voltage Connected Thermostat	Add new measure offering for direct install delivery. Break out measures for retail and direct install. Specify program requirements based on RTF measures.	\$56	Retail: \$56 Direct Install: \$100
Smart Thermostat	Edit eligibility requirements to clarify that measure is available in retail and direct install delivery.	\$100	\$100
Multifamily Pay for Savings	Create new offering for multifamily “pay for savings” to re-engage residential builders in territory and to encourage energy efficiency. This measure will provide an incentive per kWh savings based on modeled home	N/A	\$0.50/kWh

	performance and verified by an independent third-party home energy rater. The program will maintain the current Performance incentives for builders that exceed energy code by at least 5% for new multifamily homes.		
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Program Modifications – Enhanced Incentives for Highly Impacted Communities			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Ductless Heat Pump	Offer higher incentives for Ductless Heat Pumps installed for customers living in Highly Impacted Communities.	N/A	Electric baseline: \$1,800 customer incentive and \$400 market partner incentive. Non-electric/non-gas baseline: \$2,000 customer incentive and \$400 market partner incentive.
Federal Standard Heat Pump Conversion	Offer higher incentives for Federal Standard Heat Pump Conversions installed for customers living in Highly Impacted Communities.	N/A	Electric baseline: \$2,250 customer incentive and \$500 market partner incentive. Non-electric/non-gas baseline: \$2,500 customer incentive and \$500 market partner incentive
9.0+ HSPF Heat Pump Conversion	Offer higher incentives for 9.0+ HSPF Heat Pump Conversions installed for customers living in Highly Impacted Communities.	N/A	Electric baseline: Manufactured Home: \$2,500 customer incentive and \$500 market partner incentive. Electric baseline: Single Family Home: \$2,750 customer incentive and \$750 market partner incentive. Non-electric/non-gas baseline: Single Family Home: \$2,750 customer incentive and \$500 market partner incentive Non-electric/non-gas baseline: Single Family Home: \$3,000 customer incentive and \$500 market partner incentive
12.0+ HSPF Heat Pump Conversion	Offer higher incentives for 12.0+ HSPF Heat Pump Conversions installed for customers living in Highly Impacted Communities.	N/A	Electric baseline: Manufactured Home: \$2,750 customer incentive and \$500 market partner incentive. Electric baseline: Single Family Home: \$3,250 customer incentive and \$750 market partner incentive. Non-electric/non-gas baseline: Single Family Home: \$3,000 customer incentive and \$500 market partner incentive Non-electric/non-gas baseline: Single Family Home: \$3,500 customer incentive and \$500 market partner incentive

Clean Energy Transformation Act Utility Actions (Equity-focused initiatives)

The following utility actions defined in the 2022-2023 Demand-side Management Business Plan and Clean Energy Implementation Plan filed in 2021 are either complete or continuing:

- Enhanced incentives for windows in multi-family units on residential rate schedules. Initial focus on buildings in Highly Impacted Communities. ***(Ongoing.)***
- Continue direct install residential lighting in multi-family units. Continue focus in Highly Impacted Communities. ***(Ongoing with changes.)***
- Maintain and expand if possible general purpose lamp buy down in “dollar stores” in Highly Impacted Communities. This will be the only retail lighting buy down offer. ***(Ongoing.)***
- Continue manufactured home direct install duct sealing and lighting. Continue focus in Highly Impacted Communities. ***(Ongoing.)***
- Continue promoting new construction offerings for multifamily and single-family units. Continue focus in Highly Impacted Communities. ***(Ongoing.)***
- Non-Electric, Non-Natural Gas Upgrades in Named Communities. ***(Ongoing with changes.)***
 - Serve named community residential customers who use non-electric and non-natural gas fuel sources in their primary heating systems by decommissioning these systems and installing ductless heat pumps. This measure will be offered at the same incentive rate as the typical ductless heat pumps measure, and will be available in single family, manufactured homes, and multifamily residences. Customers in Highly Impacted Communities will be eligible for this incentive and customer eligibility criteria will be available on the program website. The standard ductless heat pump measure replacing electric forced air furnace or zonal electric primary heating systems is still available for all residential customers.
 - The program will use RTF deemed values for ductless heat pump installations that assume a zonal electric resistance baseline since RTF does not have any measures for alternative fuel source replacement or conversions. Highly impacted community determination will be included in customer data provided by Pacific Power.

The following additional utility actions are planned for 2023:

- Add direct install thermostats to the direct install residential lighting in multi-family units utility action listed above.
- Modify the Non-Electric, Non-Natural Gas Upgrades in Named Communities action.
 - Increasing the incentive for residential customers living in Highly Impacted Communities.
 - Create an offer for customers replacing existing systems with air source heat pumps and offer higher incentives for customers living in Highly Impacted Communities.
 - The savings reporting for ductless heat pump and air source heat pump measures will be calculated to reflect the prior heating fuel source by comparing NEEA Residential Building Stock Assessment data for heating oil, propane, and wood heated homes against RTF data for efficient heat pumps

- Add enhanced incentives for customers living in Highly Impacted Communities.
 - Ductless Heat Pump
 - Heat Pump Conversion

Regional Technical Forum (RTF) review

A review of the RTF updates was performed. Updates approved as of October 1, 2022, were incorporated. Measure specific information is included in the RTF Alignment Review HES attachment.

Transition Plan

The measure effective date dictates the applicable program version and incentives available. For measure effective dates starting 1/1/2023, the new version of the program applies. For measure effective dates prior to 1/1/2023, the version of the program in effect at the time applies.

For all post-purchase measures, the purchase date is used to determine the measure effective date. For trade ally projects, the invoice date or date of installation is used to determine the measure effective date. Incentive application and supporting documentation must be postmarked or submitted online within 90 days of the equipment purchase or installation.

For New Manufactured Homes the date of title transfer is used to determine the measure effective date. The program requires that incentive application and supporting documents are submitted within 90 days of the title transfer.

The certificate of occupancy issuance date is used to determine the measure effective date in the Single-Family New Homes program and Multifamily New Homes program. The program requires that all documents are submitted within 90 days of certificate of occupancy issuance date. Homes completed with certificates of occupancy dated less than 120 days prior to the new program version effective date may be eligible for incentives under the new program structure.

The program may grant exceptions to these rules.

Cost-Effectiveness

Cost effectiveness for the Home Energy Savings program with these changes is sub-optimal over the 2022-2023 period. PacifiCorp prioritized increasing participation and achieving CETA equity objectives over improving program cost-effectiveness for this biennium. The forecast Total Resource Cost benefit-cost ratio, including the 10% conservation adder (PTRC) is 0.48. The addition of non-energy impacts increases the forecast PTRC ratio to 0.58.

The portfolio as a whole is projected to be cost effective from a PTRC and utility cost perspective both with and without the addition of non-energy impacts. The portfolio level Total Resource Cost benefit-cost ratio, including the 10% conservation adder (PTRC) and excluding NEEA is 1.55. The addition of non-energy impacts increases the PTRC ratio to 1.72. The portfolio level Utility Cost Test is a benefit cost ratio of 1.70. Program-level cost-effectiveness results are provided in the tables below (which are also found in Tables 5 and 1 of Exhibit C). 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	\$0.2586	\$13,911,784	\$6,612,089	(\$7,299,696)	0.48
Total Resource Cost Test (TRC) No Adder	\$0.2586	\$13,911,784	\$6,010,990	(\$7,900,794)	0.43
Utility Cost Test (UCT)	\$0.1689	\$9,086,855	\$6,010,990	(\$3,075,866)	0.66
Participant Cost Test (PCT)		\$8,593,531	\$9,082,464	\$488,933	1.06
Rate Impact Test (RIM)		\$14,400,717	\$6,010,990	(\$8,389,728)	0.42
Lifecycle Revenue Impacts (\$/kWh)					\$0.0002588
Discounted Participant Payback (years)					15.78

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	\$0.2586	\$13,911,784	\$8,025,486	(\$5,886,298)	0.58
Total Resource Cost Test (TRC) No Adder	\$0.2586	\$13,911,784	\$7,424,387	(\$6,487,397)	0.53
Utility Cost Test (UCT)	\$0.1689	\$9,086,855	\$6,010,990	(\$3,075,866)	0.66
Participant Cost Test (PCT)		\$8,593,531	\$10,495,862	\$1,902,331	1.22
Rate Impact Test (RIM)		\$14,400,717	\$6,010,990	(\$8,389,728)	0.42
Lifecycle Revenue Impacts (\$/kWh)					\$0.0002588
Discounted Participant Payback (years)					13.51

Exhibits Provided

- A. Washington HES Incentive Tables – Red-lined
- B. Cost Effectiveness – DRAFT_PacifiCorp_HES_Cost-effectiveness_PY2022-2023_WA_9.16.2022.docx
- C. RTF Alignment Review HES_for 01-01-2023