

PacifiCorp's Planned Changes to Home Energy Savings Program in California Proposed Effective Date of March 28, 2022

As defined in its Annual Budget Advice Letter for 2022 (Advice 657-E and Advice 657-E-A), PacifiCorp (Pacific Power) is planning to make modifications to the Home Energy Savings program for residential customer energy efficiency, which is offered through Schedule D-118. The proposed changes are intended to continue to update the program based on new statewide energy efficiency workpapers to improve consistency with other California energy efficiency programs.

Schedule D-118 includes the basic program elements: customer eligibility, use of a program administrator for delivery, the seasonal nature of selected incentive offers, and that current incentive levels may change. Specific details on all aspects of the program including incentive levels, eligible equipment specifications and dates for incentive availability are managed by the program administrator using a dedicated [program web site](#) with links from the [Pacific Power web site](#).

Consistent with the change process for the Home Energy Savings program approved in Decision D.21-12-034 on December 16, 2021, the program changes incorporated in the Annual Budget Advice Letter for 2022 are required to be filed in a Tier 1 Advice letter and, following approval of the Tier 1 Advice letter, notice of the changes posted on the program website¹ 45 days prior to implementation.

Background

The Program is available to residential customers in the Company's California service territory and offers incentives for prescriptive measures which improve energy efficiency. The current Program offers incentives for energy efficient appliances, water heating, HVAC, and new homes packages. Incentives are available for both existing homes and new homes. The Program was first approved by the California Public Utilities Commission on February 29, 2008.² The Program was modified on April 12, 2010, June 12, 2014, August 26, 2019, September 24, 2020, and again on March 15, 2021 to maintain cost effectiveness and participation and incorporate changing codes and standards.

Description of Planned Home Energy Savings Changes

The Program modifications are summarized below in Tables 1-8 with complete details provided in the revised Program incentive tables, which are provided in Exhibits 1 and 2.³ All changes reflect alignment with current statewide DEER workpapers.

Cost-Effectiveness

¹ [California Residential | Wattsmart Savings](#)

² Decision No. 08-01-041 dated January 31, 2008.

³ Exhibit 1 contains the Home Energy Savings program incentive tables, which were originally provided as part of Exhibit J in A.07-07-011 and further modified using the program change process described in Schedule D-118. The incentive tables currently in effect are marked to show the planned changes.

Cost effectiveness analysis for the program with these changes was provided as part of PacifiCorp's 2022 Annual Budget Advice Letter (Advice 657-E) filed September 1, 2021. The 2022 ABAL also includes a comprehensive description of the company-specific model used for the analysis. The program is not cost effective, but the portfolio (Home Energy Savings in combination with Wattsmart Business) is projected to be cost effective.

Database of Energy Efficient Resources (DEER) Alignment Review

Commission Decision D.14-04-008 included an order⁴ related to use of unmodified DEER values for measures where DEER values are available. This order was reinforced in Decision 18-11-033⁵ and in Decision 21-12-034. Recent updates to unit energy savings (UES) measures from DEER statewide workpapers found in the California Public Utilities Commission Workpaper and Disposition Archive⁶ were reviewed as of September 1, 2021 for all Home Energy Savings measures for alignment with DEER. The results of this review can be found in Exhibit 3.

Evaluation Plan

The Company offers the Home Energy Savings in its other service territories. Evaluations are conducted at the program level with reports prepared for each state. Consistent evaluation plans throughout PacifiCorp's system-wide territory reduce administrative costs for the program. The most recent evaluation⁷ was for the 2017-2018 program. The next evaluation of PacifiCorp's residential programs will be for program years 2019-2020, and this evaluation is scheduled for completion in 2022.

Exhibits Provided

Exhibit 1 - HES Explanation of Changes

Exhibit 2 - HES Incentive Tables – Red-lined

Exhibit 3 - DEER Alignment Review HES

Cost-Effectiveness analysis –

PCorp CE Memo_CA_ABAL_PY2022_16Aug2021.docx

⁴ In future applications for approval of energy efficiency programs, PacifiCorp shall use unmodified Database of Energy Efficiency Resource (DEER) values for measures where the DEER values are available.

⁵ In calculating its Total Resource Cost and Program Administrator Cost, PacifiCorp must use only Database for Energy Efficiency Resources values approved as of the date of each Annual Budget Advice Letter submission or future pleading, as applicable.

⁶ <http://www.deeresources.net/workpapers>.

⁷ https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/environment/dsm/california/Final_Evaluation_Report_for_PacifiCorp_Residential_2017-2018_Home_Energy_Savings_Program_in_California.pdf.

Definitions

British Thermal Unit (Btu): It is approximately the amount of energy needed to heat 1 pound of water from 39° to 40° Fahrenheit.

Consortium for Energy Efficiency (CEE): A consortium of US and Canadian gas and electric efficiency program administrators. Members work to unify program approaches across jurisdictions to increase the success of efficiency in markets. CEE members define one or more tiers of energy performance for a particular product or service. A specification is an advanced level of energy performance, higher than is normal in a market, for a residential, commercial, or industrial product or service.

Cubic Feet per Minute (CFM): A measurement of the velocity at which air flows into or out of a space.

Customer: Any party who has applied for, been accepted and receives service at the real property, or is the electricity user at the real property.

DEER (Database for Energy Efficiency Resources): is a California Energy Commission and California Public Utilities Commission-sponsored database designed to provide well-documented estimates of energy and peak demand savings values, measure costs, and effective useful life all with one data source.

Direct Install: Installation of an Energy Efficiency Measure directly by the Company, Program, or a Program-approved contractor or other 3rd party.

Downstream: Payment of incentive made by the Company to a customer, owner, contractor or other approved third party for the purchase or installation of an Energy Efficiency Measure pursuant to an approved energy efficiency incentive application.

Energy Efficiency Incentive: Payments of money made by Company to Owner or Customer or other approved party for installation of an Energy Efficiency Measure pursuant to an approved Energy Efficiency Incentive Application or Invoice.

Energy Factor (EF): Indicates a water heater's overall energy efficiency based on the amount of hot water produced per unit of fuel consumed over a typical day. The higher the energy factor, the more efficient the water heater. This is an older measure of water heater efficiency that is being phased out and replaced with Uniform Energy Factor (UEF).

Heating Seasonal Performance Factor (HSPF): The efficiency of heat pumps measured by the ratio of Btu heat output over the heating season to watt-hours of electricity used. The higher the number, the greater the efficiency.

Heating, Ventilation and Air Conditioning (HVAC): Refers to technology of indoor environmental comfort.

Light-emitting Diode (LED): A semiconductor light source.

Manufactured Homes (mobile homes): A type of prefabricated housing that is largely assembled in factories and transported to the site of use. Units are at least 320 square feet and installed with a permanent chassis to assure the initial and continued transportability of the home.

Mid-Market: An approved third party (typically a contractor, retailer or manufacturer) who installs Energy Efficiency Measures at the real property or sells Energy Efficiency Measures to a Customer.

Modified Energy Factor (MEF): Measures energy consumption of the total laundry cycle (washing and drying). It indicates how many cubic feet of laundry can be washed and dried with one kWh of electricity; the higher the number, the greater the efficiency.

NEEA: Northwest Energy Efficiency Alliance.

New Home: A newly constructed residence.

Owner: The person who has both legal and beneficial title to the real property, and is the mortgager under a duly recorded mortgage of real property, the trustor under a duly recorded deed of trust.

Regional Technical Forum (RTF): Part of the Northwest Power & Conservation Council, the RTF is an advisory committee established in 1999 to develop standards to verify and evaluate conservation savings.

R-Value: Indicates insulation's resistance to heat flow. The higher the R-value, the greater the insulating effectiveness.

Seasonal Energy Efficiency Ratio (SEER): The efficiency of air conditioners, measured by the cooling output in Btu during a typical cooling-season, divided by the total electric energy input in watt-hours during the same period. The higher the unit's SEER rating, the more energy efficient it is.

Uniform Energy Factor (UEF): The newest measure of water heater overall efficiency. The higher the UEF value is, the more efficient the water heater.

Upstream: Payment of incentive made by the Company directly to a manufacturer, retailer, or other pre-approved vendor to apply a pre-purchase discount for customers.

General Notes

- Incentive cannot exceed total price of product or service.
- All work must be installed per local, state, and federal building codes and requirements.

Exhibit 1 - Explanation of Changes

Table 1 - Appliance Incentives Table

Program Modifications – Appliance Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Clothes Washer	Incentive is reduced to align with lower energy savings from the current statewide workpaper.	<u>Qualification:</u> ENERGY STAR certified. <u>Customer/Market Partner Incentive:</u> \$50 <u>Available Delivery Methods:</u> <ul style="list-style-type: none"> • Downstream • Mid/upstream 	<u>Qualification:</u> ENERGY STAR certified. <u>Customer/Market Partner Incentive:</u> \$20 <u>Available Delivery Methods:</u> <ul style="list-style-type: none"> • Downstream • Mid/upstream
Notes for Appliance Incentive Table	Adding note to specify that coin-operated clothes washers are not eligible for incentives. This equipment has a shorter measure life and is not cost effective.	<ul style="list-style-type: none"> • See additional installation requirements and qualifying models on program website. • Incentives for clothes washers apply to mid/upstream and/or downstream. Only one incentive will be provided per qualifying clothes washer. • Incentives for clothes washers may be paid to the customer, retailer, and/or manufacturer and may be split between customer, retailer, and/or manufacturer. 	<ul style="list-style-type: none"> • See additional installation requirements and qualifying models on program website. • Incentives for clothes washers apply to mid/upstream and/or downstream. Only one incentive will be provided per qualifying clothes washer. • Incentives for clothes washers may be paid to the customer, retailer, and/or manufacturer and may be split between customer, retailer, and/or manufacturer. • Incentives are not available for coin-operated clothes washers.

Table 2 – Water Heating Incentive Table Modifications

Program Modifications – Water Heating Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Heat Pump Water Heater	Measure eligibility requirements are being updated to ensure that the	<u>Qualification:</u>	<u>Qualification:</u>

Program Modifications – Water Heating Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
	program only offers cost effective measures.	<ul style="list-style-type: none"> > 45 and ≤ 55 gallons: 3.09 or 3.31 UEF > 55 and ≤ 75 gallons: 3.33 UEF > 75 gallons: 3.42 UEF Measure is available in single family, multifamily, and manufactured home installations as either new construction or normal replacement. <p><u>Customer/Market Partner Incentive:</u></p> <ul style="list-style-type: none"> Up to \$600 <p><u>Available Delivery Methods:</u></p> <ul style="list-style-type: none"> Downstream Mid/upstream 	<ul style="list-style-type: none"> > 45 and ≤ 55 gallons: 3.09 or 3.31 UEF Measure is available in single family, multifamily, and manufactured home installations as either new construction or normal replacement. <p><u>Customer/Market Partner Incentive:</u></p> <ul style="list-style-type: none"> Up to \$600 <p><u>Available Delivery Methods:</u></p> <ul style="list-style-type: none"> Downstream Mid/upstream
Smart Pump	New measure per statewide workpaper	N/A	<p><u>Qualification:</u></p> <ul style="list-style-type: none"> High performance circulator pump must have variable speed controls to accommodate demand. Pump must utilize an electronically commutated motor, have an integrated variable frequency drive, and have onboard pump controlling logic with self-optimizing programming to allow the pump to learn and operate at the best efficiency point on the pump curve. Measure is available in single family or multifamily

Program Modifications – Water Heating Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
			<p>domestic hot water applications as either new construction or normal replacement.</p> <ul style="list-style-type: none"> Hydronic heating applications are excluded from this measure. <p><u>Customer/Market Partner Incentive:</u> Up to \$75</p>
Faucet Aerator/Flow Control Valve	New measure per statewide workpaper	N/A	<p><u>Qualification:</u></p> <ul style="list-style-type: none"> The existing faucet must have a flow rate of at least 2.2 gallons per minute (gpm), and must not have an aerator installed. Measure is available in single family, manufactured, or multifamily homes as add-on equipment. Kitchen sink aerators/flow control valves (FCVs) must reduce flow rate to 1.5 gpm or less. Lavatory sink aerators/FCVs must reduce flow rate to 1.2 gpm or less. This measure is not applicable to new faucets that meet or exceed 2016 CA Appliance Efficiency Regulations (Title 20) code requirement of 1.2 gpm flow rate for lavatory faucet and 1.8 gpm flow rate for kitchen faucet. <p><u>Customer/Market Partner Incentive:</u></p>

Program Modifications – Water Heating Incentives			
Measure Name	Description of Changes	Current Offering	Revised Offerings
			Up to \$5
Low Flow Showerhead	New measure per statewide workpaper	N/A	<u>Qualification:</u> <ul style="list-style-type: none"> Measure is available in single family, manufactured, or multifamily homes as normal replacement or new construction. Showerhead must be 1.7 gpm or less. <u>Customer/Market Partner Incentive:</u> Up to \$4
Flow Restriction Valve	New measure per statewide workpaper	N/A	<u>Qualification:</u> <ul style="list-style-type: none"> Measure is available in single family, manufactured, or multifamily homes as add-on equipment. Flow restriction valve must be 1.7 gpm or less. <u>Customer/Market Partner Incentive:</u> Up to \$30
Notes for Water Heating Incentive Table	Adding acronyms and note to clarify that DHW must be electrically heated.	<ul style="list-style-type: none"> Market partner incentives for all plumbing measures apply to upstream or midstream. See additional installation requirements on program website. Acronyms: UEF: Uniform Energy Factor 	Notes for water heating incentive table: <ul style="list-style-type: none"> Market partner incentives for all water heating measures apply to upstream or midstream. Home where measure is installed must have electrically heated domestic hot water See additional installation requirements on program website. Acronyms: FCV: Flow control valve GPM: Gallons per minute UEF: Uniform Energy Factor

Exhibit 2

California Home Energy Savings Program - Redlined Measures, Incentives, and Qualifications

Per unit incentives for specific Energy Efficiency Measures (EEMs) are listed in the program incentive tables below. Current incentives can be found at <https://wattsmartsavings.net/california-residential/>.

Table 1 - Appliance Incentives Table

Measure	Qualifications	Customer Incentive	Market Partner Incentive
Clothes Washer	ENERGY STAR certified		\$20

Notes for appliance incentive table:

- See additional installation requirements and qualifying models on program website.
- Incentives for clothes washers apply to mid/upstream and/or downstream. Only one incentive will be provided per qualifying clothes washer.
- Incentives for clothes washers may be paid to the customer, retailer, and/or manufacturer and may be split between customer, retailer, and/or manufacturer.
- Incentives are not available for coin-operated clothes washers.

Table 2 - Water Heating Incentives Table

Measure	Qualifications	Customer Incentive	Market Partner Incentive
Heat Pump Water Heater	<ul style="list-style-type: none"> • > 45 and ≤ 55 gallons: 3.09 or 3.31 UEF • Measure is available in single family, multifamily, and manufactured home installations as either new construction or normal replacement. 		Up to \$600
Smart Pump	<ul style="list-style-type: none"> • High performance circulator pump must have variable speed controls to accommodate demand. • Pump must utilize an electronically commutated motor, have an integrated variable frequency drive, and have onboard pump controlling logic with self-optimizing programming to allow the pump to learn and operate at the best 		Up to \$75

	<p>efficiency point on the pump curve.</p> <ul style="list-style-type: none"> • Measure is available in single family or multifamily domestic hot water applications as either new construction or normal replacement. • Hydronic heating applications are excluded from this measure. 	
Faucet Aerator/Flow Control Valve	<ul style="list-style-type: none"> • The existing faucet must have a flow rate of at least 2.2 gallons per minute (gpm), and must not have an aerator installed. • Measure is available in single family, manufactured, or multifamily homes as add-on equipment. • Kitchen sink aerators/flow control valves (FCVs) must reduce flow rate to 1.5 gpm or less. • Lavatory sink aerators/FCVs must reduce flow rate to 1.2 gpm or less. • This measure is not applicable to new faucets that meet or exceed 2016 CA Appliance Efficiency Regulations (Title 20) code requirement of 1.2 gpm flow rate for lavatory faucet and 1.8 gpm flow rate for kitchen faucet. 	Up to \$5
Low Flow Showerhead	<ul style="list-style-type: none"> • Measure is available in single family, manufactured, or multifamily homes as normal replacement or new construction. • Showerhead must be 1.7 gpm or less. 	Up to \$4
Flow Restriction Valve	<ul style="list-style-type: none"> • Measure is available in single family, manufactured, or multifamily homes as add-on equipment. • Flow restriction valve must be 1.7 gpm or less. 	Up to \$30

Notes for water heating incentive table:

- Market partner incentives for all water heating measures apply to upstream or midstream.
- Home where measure is installed must have electrically heated domestic hot water
- See additional installation requirements on program website.
- Acronyms:
 - FCV:** Flow control valve
 - GPM:** Gallons per minute
 - UEF:** Uniform Energy Factor

Table 3 - New Homes Incentives Table

Measure	Qualifications	Customer Incentive	Market Partner Incentive
New Homes Whole Home Performance Path	To align with the California Advanced Homes Program, the Program will offer incentives to builders based on the new homes' percentage improvement beyond Title 24, beginning at 15% better than code and increasing. The home's performance will be modeled and verified by independent third-parties and the models will be delivered to the program for final savings and incentives calculations. See program website details.	Up to \$5,000	

Notes for new homes incentive table:

- Incentives for all New Homes measures apply to downstream or mid/upstream. Only one incentive will be provided per home.
- Incentives may be paid to the customer, builder, and/or Rater and may be split between customer, builder, and/or Rater. The sum of the incentive payments per unit will be clearly displayed on the program website with applicable dates. The end use portion of the incentive may be changed.
- See additional installation requirements on program website.

Table 4 – HVAC Incentives Table

Measure	Qualifications	Customer Incentive	Market Partner Incentive
Smart Thermostat	<ul style="list-style-type: none"> • ENERGY STAR® certified. • Incentives are only available for customers residing in climate zone 16. • Home must have a ducted heat pump as its primary source for heating. • Measure is available in single family, multifamily, and manufactured home installations as normal replacement. 	\$50	

Notes for HVAC incentives table:

- Maximum of one smart thermostat per household.
- See additional installation requirements on program website.