

PacifiCorp's Planned Changes to Home Energy Savings Program in California Proposed Effective Date of March 15, 2021

PacifiCorp (Company) is planning to make modifications to the Home Energy Savings program (HES) for residential customer energy efficiency, which is offered through Schedule D-118. The changes are intended to allow the Company to continue offering a cost effective measure mix and program while complying with CPUC Decision D.14-04-008.

Due to the comprehensive nature of the Program, the Commission provided for a flexible and market-driven program delivery approach in Application No. 07-07-011.¹ As outlined in Appendix J of the application, Schedule D-118 includes the basic program elements, including: 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 easy links from the [Pacific Power web site](#). Changes in equipment specifications or incentive levels are clearly posted on the web site with at least 45 days advance notice.

Consistent with the change process for the Program, notice of the changes will be posted on the program web site² 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, plumbing, 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, 2008.³ The Program was modified on April 12, 2010, June 12, 2014, August 26, 2019, and again on September 24, 2020, 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 2.⁴

Cost-Effectiveness

Cost effectiveness analysis for the program with these changes was provided as part of PacifiCorp's 2021 revised Annual Budget Advice Letter (Advice 637-E) filed December 17, 2020. The 2021 ABAL also includes a comprehensive description of the company-specific model used

¹ Refer to Exhibit J of A.07-07-011.

² <https://wattsmartsavings.net/california-residential/>

³ Decision No. 08-01-041 dated January 31, 2008.

⁴ 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.

for the analysis. The 2021 values reflect a full year with program changes in effect. 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 order⁵ related to use of unmodified DEER values for measures where DEER values are available. This order was reinforced in Decision 18-11-033⁶. Recent updates to unit energy savings (UES) measures from DEER statewide workpapers found in the California Public Utilities Commission Workpaper and Disposition Archive⁷ were reviewed as of September 1, 2020 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 evaluation⁸ 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 –

Exhibit C PCorp CE Memo_CA_ABAL_PY2021_23Nov2020.docx

Definitions

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

⁵ 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.

⁶ 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.

⁷ <http://www.deeresources.net/workpapers>.

⁸ 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.

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 2 – Water Heating Incentive Table Modifications

Program Modifications – Plumbing Incentive			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Heat Pump Water Heater	Measure is being revised to align with updated DEER SWWH014-02 statewide workpaper deemed values. Qualifications are being updated to clarify measure applicability.	<u>Qualification:</u> <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 <u>Customer/Market Partner Incentive:</u> <ul style="list-style-type: none"> Up to \$600 <u>Available Delivery Methods:</u> <ul style="list-style-type: none"> Downstream Mid/upstream 	<u>Qualification:</u> <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. <u>Customer/Market Partner Incentive:</u> <ul style="list-style-type: none"> Up to \$600 <u>Available Delivery Methods:</u> <ul style="list-style-type: none"> Downstream Mid/upstream
Notes for Plumbing Incentive Table	N/A	<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 	<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

Table 4 –HVAC Incentives Table Modifications

Program Modifications – Single Family HVAC Incentive			
Measure Name	Description of Changes	Current Offering	Revised Offerings
Smart Thermostat	Measure is being re-introduced for customers in climate zone 16, because the revised workpaper values for these measures are cost effective for the program.	N/A	<u>Qualification:</u> <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.

Program Modifications – Single Family HVAC Incentive			
Measure Name	Description of Changes	Current Offering	Revised Offerings
			<ul style="list-style-type: none"> Measure is available in single family, multifamily, and manufactured home installations as normal replacement. <p><u>Customer/Market Partner Incentive:</u></p> <ul style="list-style-type: none"> \$50 <p><u>Available Delivery Methods:</u></p> <ul style="list-style-type: none"> Downstream Mid/upstream
Notes for Single Family HVAC Incentive Table	Table is being added.	N/A	<ul style="list-style-type: none"> Maximum of one smart thermostat per household. See additional installation requirements on program website.

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 qualified		\$50

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.

Table 2 - ~~Plumbing~~ 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 > 55 and ≤ 75 gallons: 3.33 UEF > 75 gallons: 3.42 UEF <u>Measure is available in single family, multifamily, and manufactured home installations as either new construction or normal replacement.</u> 	\$400	Up to \$200

Notes for plumbing incentive table:

- Market partner incentives for all plumbing measures apply to upstream or midstream.
- See additional installation requirements on program website.
- Acronyms:
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

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

Notes for HVAC incentives table:

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