



2023 Washington Annual Report on Conservation Acquisition

5/31/2024 - Final

Pacific Power
825 NE Multnomah St.
Portland, OR 97232

<https://www.pacificorp.com/environment/demand-side-management.html>

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
REGULATORY AND COMPLIANCE	5
PORTFOLIO OF PROGRAMS	8
RESIDENTIAL ENERGY EFFICIENCY PROGRAM.....	8
HOME ENERGY SAVINGS.....	8
HOME ENERGY REPORTS.....	12
LOW INCOME WEATHERIZATION	13
NON-RESIDENTIAL ENERGY EFFICIENCY PROGRAM	15
WATTSMART BUSINESS.....	15
DISTRIBUTION EFFICIENCY	20
PRODUCTION EFFICIENCY	21
NORTHWEST ENERGY EFFICIENCY ALLIANCE	23
PILOT PROJECTS.....	23
CLEAN ENERGY IMPLEMENTATION PLAN – UTILITY ACTIONS.....	29
TOTAL PORTFOLIO BUDGET AND EXPENDITURES.....	36
GROSS SAVINGS BY MEASURE CATEGORY	40
COST EFFECTIVENESS.....	41
EVALUATIONS.....	43
APPENDIX A – COST-EFFECTIVENESS	44
APPENDIX B – NEEA SUPPLY CHAIN MEMOS (3).....	44
APPENDIX C – NEEA 2023 SAVINGS REPORT MEMO	44

EXECUTIVE SUMMARY

PacifiCorp is a multi-jurisdictional electric utility providing retail service to customers in Washington, California, Idaho, Oregon, Utah, and Wyoming. PacifiCorp dba Pacific Power & Light Company (Pacific Power or Company) serves approximately 136,363 customers in Washington. The Company works with its customers to reduce the need for investment in supply side resources and infrastructure by reducing energy consumption and peak demand through a cost-effective energy efficiency program portfolio.

PacifiCorp is required to comply with the requirements of the Energy Independence Act (I-937) codified in RCW19.285 and WAC 480-109. This report outlines the activities and expenditures related to pursuing all conservation in accordance with the I-937 framework, including Washington Utilities and Transportation Commission (Commission) orders and administrative rules.

In 2023, the Company offered four energy efficiency programs in Washington and received energy savings and market transformation benefits through its affiliation with the Northwest Energy Efficiency Alliance (NEEA). In addition to the energy efficiency programs, the Company, on behalf of customers, invested in outreach and education for the purpose of promoting the efficient use of electricity and improving program performance. The Company recovers expenditures associated with these programs through the System Benefits Charge Adjustment, Schedule 191.

Pacific Power uses outsourced program delivery implementers for its programs.¹ Evaluations for each of the programs are performed by independent external evaluators to validate energy savings derived from Pacific Power's energy efficiency programs.²

Pacific Power utilizes earned media, customer communications, education, outreach, and advertising as well as program specific marketing to communicate the value of energy efficiency.³

In 2023, to achieve Clean Energy Transformation Act (CETA) equity objectives, Pacific Power continued implementing Demand-side Utility Actions and integrating equity into program delivery. The focus for 2023 was on the updated actions outlined in the 2023 ACP. These updates were also made in the 2023 Biennial Clean Energy Implementation Plan (CEIP) Update (Docket UE-210829, filed November 1, 2023). See the CETA Utility Actions section for updates. Pacific Power's customer benefit indicator metric results for energy efficiency programs for 2023 will be reported in the CEIP progress report due July 1, 2024.

This report provides details on program results, activities, expenditures, and System Benefits Charge revenue as of the reporting period January 1, 2023, through December 31, 2023. Pacific Power, on behalf of its customers, invested \$20 million in energy efficiency and peak reduction resource acquisitions during the reporting period. The investment yielded approximately 53,085 megawatt-hours (MWh) in first-year energy savings,⁴ and approximately 9.51 gross megawatts (MW) of savings from 2023 energy efficiency

¹ Program Administration can be found at <https://www.pacificorp.com/environment/demand-side-management.html> under the "Program Administration" section.

² Program Evaluation information for each program can be found at the following address: <https://www.pacificorp.com/environment/demand-side-management.html> under the "Reports and program evaluations by state" section.

³ Communications, Outreach and Education can be found at <https://www.pacificorp.com/environment/demand-side-management.html> under the "Communications and Outreach" section.

⁴ Reported ex-ante savings are gross at generation.

acquisition. This represents a substantial improvement over 2022 results,⁵ although it did not achieve the savings in the 2023 ACP (which was increased over the 2023 savings in the 2022-2023 Biennial Conservation Plan). Energy savings from Pacific Power programs and NEEA were 95% of 2023 savings projected in the 2023 ACP filed November 15, 2022. Total portfolio expenses (including NEEA and portfolio costs) in 2023 were 88% of the 2023 projection in the 2023 ACP.

For 2023, the Company notes the lingering effects of the COVID-19 pandemic:

- 1) Significantly impacted program performance (although to a lesser extent in 2023 than in 2022) and prevented the Company from being on track to meet its 2022-2023 conservation target,
- 2) Were beyond the reasonable control of the Company and could not have been reasonably anticipated, and
- 3) Meet the criteria of “natural disasters resulting in the issuance of extended emergency declarations” given Governor Jay Inslee declared a State of Emergency on February 29, 2020, and the State of Emergency was still in place until November 1, 2022. The federal Public Health Emergency declaration was in effect until May 11, 2023.⁶

Several prevalent challenges persisted in 2023 due to the COVID-19 pandemic. Outlined below are some of the issues that contributed to lower-than-expected energy savings results:

- **Higher interest rates** – Interest rates increased in 2022 and remained high in 2023, which changed the calculus for investment decisions and prompted some customers to delay the implementation of projects.
- **Inflation** – Prices for equipment and labor remained high in 2023 due to inflation.
- **Staffing issues and building vacancies** – Customers across all business sectors and Trade Allies experienced a shortage of available workers and increased wages/benefits for those employed and some did not have enough staff to take on additional projects. Demand for skilled trade jobs continued to outpace the supply of qualified workers. Building owners with vacant tenant spaces faced challenges impacting their ability to invest in energy efficiency upgrades.
- **Product availability/longer lead times** – Although this issue eased in 2023, some customers continued to see long lead times on equipment, which delayed project implementation.
- **General uncertainty** – Customer uncertainty around staffing issues and labor and material costs, caused delays in project implementation.

In 2021 and 2022, NEEA documented supply chain challenges resulting from the COVID-19 pandemic. They updated this memo for 2023 to document the status of the challenges in 2023. Their memos are attached as Appendix B to this report.

In 2023, program participation was also affected by the cancelation of significant projects. See the Wattsmart Business section for details.

⁵ 2022 gross savings (at generation) was 40,190,992 kWh or 40,191 MWH.

⁶ [Fact Sheet: End of the COVID-19 Public Health Emergency | HHS.gov](#)

The Demand-side Management (DSM) portfolio (excluding Low Income Weatherization)⁷ was cost effective based on the PacifiCorp Total Resource Cost Test (PTRC) of 1.91 and the Utility/Program Administrator Cost Test (UCT) of 2.09, which are the primary Cost Effectiveness tests used in Washington.⁸ Further cost-effectiveness results are provided in table 13 below, and Appendix A.

In 2023, Pacific Power’s portfolio included the following programs:

- **Energy Efficiency Programs:**
 - Home Energy Savings (Schedule 118)
 - Home Energy Reports
 - Low Income Weatherization (Schedule 114)
 - Wattsmart Business (Schedule 140)

REGULATORY AND COMPLIANCE

An external conservation advisory group of stakeholders is required to be maintained and used by the Company to advise it about conservation issues including program designs, incentive levels, third party evaluations, program marketing, and pilots. WAC 480-109-110 provides the scope of issues for the advisory group. The Company refers to its conservation advisory group as the Washington DSM Advisory Group. 2023 advisory group meetings continued to be virtual only and are listed below with meeting dates and summary of topics discussed.

In 2023, in addition to conservation/energy efficiency, the Company discussed Demand Response programs with the DSM Advisory Group. Demand Response is a resource in the CEIP filed in 2021 (and subsequent filings) in compliance with the Washington CETA. The annual report for demand response programs will be included in the CEIP progress reports due July 1 each year.

In compliance with I-937, the Company continuously reviews and updates, as appropriate, the conservation programs and portfolio to adapt to changing market conditions. Steps taken to adaptively manage the conservation programs during 2023 are included within program specific sections of this report.

Pilot projects are implemented when appropriate and are expected to be cost effective within the current or immediately subsequent biennium if the overall portfolio remains cost effective. The Company, after consultation with its DSM Advisory Group, offers pilot initiatives or offers within two programs: *Home Energy Savings* and *Wattsmart Business*. This focus is administratively efficient and uses existing program awareness—both important considerations in the Company’s rural territory. To further leverage other efforts, the Company has linked its pilot efforts with regional work supported by NEEA whenever possible. Pilot projects and 2023 results are outlined in the section, Pilot Projects.

Summary of DSM Advisory Group Meetings in 2023:⁹

⁷ The Low-Income Weatherization program is excluded in accordance with WAC 480-109-100, 10c. “A utility must exclude low-income conservation from portfolio-level cost-effectiveness calculations...”

⁸ Cost-effectiveness results include realization rates and Net-to-Gross (NTG) ratios (NTG is 1.0).

⁹ Meeting slides are available on the Clean Energy Transformation Act page in the 2023 Public Participation and Advisory Group Meeting Materials section - [Washington Clean Energy Transformation Act & Equitable Distribution of Benefits \(pacificorp.com\)](#)

Date/Meeting #	Key Topics	Updates
#1 3/30/2023	<ul style="list-style-type: none"> • System Benefits Charge Review (condition 12d) • 2022-2023 DSM Forecast indicating shortfall (conditions 3d and 3e) • Procurement: Delivery Contracts (Home Energy Savings, Wattsmart Business) • Distribution Efficiency • Preview: 7/1/2023 program changes 	<ul style="list-style-type: none"> • Home Energy Reports • Demand Response • CETA: Equity Advisory Group • CEIP: Utility Actions/Customer Benefit Indicator Metrics • Pilots • Wrap-up
#2 6/29/2023	<ul style="list-style-type: none"> • 2024-2025 Target Setting (condition 3c) (including Distribution Efficiency) • Production Efficiency – thermal (condition 12c) • 2022 Annual Report • 2022-2023 DSM Forecast indicating shortfall, adaptive management (conditions 3d, 3e) • CEIP • CEIP Progress Report – energy efficiency CBI metrics, utility actions (condition 9b) 	<ul style="list-style-type: none"> • CETA: Equity Advisory Group • Demand Response • Procurement: Delivery Contracts (Home Energy Savings, Wattsmart Business) • Wrap-up
#3 7/27/2023	<ul style="list-style-type: none"> • Distribution Efficiency • Production Efficiency – thermal and wind (condition 12c) • Draft 10-year conservation potential, revised four-year target, and two-year target (condition 3f) • DEFINE (NEI) progress: EE and Resiliency (condition 11a) • Competitive Procurement Framework – 2024-2025 • 2022-2023 DSM Forecast indicating shortfall (conditions 3d and 3e) 	<ul style="list-style-type: none"> • CEIP, Equity Advisory Group • Wrap-up
#4 8/31/2023	<ul style="list-style-type: none"> • Draft 2024-2025 savings target, including Production Efficiency (condition 3f) • Draft DSM Business Plan with program details, program budgets (2024-2025) (conditions 3f, 9b) • Preview of planned program changes, adaptive management for 2024 	<ul style="list-style-type: none"> • Demand Response – EV Managed Charging Pilot • Wrap-up

	<ul style="list-style-type: none"> • Preview of Utility Actions • 2022-2023 DSM Forecast indicating shortfall (conditions 3d and 3e) 	
#5 9/13/2023	<ul style="list-style-type: none"> • Draft 2024-2025 Biennial Conservation Plan (incl. pilots, CETA incremental costs, utility actions, draft pilots, other open items) • 2022-2023 DSM Forecast indicating shortfall (conditions 3d and 3e) 	<ul style="list-style-type: none"> • Clean Energy Implementation Plan, Equity Advisory Group • Demand Response targets planned for CEIP biennial update. • Procurement update • Wrap-up
#6 12/14/2023	<ul style="list-style-type: none"> • 2024 communications and outreach plan including Be Wattsmart Begin at Home schools' program. • 2022-2023 DSM Forecast indicating shortfall (conditions 3d and 3e) and adaptive management. • 2025 Conservation Potential Assessment (CPA) Work Plan (condition 3b) • Demand Response: NEEA End Use Load Flex Project • 2024 Planned DSM Advisory Group Meeting Topics 	<ul style="list-style-type: none"> • CETA: Equity Advisory Group • CETA: Clean Energy Implementation Plan • Demand Response • Procurement • Wrap-up

Summary of DSM filings in 2023:

November 15, 2022 – Filed Pacific Power’s 2023 ACP. This was approved at the Open Meeting on February 23, 2023. (Docket UE-210830)

April 27, 2023 – PacifiCorp filed request for an exemption from the annual requirement to file a revision to its Schedule 191, System Benefits Charge, under WAC 480-109-130(2). This was approved May 25, 2023. (Docket UE-230293)

June 1, 2023 – Washington Annual Report on Conservation Acquisition for 2022. The report provides details on program results and activities. (Docket UE-210830)

June 7, 2023 – Filed Advice 23-02 requesting approval to revise Schedule 114 to include a new measure for smart thermostats in the Low-Income Weatherization program. (Docket UE-230453)

October 19, 2023 – Revised the 2023 ACP to update program details for Home Energy Savings and Wattsmart Business programs. (Docket UE-210830)

November 1, 2023 – Filed Pacific Power’s 2024-2025 Biennial Conservation Plan. (Docket UE-230904)

In addition to the above DSM regulatory activity, there were Equity Advisory Group meetings and CETA regulatory and engagement activities in 2023.

The Company worked with its Equity Advisory Group, formed in 2021 and made up of key local community members, to help inform and advise the Company and met with them nine times in 2023. Input from the Equity Advisory Group informed updates to the utility energy efficiency actions in the Company's 2023 ACP (the same actions are also in the CEIP biennial update) and equity-related program changes.

The Company appreciates the input and guidance from its advisory groups.

PORTFOLIO OF PROGRAMS

The portfolio of Company programs (excluding Low Income Weatherization and without NEEA or NEIs) passed the PTRC with a benefit cost ratio of 1.91 and the UCT with a benefit cost ratio of 2.09. Information by program is available below followed by pilot results, utility action results, a full set of tables and cost-effectiveness.

RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

Pacific Power residential programs include Home Energy Savings, Home Energy Reports, and Low-Income Weatherization. Home Energy Savings is an acquisition-based program providing incentives or no cost installation of efficiency measures to customers while Home Energy Reports is a behavioral program that provides customers with information through mailed and/or emailed reports about energy efficiency that can be used to reduce energy use and lower utility cost. The Low-Income Weatherization program provides energy efficiency services through a partnership between the Company and local non-profit agencies to residential customers who meet the income-eligible guidelines. Home Energy Reports passes both the PTRC and UCT cost effective tests. Home Energy Savings and Low-Income Weatherization do not pass the PTRC or UCT cost effectiveness tests. For Home Energy Savings, the Company prioritized participation over reducing the measure set for cost-effectiveness.¹⁰ The portfolio (excluding Low Income Weatherization) is cost-effective.

HOME ENERGY SAVINGS

Program Description

The Home Energy Saving program is designed to provide access and incentives for more efficient products and services installed or received in the following residential dwelling types.

- New Construction Homes

¹⁰ See 2023 ACP, page 22, Docket UE-210830. "The Home Energy Savings program is not projected to be cost effective in 2022-2023. The Company prioritized improving participation (kWh savings) and equity over improving cost effectiveness at the program level while maintaining cost effectiveness at the overall portfolio level."

- Single Family Existing Homes
- Multi-family Housing Units
- Manufactured Homes

The Home Energy Savings program passed the PTRC with a benefit cost ratio of 0.74 without NEIs or 0.90 with NEIs or UCT with a benefit cost ratio of 0.90. While Home Energy Savings does not pass cost effectiveness, the portfolio level cost effective requirement is met. Overarching challenges to achieving cost effectiveness has to do with increased cost to reach named communities in rural locations, increased incentives to support customers in Highly Impacted Communities and Vulnerable Populations as well as the mix of available measures to support customers. For example, HVAC is the program’s largest savings category and the PTRC, TRC, and UCT are all less than 1.0. See Tables 5 and 6: Home Energy Savings Program Cost-Effectiveness Results.

The Home Energy Savings program is administered by a third-party implementer working with subcontractors, retailers, and trade allies who assist in delivering energy efficient products and services to customers. As the program delivery administrator, Resource Innovations, has responsibility of functional areas and associated goals including:

- Savings acquisition – achieving goals and metrics for vulnerable population customers and Highly Impacted Communities.
- Outreach – engagement through delivery channels including trade ally, retail, direct-install, and direct-to-customer.
- Marketing and communications – develop and manage content and messaging for program collateral, website, mailings, social media, retail point-of-purchase displays, and presentations.
- Project inspection and measure verification – Conduct a post inspection process for measure installation verification.
- Incentive processing – manage application submittal through payment processing focusing on complete and accurate information to provide customer payments expeditiously.
- Program design and updates – provide program design and regulatory support including measure research, technical design and analysis, review of statewide workpapers and regulatory requirements (energy code/standard changes, Regional Technical Forum (RTF), cost effectiveness inputs, administration of program and software tools, measure library updates, and tariff compliance.
- Customer satisfaction – customer satisfaction experience delivered across outreach, marketing, operations, and customer support teams.
- Continuous improvement – analyze and make recommendations to program based on new and emerging technologies, market and pricing trends, participation trends, and availability of high efficiency equipment options.

Program Performance and Major Achievements in 2023

- The Home Energy Saving Program achieved 4,994,042 kilowatt-hours (kWh) gross savings at site.
- Disbursed \$3.2 million in incentives.
- Program changes to increase participation took effect January 1, 2023:
 - Increased customer and trade ally incentives for HVAC measures.

- Expand and modify the offering for ductless heat pumps. Customers in Highly Impacted Communities will qualify for an increased incentive rate.
 - Added measures for air purifiers and engine block heater controls.
 - Expand new home incentives to offer a “pay for savings” option as well as standalone new construction measures.
 - Expand single family home window incentives.
 - Clarify eligibility requirements for electric line voltage thermostats, smart thermostats, heat pump water heaters, and ductless heat pumps.
 - Align the program’s measure offerings with the latest unit energy savings (UES) and standard protocols from the RTF.
 - Updated the list of eligible rate schedules.
- Program Changes effective July 1, 2023, included:
 - ✓ End Standalone New Construction Heat Pump Water Heater measure.
 - ✓ Split out Smart Thermostat measures into Retail and Direct Install, with a \$5 incentive increase for direct install delivery.
 - ✓ Clarify in the footnotes that incentives in the Multifamily Incentives table are available for customers on rate Schedule 19.

Adaptive Management

In coordination with Pacific Power, program administrator Resource Innovations implemented the following key initiatives in 2023 to adaptively manage the Home Energy Savings program:

1. **Incentive Increases in Response to Post Pandemic and Market Conditions** – Incentive increases from 2021 remained in place in 2023 to address market conditions associated with inflation related material and equipment costs and increased labor rates.
2. **Focus on supporting contractors.** Recruit, train, and support the Trade Ally network which has grown to >100 vendors who promote Pacific Power offerings to Residential customers. Contractors were contacted in a variety of ways to adaptively manage the needs of the program. The continued effort to focus on and support contractors resulted in most of the HVAC savings results of approximately 3,900,000 kWh in savings.
3. **Promotions for the instant validation coupon offer.** Instant point-of-purchase discounts offered on eligible equipment in select retail locations. Customer receives a coupon code that can be redeemed at checkout of participating retailers. The coupon was promoted to customers via:
 - a. Residential customers received a billing insert for smart thermostats.
 - b. Pacific Power hosted tables at community events promoting the instant coupons available both online and at participating retail locations.
 - c. Point of purchase collateral at retail locations offered instant coupons.
4. **Limited Time Offers.** Limited time offer (LTO)’s were offered to customers in partnership with the TechniArt ecommerce platforms. The offers were promoted through direct mail, email, and social media. Below is a summary of offerings in 2023:

Promotion	Description	Units	kwh Savings	Incentives
Earth Day LTO April 11-25, 2023	Offered 8 thermostat models including Nest, Emerson Sensi, and Eco bee ranging in price from \$1 to \$99.	396	101,306	\$39,600
Air Purifier LTO August 15-25, 2023	Offered an Air Purifier to customers for \$79.99 and free shipping.	119	15,038	\$3,570
Black Friday LTO November 13-27, 2023	Offered 6 thermostat models including Nest, Emerson Sensi, and Eco bee ranging in price from \$1 to \$89.99.	554	141,723	\$55,400

5. Expanded direct install programs and measures.

- a. Direct install-lighting for multi-family renters and manufactured homes. This direct install approach yielded more savings per bulb in comparison to a retail upstream buy-down approach due to program staff confirmed existing bulb types and only installed bulbs in eligible spaces as determined by the RTF (i.e., kitchen, living and dining rooms). Participants provided with targeted multi-family and manufactured home marketing collateral which cross-promoted other Pacific Power offerings. This direct-install lighting approach helped offset a portion of lost kWh savings from measures removed due to higher RTF baselines.
- b. Expanded direct-install duct sealing to single family homes. Single family homes duct sealing was completed in 326 homes which resulted in 386,141 kWh.
- c. Direct-install Thermostats: Outreached to 30 multifamily properties and management companies. No installations completed in 2023, however more participation of thermostats is set to begin installation in 2024.

Other Highlights and Updates

- **Provided information about available federal tax credits.** Customers and contractors were informed about available tax credits for Energy Star measures through the Home Energy Savings website, marketing collateral and through trade ally trainings and communications.
- **In-person retailer visits.** Field visits to participating retail locations. Visits include a review and replacement of point-of-purchase collateral and educating on Pacific Power offers. Discount lighting only available at approved retailers located in highly impacted communities.
- **Conducted retail store shelf surveys to track lighting market trends.** Report findings related to LED market adoption levels, retail pricing, and ENERGY STAR appliance purchase data. This action will not continue to 2024.
- **Participated in challenging residential new construction.** Remain in contact with Energy Raters and Builders. Provide collateral to promote the multifamily incentive. Started tracking home construction permits and provide outreach to builders which includes Central Washington Home Builders Association. Washington State Energy Codes are strict, and supply chain issues which include high cost of construction materials pose a continued challenge to the new residential construction sector.

Program Performance Compared to the 2023 ACP.

Overall, 2023 Home Energy Savings achieved 4,994 MWh compared to 2023 ACP forecast of 3,600 MWh (138% of forecast). Total incentives paid to customers were \$3.2 million which is higher than the 2023 ACP forecast plan). Factors are outlined below:

- **Non-Lighting:** non lighting was the majority of the 2023 savings. Although continued outreach to retail stores, as well as contractors several post-pandemic economic challenges persist. Including labor shortages, shipping delays, product availability, and high-interest rates.
- **Lighting:** Retail lighting is offered in only retail stores located in highly impacted communities. Pacific Power bought down the purchase price and included incentives. Upon the Regional Technical Forum sunsetting of residential retail lighting as a UES measure, the program discontinued retail lighting. 2024 Plans to support HIC and vulnerable populations with a lighting offering through community organizations.
- **Direct-Install:** 2023 direct-install measures accounted for approximately 1,820,000 kWh in savings. Direct-install measures are installed by various partners including partnerships with Home Energy Experts and the Sustainable Living Center based in Walla Walla.
- **New Single-Family Homes and Manufactured Homes:** Building material prices fell by the end of 2023, from historical inflation according to the National Association of Home Builders. Mortgage rates and labor shortages continue to cause new home prices to increase, causing a decline in new home construction in 2023.
- **Multifamily New Construction:** No projects participated in the new construction offer in 2023 due to the Washington energy code that requires savings verification through energy modeling. This is cost prohibitive because the incentives do not cover associated modeling and consulting fees. Customers and contractors opted for more streamlined, less costly prescriptive options.

Additional information on the program administration can be found on the Company's website under the Program administration section:

<https://www.pacificorp.com/environment/demand-side-management.html>

Direct Link to Home Energy Savings program administration:

<https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/environment/dsm/washington/Washington Program Administration Home Energy Savings 23.pdf>

HOME ENERGY REPORTS

Program Description

The Home Energy Reports program is a behavioral program designed to decrease participant energy usage by providing comparative energy usage data for similar homes located in the same geographical area. Additionally, the report provides the participant with tips to decrease their energy usage.

The Home Energy Reports program passed the PTRC with a benefit cost ratio of 1.63 and the UCT with a benefit cost ratio of 1.48 for 2023. See Table 4: 2023 Home Energy Reports Cost-Effectiveness Results.

Program Performance and Major Achievements in 2023

- Total pre-evaluation savings for 2023 was 4,466,880 kWh savings at customer site.
- Participants report being satisfied with the programs, which indicates successful program design.
- In November 2023 Home Energy Reports refilled 10,650 customers into the program treatment group to address attrition associated with participant relocation over the past two years. This refill resulted in the program reaching current capacity of available customer participants and is considered a distinct wave that is being measured against a comparable control group. Without the ability to refill the program back to original levels, an impact on savings potential is expected to occur.

Program Performance Compared to the 2023 ACP

- Reported kWh savings for 2023 is 4,446,880, 26% greater than plan. Evaluated savings will be reported in the 2022-2023 Biennial Conservation Report.
- Expenditures for the program were \$435,105, 6% less than estimated.

Additional information on the program administration can be found on the Company's website under the Program administration section:

<https://www.pacificorp.com/environment/demand-side-management.html>

Direct Link to Home Energy Reporting (HER) program administration:

<https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/environment/dsm/washington/Washington Program Administration Home Energy Reports 23.pdf>

LOW INCOME WEATHERIZATION

Program Description

The Low-Income Weatherization program provides energy efficiency services through a partnership between the Company and local non-profit agencies to residential customers who meet the income-eligible guidelines. Services are provided at no cost to the program participants.

These agencies include Blue Mountain Action Council located in Walla Walla, Northwest Community Action Center in Toppenish, Opportunities Industrialization Center of Washington in Yakima, and Yakama Nation Housing Authority – a tribally chartered public corporation of the Yakama Nation and its tribally-designated housing entity.

The Low-Income Program did not pass the PTRC with a benefit cost ratio of 0.68 for 2023 (with NEIs) and 0.17 benefit cost ratio (without NEIs). See Table 4: 2023 Low Income Weatherization Program Cost-Effectiveness Results.

Program Performance and Major Achievements in 2023

- In 2023 the program achieved savings of 154,807 kWh at customer site with 95 homes served.
- One multi-family home, a total of 4 units, received weatherization services.
- The following program change was approved by Washington Utilities and Transportation Commission and effective July 14, 2023:
 - Addition of smart thermostat to energy efficient measures list. Smart thermostat can often save more energy than timed thermostat by adjusting temperature when the occupant is not home. Some customers find that mobile app programming is easier than the controls on the timed thermostat device. In addition, smart thermostats will enable homeowners to participate in potential future demand response programs for additional savings and incentives.

Program Performance Compared to the 2023 ACP

The annual energy savings 2023 was 154,807 kWh vs. 130,100 kWh planned. Annual energy savings per home was 1,630 kWh in 2023 vs. 1,301 in the plan. Ninety-five homes served in 2023 vs 100 in the plan. Actual energy savings exceeded the projections in the plan due the number of ductless heat pump measures installed.

Additional information on the program administration can be found on the Company's website under the Program administration section:

<https://www.pacificorp.com/environment/demand-side-management.html>

Direct Link to Low Income Weatherization program administration:

<https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/environment/dsm/washington/Washington Program Administration Low Income 23.pdf>

NON-RESIDENTIAL ENERGY EFFICIENCY PROGRAM

WATTSMART BUSINESS

Program Description

The commercial, industrial, and irrigation energy efficiency program is consolidated into a Non-Residential Energy Efficiency program, Schedule A-140.11 The Non-Residential Energy Efficiency program is promoted to the company's customers as Wattsmart Business.

Wattsmart Business is intended to influence new and existing non-residential customers to increase the efficiency of electricity usage through the installation of energy efficiency measures and adoption of improved energy management protocols. Qualifying measures include those which, when implemented in an eligible facility, produce verifiable electric energy efficiency improvements.

Incentives and services offered through Wattsmart Business include:

- Typical upgrades included in Incentive Lists: Incentives for listed lighting, HVAC, irrigation, compressed air, and other equipment upgrades that increase electrical energy efficiency and exceed energy code requirements.
- Custom analysis: Offers energy analysis studies, services, and incentives for more complex projects.
- Energy Management: Provides expert facility and process analysis and incentives to help lower energy costs by optimizing customer's energy use.
- Enhanced incentives for small businesses: Provide enhanced incentives for lighting upgrades installed by an approved Wattsmart Small Business Vendor at an eligible existing small business customer facility. Enhanced incentives are also available for non-lighting upgrades installed by an approved Wattsmart Business Vendor at an eligible existing small business customer facility. **As part of Pacific Power's CEIP utility actions, to increase Named Community customer participation, higher incentives are available for small businesses located in a Highly Impacted Community.**
- Midstream/Lighting Instant Incentive: Provides instant, point-of-purchase incentive for qualifying LED lighting sold through participating distributors. Customers purchasing qualifying LED lighting from non-participating suppliers can apply for incentives after purchase.
- Energy Project Manager Co-funding: Available to customers who commit to an annual goal of completing energy projects resulting in at least 1,000,000 kWh/year in energy savings.

¹¹ Current program detail (in addition to the program tariff, Schedule 140) maintained on the Company website is available at https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/savings-energy-choices/wattsmart-business/washington/WA_wattsmartBusiness_Incentive_tables_information.pdf.

Current program detail on Midstream/Lighting Instant Incentives is available at

[WA_wattsmartBusiness_Lighting_Instant_Incentives_1-1-2024.pdf \(pacificpower.net\)](#).

Current program detail on Small Business Non-lighting incentives is available at [ExhibitA-3_Changes_to_WA_NonLighting_Incentive_Offer_1-2023.pdf \(pacificpower.net\)](#).

- **Project Financing:** PacifiCorp is teamed with National Energy Improvement Fund, an energy efficiency project financing firm, to provide customers with access to third party financing options for instances where funds for project implementation are not available from within the customer’s organization.

The Wattsmart Business program passed the PTRC with a benefit cost ratio of 3.24 and the UCT with a benefit cost ratio of 2.90 (with NEIs) and PTRC of 2.78 and UCT of 2.90 (without NEIs). See Table 4: Benefit/Cost Ratios by Portfolio Type.

Program Performance and Major Achievements in 2023

- In 2023, the program achieved 36,197,392 kWh gross savings at customer site. This is significantly higher than 2022 results (26,850,318 kWh at customer site).
- Disbursed incentives of \$6.9 million.
- Program changes effective January 1, 2023, were intended to:
 - Further adaptively manage the program in response to inflation, supply chain and labor shortage challenges caused by the pandemic that are impacting program participation levels.
 - Increase participation by increasing incentives for most lighting measures.
 - **Update the small business offer to increase participation from small businesses and Named Community small businesses in alignment with the Clean Energy Transformation Act by expanding the small business offerings to include enhanced incentives for non-lighting measures.**
 - Expand the existing offerings for Advanced Rooftop Unit Controls (ARC) to include equipment that is five tons or less.
 - Align the program’s measure offerings and incentives with the latest UES and Standard Protocols from the RTF.
 - Align the program with the latest third-party specifications such as Consortium for Energy Efficiency (CEE) and Energy Star.
 - Update the list of eligible rate schedules and make other minor administrative changes.
- Program changes effective July 1, 2023, were intended to:
 - Align the program with the new Washington State Energy Code (WSEC-C 2021) which was expected to become effective July 1, 2023.¹²
 - Align the program with the latest third-party specifications such as CEE and Energy Star, and
 - Make other minor administrative changes.

Adaptive Management

The Company made substantial changes through an adaptive management approach and attempted to “leave no stone unturned” in terms of effort to achieve energy savings and increase Named Community business customer participation.

¹² Implementation of WSEC 2021 was delayed; it became effective March 15, 2024.

Increased Customer Incentives. Increased customer incentives effective in January 2023 for lighting. Lighting project costs increased due to inflation and other factors related to the lingering effects of the COVID-19 pandemic and an incentive increase was needed to bring the payback for more projects closer to one to two years and increase participation. Lighting retrofit projects are particularly sensitive to price increases because they are sold proactively to the customer as an elective project that needs to be justified based on a quick payback.

Increased Vendor Incentives. As a key part of the adaptive management strategy to increase participation, vendor incentives introduced in 2021 for lighting projects continued into 2023 at \$0.03/kWh for typical and midstream and were increased to \$0.05/kWh in July 2023, with maximum per vendor location project caps. Participating vendors were eligible for up to \$20K per vendor location. Vendor incentives for Advanced Networked Lighting Controls (ANLC) were offered for 2023 starting at \$30 per fixture and increasing to \$50 in July 2023. Vendor incentives available for qualifying ARC upgrade at \$50 per eligible ARC installed with a maximum of \$20,000 per single vendor. Lastly, vendor incentives were added for multiple qualifying non-lighting measures for Small Business Customers.

Vendor incentives kept vendors focused on proposing projects in Pacific Power's Washington service area. Vendor incentives piqued an interest from out-of-state lighting vendors to seek opportunities in the Washington service area. The vendor incentives allowed funds to help offset their travel costs, encouraging the vendors to travel to the Company's Washington service area. Vendors recognized the value of proposing lighting controls for additional savings opportunities to obtain greater vendor incentives. Vendors successfully re-visited customers that they proposed projects to in the past, and the additional vendor incentives gave them the ability to reduce their projects costs which helped move projects forward. Total vendor incentives paid by category are listed below:

- Lighting Vendor Incentives:
 - Lighting retrofits and new construction (listed incentives) - \$79,800 vendor incentives and 4,800,000 in kWh savings (55 projects).
 - Lighting Instant Incentive - \$4,200 vendor incentives and 127,000 in kWh savings (12 projects).
 - Small Business Lighting - \$101K vendor incentives and 4,900,000 in kWh savings (220 projects).
- Advanced Networked Lighting Controls Vendor Incentives
 - Six projects, \$12,000 in vendor incentives
- Non-Lighting Vendor Incentives:
 - Listed Incentive, one project, \$100 vendor incentive and 18,000 kWh savings.
 - Small Business Non-Lighting, one project, \$400 vendor incentive and 6,000 kWh savings.

Increased Small Business Lighting Participation. Adaptively managed this offer with the program changes and CETA Utility Actions to increase small business participation in Named Communities. The result was the Small Business Lighting offer had good participation in 2023 with 251 projects completed achieving 157% of plan with a total of 5,502,463 kWh. Overall, nine approved vendors participated in 2023, including two new vendors. Continued the postcard campaign focusing on hard-to-reach small business customers. Small Business Vendors who signed a non-disclosure agreement were given the option to receive customer lists (containing business name, address, and phone number only) allowing them to connect with customers who received a postcard from Pacific Power containing an introduction to the program

and an approved vendor. In addition, co-branded shirts are made available to approved small business vendors to help promote vendor credibility with small business customers. The outreach team sends recurring emails to participating small business vendors reminding them that they are available for joint customer visits (and to communicate with the customer in Spanish if needed). The program also offered co-branded leave-behind postcards to share with customers that included a QR Code for information in English and Spanish.

Targeted Refrigeration Tune-ups. In 2023, equipment shortages and capital constraints due to ongoing supply chain issues continued to negatively influence project implementation. Building on the success of the 2022 refrigeration energy management efforts, the team adaptively managed by increasing outreach to tree fruit industry facilities. Pacific Power staff and Cascade Energy, an implementer for the custom offering, completed six refrigeration “find and fix” opportunities that identified quick, low-cost controls setpoints changes that yielded large energy savings with minimum or no impact on fruit quality. These six projects resulted in 5,282,200 kWh. The success of these projects and the willingness of these customers to implement the recommendations, influenced planning for a training effort for refrigeration operators within the tree fruit industry. (The training took place in January 2024.)

Application-specific Targeted Outreach. Pacific Power staff and Cascade Energy’s team implemented a targeted adaptive management strategy to focus outreach specifically on common refrigeration system capital upgrade opportunities including evaporator fan VFDs, condenser fan VFDs, and carbon dioxide scrubbers that were often overlooked by customers. The results were eight projects totaling 7,800,000 kWh.

Additional Highlights

- **Program-Specific Field Outreach including Diversity, Equity, Inclusion Efforts**
 - The Diversity & Community Outreach Coordinator focused on in-person outreach to named community/Highly Impacted Community customers and vendors. A second Wattsmart Business bilingual outreach specialist was added to assist with named community/highly impacted community outreach.
 - Reached out to non-participating vendors and minority-owned vendors to share program opportunities.
 - Continued efforts to promote the lighting instant incentive offer to distributors by offering to meet in person, educate staff, and assist with program submittals.
 - Leveraged relationships with vendors from outlying territories and had program Outreach Specialists join them during project presentations to customers. This resulted in multiple large lighting projects.
 - Encouraged two active Vendors to complete NEEA’s NXT Level courses, receive their training certification, and reach Premium Vendor status.
 - Developed a Spanish Earned Media Campaign through five Spanish Radio and two TV interviews to assist Spanish Small Business customers becoming informed and participate in the energy efficiency programs. Outreach specialists worked with local television and radio stations in Yakima County and Walla Walla to promote Pacific Power’s Spanish Earned Media Campaign.
 - More program materials were translated from English into Spanish.

- Followed up on past prospects that have not moved forward with their efficiency upgrade opportunities.
- Performed joint presentations with vendors and customers to help customers understand benefits and program opportunities.
- Program outreach staff succeeded in cultivating one-on-one relationships with vendors of irrigation equipment, adaptive refrigeration controls, and fast acting doors through repeat calls and visits.
- Reached out to over 300 customers within highly impacted communities and 150 medium- to - large customers throughout the region.
- Attended monthly Central Washington Hispanic Chamber of Commerce Meet and Greets and City of Yakima Sustainability Committee Meetings including Taco Fest in Yakima on May 6.
- One outreach specialist is now on the board and attends the monthly meetings for the Central Washington Hispanic Chamber of Commerce Board of Directors.
- Attended Walla Walla Sustainability Committee meetings (occurs every two months)
- Helped a local Filipino Hall, recently added to the National Register of Historic Places, upgrade their lights.
- **Clean Buildings Performance Standard** – Please see the Pilots section for additional updates.
- **Vendor eLearning Platform** - The eLearning Platform has a variety of courses for participating vendors that cover available incentives, measure requirements, and resources for applying. Added two new Wattsmart e-learning courses: “Identifying Efficiency Opportunities – Wattsmart Business” and “Small Business Lighting” (English and Spanish).

Program Performance Compared to the 2023 ACP

Overall, 2023 Wattsmart Business energy savings results were 88% of plan. Measure categories with the highest energy savings for 2023 in the 2023 ACP were Lighting, Refrigeration, Energy Management and Compressed Air. Lighting savings results in 2023 were 89% of plan, Refrigeration savings were 184% of plan, Energy Management savings was 71% of plan and Compressed Air was 13% of plan.

Total Wattsmart Business incentives were 76% of plan and incentives per kWh in 2023 were \$0.19/kWh on average compared to \$0.22/kWh in the plan. The main driver of the difference was higher refrigeration savings in the actual 2023 results. The refrigeration savings in 2023 had a lower incentive/kWh on average due to more project incentives capping at 70% percent of project costs or the one-year payback cap. When the incentives hit either of these project incentive caps, the incentive per kWh for those projects is lower.

In addition to the general factors described in the executive summary, contributing factors are outlined below.

- Some customers, including building owners with tenant vacancies, were wary about investing capital funds during an uncertain economic environment that has followed the pandemic.
- Staff shortages added pressure to already-scarce time availability for maintenance people and management. Supply chain issues delayed implementation and some projects in the forecast for 2023 slipped to 2024, including some significant projects.
- Customers had trouble not only with supply chain delays, but with cost increases caused by inflation.

- Vendors experienced labor shortages and supply chain issues which limited their ability to sell and install upgrades.
- Tree Fruit industry profits were negatively affected by a very large apple harvest with less desirable quality in 2023. Much of the apple harvest was directed to secondary markets such as juice and sauces which yielded less profits than typical retail market environments or foreign contracts. This has resulted in budget restrictions for capital improvements including equipment upgrades and building expansion.
- Program outreach activities with large customers were mostly done in-person and at similar levels to 2022. Due to more customer familiarity with virtual meetings because of the pandemic, program staff were able to rely on virtual follow-up meetings which lessens the impact on customer's time.

Below are project-specific examples from 2023.

- Completion of six significant projects totaling approximately 3,000,000 kWh slipped from 2023 to 2024 due to delays and extended lead times for equipment.
- Four significant projects with estimated savings totaling 2,800,000 kWh were on hold in 2023 due to higher project costs caused by inflation and a lack of funds.

In addition, there were seven significant conservation projects canceled or delayed in 2023 that were beyond the Company's control and could not have been reasonably anticipated or ameliorated with estimated savings that totaled approximately 7,700,000 kWh. Reasons cited included plant shutdown for approximately six months in 2023, market conditions, and ownership turnover.

Additional information on the program administration can be found on the Company's website under the Program administration section:

<https://www.pacificorp.com/environment/demand-side-management.html>

Direct Link to Wattsmart Business program administration:¹³
https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/environment/dsm/washington/Washington_Program_Administration_NonResidential_23.pdf

The current Wattsmart Business overview is available at [WA wattsmartBusiness Overview.pdf \(pacificpower.net\)](#) and the brochure is available in both English and Spanish at [WA WattsmartBusiness Brochure.pdf \(pacificpower.net\)](#) (English) and [WA wattsmartBusiness Brochure Spanish.pdf \(pacificpower.net\)](#).

The current small business lighting handout is available in both English and Spanish at [WA wattsmartSmallBusiness Lighting Handout.pdf \(pacificpower.net\)](#) (English) and [WA_wattsmartSmallBusiness_Lighting_Handout_Spanish.pdf \(pacificpower.net\)](#)

DISTRIBUTION EFFICIENCY

Distribution efficiency is one of the six types of efficiency in the WAC 480-10-100 Energy Efficiency Resource Standard.

¹³ The Wattsmart Business program is administered through a process that allows for program changes after any stakeholder comments are addressed. After consultation with Commission staff on the program changes, they are posted to the program website and become effective 45 days thereafter.

There was one distribution efficiency project that was forecast to be included in 2023 DSM Annual Report but was superseded due to increased circuit loading:

- Grandview Substation feeder 5Y303
 - Original project scope:
 - Replace existing capacitor banks with switched capacitor banks and install three additional switched capacitor banks.
 - The initial annual energy savings estimate was 244 MWh.
 - Project Update:
 - Superseded due to overload concerns on Grandview feeders.
 - New project approved and in design process, expected in service date is Q1 2025.
 - New project will add new circuit breaker in Sulphur Creek Substation and new feeder that will move customers from Grandview feeders to this new feeder to reduce loading on Grandview feeders.
 - This new project was required to continue providing reliable safe electric service to customers in Grandview and the distribution efficiency project was superseded.

There is one project in progress that may be completed in time for energy savings reporting in the 2024 DSM Annual Report:

- Wiley Substation feeder 5Y164 Reconductor and Voltage Optimization
 - Replace 3,400 feet of #6 steel mainline with 4/0 AAC.
 - Install voltage regulator bank.
 - Project is designed, approved, and currently under construction. Construction expected to be complete July 30, 2024. Total estimated cost \$284,104.
 - The initial annual energy savings estimate was 227 MWh. This work will be revisited once the improvements are complete.

Distribution Efficiency Performance Compared to the 2023 ACP

The estimated annual energy savings in the 2023 ACP for 2023 for Distribution Efficiency was 83,000 kWh (at the generator). Although there is a project in progress, there is no Distribution Efficiency energy savings reported in 2023.

PRODUCTION EFFICIENCY

Production efficiency is one of the six types of efficiency in the WAC 480-10-100 Energy Efficiency Resource Standard.

Projects Completed

The Hermiston generating facility was identified as having production efficiency opportunities in lighting by upgrading to LED fixtures. The LED fixtures would not only reduce power consumption, but they also have additional savings utilizing occupancy and light sensing to power on only when needed.

The following production efficiency lighting improvements were completed at the Hermiston generating facility during 2023.

- Energy savings for the following lighting areas is 133,546 kWh/yr¹⁴
 - Unit 1 and Unit 2 Accessory Modules
 - Unit 1 and Unit 2 Powerblock and HRSG areas
 - Unit 1 and Unit 2 PEECC buildings
 - Switchyard floodlights
 - Raw Water Building
 - Note this energy savings is not included in the portfolio cost effectiveness analysis but is reported as company conservation against the Energy Independence Act Target.
- Total cost was \$36,336.
 - Note in accordance with Docket UE-210830 Order 01 Attachment A, item 12c, recovery of costs associated with distribution and production efficiency initiatives are not funded through the Electric Conservation Tariff Rider because these programs are not customer conservation initiatives. They are company conservation programs. As such these costs are recovered in the general rate making process over time.

Projects in Progress

The Hermiston generation plant will continue to upgrade other lighting fixture as time allows with the intent to be 100% converted by 2024.

Production Efficiency Performance Compared to the 2023 ACP

There was no Production Efficiency savings forecast in the 2023 ACP, and the annual savings reported in 2023 is 133,546 kWh.

¹⁴ Note this value is based on the old vs new fixture power consumption and the following assumptions: One, the old fixtures were always on which was noted during the 2021 site inspection report. Two, the new fixtures only utilize the light sensor which will turn off the fixture on average 12 hours of a day and doesn't account for occupancy efficiencies.

NORTHWEST ENERGY EFFICIENCY ALLIANCE

Description

NEEA is a non-profit corporation that works collaboratively with its funders and other strategic market partners to accelerate the innovation and adoption of energy-efficient products, services, and practices. NEEA is supported by BPA, Energy Trust of Oregon, and more than 100 Northwest utilities, including Pacific Power.

Program performance for 2023 is reported based on NEEA's results for Pacific Power of 3,416 MWh (at site). Consistent with the reporting convention approved in Docket UE-132047, the savings represent Pacific Power's portion of Total Regional Savings less the Company's local program savings. For further information on NEEA's work in collaboration with its funding utilities and other market actors in 2023, refer to Appendix C.

In 2023, the Company had representatives on the Regional Portfolio Advisory Committee (RPAC), the Integrated Systems and Products coordinating committees and committees for special projects (Strategic Energy Management, Commercial Building Stock Assessment, End Use Load Research and Residential Building Stock Assessment).

Program Performance Compared to the 2023 ACP

NEEA savings for 2023 is 93% of plan. Expenditures for NEEA in 2023 were 109% of plan. Expenditures for the combination of NEEA, end use load research and RTF funding for 2023 are 105% of plan.

PILOT PROJECTS

The Company offers pilot projects to residential and nonresidential sectors. This section briefly describes the pilots underway in the 2022-2023 biennial period and key activities that occurred in 2023.

On-Bill Financing for owned manufactured homes located on rented space and homes on tribal trust lands in addition to current offer for owned homes

- **Purpose:** Reduce upfront cost barrier to participation in residential energy efficiency programs by offering on-bill financing. This offer further complements the third-party financing in residential and business customers currently being offered Craft3. This additional offer became available when Craft3 was awarded a grant from the Energy Revolving Loan Fund administered by the Washington State Department of Commerce.
- **Costs:** No additional start-up costs or per application costs. Pacific Power internal on-going loan administration costs will also be included as a program expense and recovered through the tariff rider. Pacific Power is not loaning its own funds and will not be receiving any interest income from loan payments.

- **Size:** The Company expects between 60-100 completed loans over the two-year period.
- **History:** Builds on work from pilot in prior biennial period.
- **Implementation:** Build upon current experience utilizing Craft3, to operate as funder and loan administrator for on-bill financing for residential customers who participate in the Home Energy Savings program. Financing will be available for the net (after incentives) costs of equipment eligible for Home Energy Savings incentives.
- **Marketing:** Home must be in good condition and built after June 15, 1976 (the first Housing and Urban Development standard). The offer will be marketed primarily through installing contractors and the program administrator. Craft3 will work jointly to identify and train contractors. Marketing and screening will be in place to help ensure customers eligible for low-income services are directed to the community action agencies instead of participating in the loan offer. Individual loan offers are subject to both customer and home park screening by Craft3.
- **2023 activity:** Home Energy Savings saw a year-over-year increase of customers taking advantage of Craft3 loans which was achieved through a variety of techniques. In 2023, Craft3 financed more than 204 loan applications for Pacific Power Home Energy Savings participants and provided \$3.1 million in financing. This increase is a direct result of the following efforts:
 - Promoted Craft3's low interest loans to trade allies as additional option for trade allies to influence customers to choose products with higher efficiency.
 - Provided opportunities for Craft3 to present to, and interact with, trade allies at Pacific Power hosted trade ally events.
 - Provided marketing collateral to trade allies to share with customers.
 - Featured Craft3 in the April Trade Ally Newsletter featuring a Critical Repairs focus.
 - Highlighting financing availability on customer and trade ally eblasts
 - Highlighting financing in a tri-fold brochure distributed to CBO Partners
 - Updated website to make financing option more accessible.
 - Updated bill inserts to Spanish language to reach more customers.
 - Highlighting financing availability on customer and trade ally eblasts

Manufactured Homes Targeted Delivery

- **Purpose:** Increase installation of energy efficiency measures within new and existing manufactured homes.
- **Costs:** Costs are included in the existing program delivery and incentive budgets for the biennial period.
- **Size:** The Program Administrator expects 500-1,000 manufactured home projects over the two-year period.
- **History:** Builds on work from pilot in prior biennial period.
- **Implementation:** Build awareness and utilization of available customer incentives for manufactured home measures, including new manufactured homes and existing manufactured home duct sealing, direct install lighting, heat pumps, evaporative coolers, central air, windows, and insulation.
- **Marketing:** Utilize geo-targeted analysis, marketing, outreach, and lead sharing methods to optimally reach customers, including customers in underserved areas or non-participating areas.
- **2023 activity:** Conducted outreach to all Manufactured Home focused Trade Allies. Continued to partner with Energy Works NW to identify potential new construction homes that are eligible for the program. Field staff held program meeting updates with all Manufactured Home dealers in

the program territory. The team also updated all existing marketing materials to reflect 2023 program changes, including updated rebate pads. In addition, the field staff helped to identify other program opportunities and incentives while conducting inspections and duct sealing audits.

- In 2023, six manufactured new homes were incentivized accounting for nearly 14,000 kWh, and outreach efforts have led to 2024 pipeline projects as well.
- Heat pump measures accounted for approximately 520,000 kWh in Manufactured homes. Savings were also accrued by way of smart thermostats, LED lighting, water heating, appliances, and windows.
- In 2023, more than 1,000 customers living in manufactured homes in Highly Impacted Communities received no cost duct sealing installation.

CTA-2045 enabled heat pumps for space heating

- **Purpose:** Increase deployment of CTA-2045 enabled heat pumps. This new approach to demand response greatly reduces the cost of controlling space heaters, while at the same time allowing daily control and improving the customer experience. The prior pilot would be continued to increase stocking, sales, and incentive applications for heat pumps. In 2022-2023, the pilot will also focus on increasing sales of CTA-2045 equipped units by providing an additional incentive of \$100 for each heat pump space heating unit purchased with CTA-2045 capability.
- **Costs:** Costs are included in the program delivery and incentive budgets for the biennial period.
- **Size:** 10 to 20 units.
- **History:** Builds on work from pilot in prior biennial period
- **Implementation:** Home Energy Savings program team will build new relationships with heat pump space heating manufacturers and distributors to increase availability of models and push sales of CTA 2045 equipped units.
- **Marketing:** Continue sales training and enhanced outreach to manufacturers with existing relationships. Promote the additional incentive for CTA-2045 ready models through direct outreach email and phone communications. Create cobranded materials with manufacturers to increase visibility.
- **2022 Update:** The Company and its program implementer initially researched and created the CTA-2045 incentives back in 2019. At the time, HB1444 in WA required that CTA-2045 capability be incorporated into all new heat pump water heaters starting 1/1/2021. The HPWH CTA-2045 incentive was to increase early adoption of equipment with this technology. For the heat pump (space heating) measure, the Company wanted to promote the demand response capability in other potential equipment as well. It wasn't clear at the time if/how CTA-2045 enablement would apply outside of water heating, so the Company wanted to get ahead of potential adoption. However, it now seems unlikely that demand response will be managed through CTA-2045 ports for space heating. Given that, this pilot will no longer be pursued and the CTA-2045 incentive for heat pumps will be removed from Home Energy Savings. The Company is exploring including electric water heating devices, which may or may not be CTA-2045 enabled, for a future residential demand response program.
- **2023 Update:** Given the lack of market-ready options, the Company is shifting focus to support NEEA's activity in this area.

Geo-Targeted Energy Efficiency

- **Purpose:** Focus on increasing participation in specific area(s) where additional value such as preventing or deferring possible infrastructure investments has been identified. This builds up work in targeted areas identified in prior periods which, while successful, did not eliminate or defer the traditional construction solution. Two circuits (5Y164 and 5Y380) in the Yakima area with summer constraints (approximately 2 MW for each circuit) and multi-year construction lead time have been identified and in 2022 program implementers will begin targeting efficiency installations on these circuits.
- **Costs:** Costs are included in the existing program delivery and incentive budgets for the biennial period.
- **Size:** to be determined.
- **History:** Concept of pilot is a continuation of prior work, but any target areas defined for this biennial period would be new.
- **Implementation:** Determine if there are areas appropriate to target. Identify the scope, timing, and characteristics of the need for these areas. Obtain customer lists for these areas.
- **Marketing:** Increase frequency of existing program incentives and outreach tactics including direct mail/email, trade ally engagement and personal selling.
- **2023 activity:** There were promotions to customers on the targeted feeders in March and August of 2023. Approximately 1,900 residential customers on the specified feeders were sent a postcard and 1,250 an email; the promotion in March focused on smart thermostats and the August promotion focused on heat pumps. On the business side, approximately 118 customers received a postcard and 61 received an email encouraging them to sign up for a free facility assessment. In 2023, residential customers on the targeted feeders completed 69 Home Energy Savings projects totaling 73,666 kWh (15.1 KW). One business customer on the targeted feeders completed a Wattsmart Business lighting project totaling 70,967 kWh (6.8 KW). In addition, two homes on the targeted feeders received services from the Low-Income Weatherization program with savings totaling 2,602 kWh/yr.

Non-Residential Lighting Controls

- **Purpose:** Increase installation of lighting controls as part of business customer lighting retrofit projects.
- **Costs:** Included in existing program delivery budgets.
- **Size:** Up to 15 projects.
- **History:** Continuation of pilot from the last biennial period as part of an overall effort in the region to build momentum and market support for advanced lighting controls.
- **Implementation:** Leverage NEEA's Luminaire Level Lighting Control (LLLC) initiative including vendor training support. Customer incentives are structured so that lighting upgrades combined with advanced networked lighting controls provide the highest incentive for lighting projects. Continue and evolve vendor incentives for lighting controls.
- **Marketing:** NXT Level training and good/better/best communications, continuing and improving lighting controls training for vendors, and providing outreach coordinator feedback to approved Wattsmart Business Vendors on lighting control opportunities in their projects.
 - **Vendor Incentive:** In 2022, Pacific Power continued the \$/fixture Vendor Incentive for advanced networked lighting controls that was promoted and offered since 2019. Contractors/vendors face up-front costs of time and money to obtain manufacturer

certification(s) to install advanced lighting controls products. A vendor incentive (focused on the vendor's first three projects) along with the vendor support provided by the program is intended to boost participation. In 2022, vendors received the lighting controls vendor incentive for each of the four projects with interior Advanced Networked Lighting Controls.

- Energy savings results: Lighting controls were present in approximately 80 completed projects; savings associated with controls totaled approximately 4,500,000 kWh per year. There were 10 projects with Advanced Exterior Dimming, and four projects with interior Advanced Networked Lighting Controls.

- **2023 Activity:**

- Continued to encourage savvy vendors (including from out-of-state) that promote lighting controls to participate in the program.
- During meetings with customers on vendors on their projects and pre-inspections, the Outreach Team recommends the use of lighting controls opportunities where applicable.
- Partnered with NEEA to host a training focused on LLLC at the Pacific Power Operations Office in Yakima, WA. This was a two-part event with a two-hour, in-person training on September 19, 2023, followed up by a two-hour virtual webinar on September 26, 2023. CEU's for Washington (and Idaho) were available for the 17 attendees. Integrated into the in-person session was hands-on learning with products and control commissioning. Three Washington State Lighting Manufacturer Representatives that are in partnership with NEEA's initiative were in attendance and conducted live demonstrations with their control products and to answer questions. Lighting brands included Acuity, Cooper & Lutron and all traveled from outside the territory to participate. Attendees were broken out into small groups and then moved from station to station. The event was highly successful with attendees ranking the overall value of the training a 6.5 out of 7, all evaluations had a score of either 6 or 7.
- Outreach Team sent personal ANLC incentive offer reminder emails to vendors and continued to encourage them to consider lighting controls during one-on-one meetings.
- Highlighted lighting controls benefits during presentations at the March 2023 in-person vendor trainings.
- Vendor incentive: Vendor incentives for ANLC were offered once again for 2023 starting at \$30 per fixture and increasing to \$50 in July 2023. As mentioned in the adaptive management section above, there were six projects completed in 2023 and a total of \$12,000 in ANLC vendor incentives paid.
- Results: Five Interior Advanced Networked Lighting Controls (ANLC) projects were completed in 2023, with two of them installed by a local premium vendor, resulting in an estimated savings of 1,600,000 kWh. There were also three projects with Advanced Exterior Dimming controls. Lighting controls were present in approximately 80 completed projects; savings associated with controls totaled approximately 2,300,000 kWh per year.

Clean Buildings Accelerator

- **Purpose:** Help commercial building owners who must comply with the Clean Buildings law (House Bill 1257) get a jump start while also identifying savings opportunities and achieving savings results (reported in the Wattsmart Business program).

- **Costs:** Costs are included in the Wattsmart Business program delivery and incentive budgets for the biennial period.
- **Size:** Up to 40 commercial buildings over 50,000 square feet (approximately 10-20 buildings per year in 2022 and 2023).
- **History:** New pilot
- **Implementation:** Leverage Puget Sound Energy development work to offer similar services for commercial buildings located in Pacific Power’s service area. Outreach for the offer will include customers in Highly Impacted Communities and other customers who may lack resources to get started with Clean Buildings. Services and incentives will be offered as part of the Wattsmart Business Strategic Energy Management offer. Services include:
 - Coffee chats to provide general information and enroll customers.
 - Sprints including monthly virtual workshops for four months.
 - Virtual energy scans to identify energy savings opportunities.
 - Cohort elevate workshops (quarterly for graduates)
 - Coaching calls
 - Energy Star Portfolio Manager training

- **2022 Activity:**
 - The first cohort includes nine businesses/organizations with 41 buildings. Of these, five businesses/organizations have buildings located in a Highly Impacted Community.
 - For the first cohort, provided four monthly workshops for the “sprint” from May through August 2022, and coaching calls and virtual energy scans. Some participants have a mix of buildings over and under 50,000 square feet. While the focus of this pilot is on buildings over 50,000 square feet, energy scans can be completed for smaller buildings if requested. Although there was 1,000,000 kWh in energy management savings projected for 2022 in the 2022-2023 DSM Business plan, there was no energy management savings reported in 2022.
 - Began recruiting and hosted “coffee chats” (November 1, 2022, December 7, 2022 plus one on January 12, 2023) for a second cohort that will begin in early 2023. Recruiting included a direct mail (834 letters sent) and email (306 sent) in October 2022 to larger customers likely to have commercial buildings over 50,000 square feet.

- **2023 Activity:**
 - The first cohort includes nine businesses/organizations with 41 buildings. Of these, five businesses/organizations have buildings located in a Highly Impacted Community.
 - For the first cohort, provided two elevation seminars in 2023 and coaching calls and virtual energy scans. Some participants have a mix of buildings over and under 50,000 square feet. While the focus of this pilot is on buildings over 50,000 square feet, energy scans can be completed for smaller buildings if requested.
 - Continued recruiting for a second cohort that began in January 2023. The second cohort includes 6 businesses/organizations with 6 buildings. Of the six buildings, four are in Highly Impacted Communities (two with an Environmental Health Disparity Score of 10

and two with a score of 9) and two are in census tracts with an Environmental Health Disparity score of 8 (just below the threshold to be a Highly Impacted Community).

- Hosted the four workshops in the “sprint” series for cohort 2 and one elevation seminar in 2023.
- Summary of Clean Buildings Accelerator coffee chats, workshops, and elevation seminars in 2023:

Workshop	Date
Clean Buildings Accelerator Coffee chat	1/12/2023
Clean Buildings Accelerator, first cohort, Elevation Seminar 1	1/19/2023
Clean Buildings Accelerator, second cohort, Workshop 1 - Accelerator Kickoff	1/25/2023
Clean Buildings Accelerator, second cohort, Workshop 2 - Energy Bootcamp	3/1/2023
Clean Buildings Accelerator, second cohort, Workshop 3 - O&M Ramp Up	3/29/2023
Clean Buildings Accelerator, second cohort, Workshop 4 - Engagement	4/26/2023
Clean Buildings Accelerator, first and second cohorts, Elevation seminar	9/27/2023

CLEAN ENERGY IMPLEMENTATION PLAN – UTILITY ACTIONS

The Utility Actions in the 2022-2023 DSM Business Plan and the CEIP (both filed in 2021) and updated in the 2023 ACP are listed below with status updates for 2023 (**in bold**). All are either completed in 2023 and/or are ongoing.

Communications:

Utility Actions from the 2022-2023 DSM Business Plan filed in 2021:

Through the programs identified in the 2021 IRP preferred portfolio – including energy efficiency and demand response – PacifiCorp can deliver programs with an increased equity focus utilizing more effective communication strategies to reach its Named Communities.

- Improve culturally and linguistically responsive outreach and marketing to increase awareness of energy and conservation programs.
- Expand in-language services across written, spoken, and visual services.
 - As appropriate, include Spanish versions of collateral and/or posters at community events where Pacific Power is sponsoring. Have interpreters and translated materials at public meetings.

Update to utility actions for 2023 filed in the 2023 ACP:

Continue to support programs with an increased equity focus using effective communication strategies to reach Named Communities.

- Continue to increase culturally and linguistically responsive outreach and marketing to increase awareness of energy and conservation programs.
- Continue to expand in-language services across written, spoken, and visual services.
 - As appropriate, include Spanish versions of collateral and/or posters at community events that Pacific Power is sponsoring. Have interpreters and translated materials at public meetings.

2023 Activity:

PacifiCorp has made progress in our efforts to expand and enhance outreach to underserved and diverse communities. PacifiCorp worked with a multicultural marketing agency to develop communications strategies to best reach the Hispanic community in the Yakima area. The multicultural earned media plan included relevant messaging, working closely with local influencers and media partners trusted by the community all while engaging communities where they are. Radio interviews, influencer Facebook posts and print content drove awareness and traffic to the Spanish Wattsmart landing page. Where customers are empowered to use insights and make changes to reduce their costs and lowering their footprint.

Residential:

Home Energy Savings:

The following utility actions defined in the 2022-2023 Demand-side Management Business Plan and CEIP (both filed in 2021) are either complete or continuing:

Utility Actions from the 2022-2023 DSM Business Plan filed in 2021 with 2023 status updates (**in bold**):

- Enhanced incentives for windows in multi-family units were added to the program in 2022. Initial focus will be on buildings in highly impacted communities. **(The enhanced incentives were added to the program effective 1/1/2022. In 2023, 4100 sq. ft. of windows received the enhanced incentive, achieving 73,301 kWh of savings. This utility action is ongoing.)**
- Continue direct install residential lighting in multi-family units. Continue focus on Highly Impacted Communities. **(In 2023 the direct install lighting implementer installed 493 LEDs in multifamily units and common spaces. Seven multifamily buildings benefited from the program, and 34,076 kWh savings were achieved. This utility action is ongoing in 2024.)**
- Maintain and expand if possible general-purpose lamp buydown in “dollar stores” in Highly Impacted Communities. This will be the only retail lighting buy down offer. **(Ended during 2023 following the direction of the Regional Technical Forum. Prior to ending, this action achieved 11,634 kWh savings. To replace this utility action the program will serve customers in highly impacted communities and vulnerable populations with no cost bulb offers delivered through community organizations.)**
- Continue manufactured home direct install duct sealing and lighting. Continue focus on Highly Impacted Communities. **(Ongoing efforts to provide direct install duct sealing and lighting to manufactured homes with a focus on Highly Impacted Communities. In 2023 this program led to, 1,349 direct install duct sealings achieving 1,169,608 kWh savings, and 2,687 direct install LEDs achieving 185,885 kWh savings.)**
- Continue promoting new construction offerings for multifamily and single-family units. Continue focus on Highly Impacted Communities. **(Ongoing effort to recruit and engage builders and raters with a focus on Highly Impacted Communities. Program saw a small uptick in new home projects but no located in Highly Impacted Communities.)**
- Non-Electric, Non-Natural Gas Upgrades in Named Communities. **(Ongoing with changes for 2023.)**

- 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 multi-family 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. ***(Ongoing: In 2023, three single family homes in highly impacted communities participated in the fuel switching heat pump conversion measure.)***

Update for 2023:

The above utility actions were implemented and will continue in 2023 with the following improvements and additions:

- Non-Electric, Non-Natural Gas Upgrades in Named Communities
 - Improve the offer for residential customers in Highly Impacted Communities who use non-electric and non-natural gas fuel sources in their primary heating systems by offering an enhanced incentive to replace their system with ductless heat pump(s). This measure will be offered at a higher incentive rate than 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 enhanced incentive and customer eligibility criteria will be available on the program website. This measure (with a lower incentive) will also be available for customers who do not reside in a Highly Impacted Community.
 - The program will use RTF deemed values for ductless heat pump installations modified to reflect the existing/prior system fuel type.
 - Enhanced incentives for customers in Highly Impacted Communities for the following HVAC measures
 - Ductless Heat Pump replacing heating oil/wood/propane heating (as described above)
 - Ductless Heat Pump replacing electric heating.
 - Federal Standard Heat Pump Conversion
 - 9.0+ HPSF Heat Pump Conversion ☐ Ramp up single-family home direct install Duct Sealing. Focus in Highly Impacted Communities.

(Ongoing: In 2023, three single family homes in highly impacted communities participated in the fuel switching heat pump conversion measure.)

Low Income Weatherization:

The following utility actions defined in the 2022-2023 Demand-side Management Business Plan and CEIP (both filed in 2021) are either complete or continuing:

Utility Actions from the 2022-2023 DSM Business Plan filed in 2021:

- Increase funds available for repairs from 15 percent to 30 percent.
- Permit installation of electric heat to replace permanently installed electric heat, space heaters or any fuel source except natural gas with adequate combustion air as determined by the

Agency. The changes are designed to promote the installation of electric heat and minimize use of wood heat, solid fuels, or natural draft equipment in specific applications where combustion safety (and indoor air quality) cannot be maintained.

- Changes to Schedule 114 are required to implement these changes. Amended tariff sheets will be filed with the Commission to enable these changes.

To implement the above utility actions, the company submitted a filing with the Commission on December 21, 2021, to make changes to Schedule 114 and received approval for the following effective February 1, 2022:

- ***Increase funds available for repairs from 15% to 30%.***
- ***Permit installation of electric heat to replace permanently installed electric heat, space heaters or any fuel source except natural gas with adequate combustion air as determined by the Agency. The changes are designed to promote the installation of electric heat and minimize use of wood heat, solid fuels, or natural draft equipment in specific applications where combustion safety (and indoor air quality) cannot be maintained.***

In 2022, the combined total annual reimbursement on repair cost was 5% of the annual reimbursement on energy efficient measures installed by the four weatherization partner agencies. There were no installations of ductless heat pumps to replace any non-electric fuel source.

Update to utility actions for 2023 (in 2023 ACP) with 2023 status updates (**in bold**).

To implement the above utility actions, the company submitted a filing with the Commission on December 21, 2021, to make changes to Schedule 114 and received approval for the following effective February 1, 2022:

- Increase funds available for repairs from 15% to 30%.
- Permit installation of electric heat to replace permanently installed electric heat, space heaters or any fuel source except natural gas with adequate combustion air as determined by the Agency. The changes are designed to promote the installation of electric heat and minimize use of wood heat, solid fuels, or natural draft equipment in specific applications where combustion safety (and indoor air quality) cannot be maintained.

In 2023, the combined total annual reimbursement on repair cost was 2% of the annual reimbursement on energy efficient measures installed by the four weatherization partner agencies. There were no installations of ductless heat pumps to replace any non-electric fuel source.

Non-residential:

Wattsmart Business

The Wattsmart Business utility actions were defined in the 2022-2023 Demand-side Management Business Plan and CEIP (both filed in 2021); the actions were updated in the 2023 ACP (filed in 2022). Below are the utility actions for 2023 and the 2023 status updates/results (**in bold**).

Increase outreach and participation for small businesses and named community small businesses identified by census tract and rate schedule.

- Create a new offer within the current small business enhanced incentive offer targeting the smallest businesses using less than 30,000 kWh per year and Named Community small businesses on Schedule 24. **(Implemented with the program changes effective January 1, 2022, and continued in 2023. Annual energy savings for small business lighting projects completed in 2023 with small businesses in Named Communities and very small businesses totaled almost 4,000,000 kWh.)**
 - Offer a higher incentive and increase the incentive cap for this new offer from 90 percent to 100 percent of project costs to reduce the customer out-of-pocket cost barrier.
 - **This was implemented with the program changes effective January 1, 2022, and continued in 2023.**
 - **Incentives for very small businesses and small businesses located in highly impacted communities were set higher than the regular small business lighting incentives. The incentive cap for very small businesses and small businesses located in Highly Impacted Communities is 100% of project costs rather than the 90% cap for the regular small business offer. This reduced the out-of-pocket cost for lighting retrofits and made it easier for customers to move forward with vendor project proposals.**
- Target a portion of company initiated proactive outreach to small businesses located in Highly Impacted Communities. Continue to tie proactive outreach to approved small business vendor capacity to respond to customer inquiries.
 - **Continued the postcard campaign in 2023 that focused on hard-to-reach small business customers. Approved Small Business Lighting Vendors who signed a non-disclosure agreement were provided with customer lists (containing business name, address, phone number only) to allow them to connect with customers who received a postcard from Pacific Power containing an introduction to the program and an approved vendor. The intent is to improve efficiency of the approved vendors sales processes and boost small business participation.**
 - **Co-branded shirts are made available to vendors who participated in the postcard campaign. These shirts help in promoting vendor credibility with small business customers.**
 - **Co-branded leave-behind postcards were provided to approved vendors to share with customers that included a QR Code for information in English and Spanish.**
- Offer approved small business lighting vendors a higher vendor incentive for completed lighting retrofit projects with small businesses located in Highly Impacted Communities.
 - **Implemented in 2022 and continued in 2023.**
 - **Vendor incentives of \$500 per project were paid in 2023 for 107 completed small business lighting retrofits for small businesses located in Highly Impacted Communities.**
 - **The \$500 per project vendor incentive was also available for completed lighting projects for very small businesses. The vendor incentive for completed lighting projects for other small businesses (not very small and not in a Highly Impacted Community) was \$300 per completed project.**

- Create a new offer within in the small business program including enhanced incentives for select non-lighting measures. **(New offer was added effective January 1, 2023. One ductless heat pump project was completed in 2023 and annual kWh savings was 6,122.)**
 - Incentives offered to small businesses for these non-lighting measures will be higher than those offered to larger businesses. Incentives offered to select very small businesses and named community small businesses will be higher than those offered to small businesses not meeting the very small and named community criteria.
 - **The following efforts were made in 2023 to promote the offer:**
 - **Sent postcard to small businesses who previously participated in a lighting project. Outreach staff followed up via phone with 77 customers to generate interest in the incentives.**
 - **Outreach efforts to previous lighting participants to promote potential non-lighting measures.**
 - **Created handouts for customers and trade allies for outreach staff to use on visits.**
 - **Eblast sent to relevant trade allies to promote the program and offer a \$50 spiff (gift card) for referrals to non-lighting program.**
- Continue development of program materials in Spanish.
 - **Program materials in Spanish were updated in 2023 for the program effective January 1, 2024 including the [Wattsmart Business overview](#), [Small Business Lighting handout](#), Wattsmart Business [brochure including incentive tables](#), and the program Application.**
- Continue and increase outreach to Latinx and Tribal community groups.
 - **Program outreach staff were featured in multicultural marketing campaigns with Spanish radio and television interviews. Created a [new Spanish website landing page](#) to support the multicultural marketing campaign.**
 - **Outreach staff attended various multi-cultural community events including the Yakima Taco Fest.**
 - **Presented Home Energy Savings and Wattsmart Business at Southwest Yakima Rotary and Central Washington Hispanic Chamber of Commerce.**
 - **Full-time Diversity & Community Outreach Coordinator continued with focus on Small Business outreach in customer’s native language.**
 - **Reached out to over 300 customers within highly impacted communities.**
 - **Attended Central Washington Hispanic Chamber of Commerce Meet and Greets and Board of Directors Meetings monthly through 2023.**
 - **Attended Equity, Diversity, and Inclusion Committee Meeting - monthly through 2023.**

Participation Tracking and Reporting:

The participation and tracking utility actions were defined in the 2022-2023 Demand-side Management Business Plan and CEIP (both filed in 2021); the actions were updated in the 2023 ACP (filed in 2022). Below are the utility actions for 2023 and the 2023 status updates/results **(in bold)**.

Track program participation for the following and include in annual reports starting in 2022 (noting 2022 will be a transition year as applications are revised to collect additional information).

- Low Income Weatherization
 - Participants located in a Highly Impacted Community
 - Participants whose primary language spoken is other than English (question asked of the contact person completing the incentive application)
 - Participants who rent or lease rather than own
 - Participants living in a manufactured home.

- Home Energy Savings
 - Participants located in a Highly Impacted Community
 - Participants whose primary language spoken is other than English (question asked of the contact person completing the incentive application)
 - Participants who rent or lease rather than own
 - Participants living in a manufactured home.
 - Participants living in a multi-family unit.

- Wattsmart Business (except midstream)
 - Participants located in a Highly Impacted Community
 - Participants whose primary language spoken is other than English (question asked of the contact person completing the incentive application)
 - Participants who rent or lease rather than own
 - Participants who are smaller businesses (e.g., account associated with project receives electric service on Schedule 24)

In addition, the Highly Impacted Community tracking will also include tracking for participants located on Tribal Lands (based on census tract data).

The above actions were implemented in 2023.

EXPENDITURES AND SAVINGS RESULTS:

TOTAL PORTFOLIO BUDGET AND EXPENDITURES

Table 1: DSM Balancing Account¹⁵

Month	Expenditure ¹⁶	S-191 Revenue ¹⁷	Cash Basis Accumulative Balance ¹⁸	Net Cost Accrual ¹⁹	Accrual Basis Accumulative Balance ²⁰
22-Dec			\$(5,010,241)		
23-Jan	\$2,706,739	\$(2,166,947)	\$(4,470,449)	\$(505,780)	\$(3,608,017)
23-Feb	\$596,369	\$(1,732,679)	\$(5,606,760)	\$393,402	\$(4,350,926)
23-Mar	\$1,340,064	\$(1,484,479)	\$(5,761,174)	\$22,980	\$(4,472,361)
23-Apr	\$634,431	\$(1,496,168)	\$(6,612,911)	\$329,040	\$(5,005,057)
23-May	\$2,357,386	\$(1,135,768)	\$(5,391,293)	\$(471,500)	\$(4,254,940)
23-Jun	\$1,992,906	\$(1,348,146)	\$(4,746,534)	\$12,343	\$(3,597,837)
23-Jul	\$1,316,212	\$(1,520,163)	\$(4,950,484)	\$770,675	\$(3,031,112)
23-Aug	\$1,531,184	\$(1,569,474)	\$(4,988,775)	\$(61,881)	\$(3,131,284)
23-Sep	\$2,232,961	\$(1,441,119)	\$(4,196,933)	\$(482,001)	\$(2,821,444)
23-Oct	\$2,405,659	\$(1,239,046)	\$(3,030,320)	\$(276,913)	\$(1,931,744)
23-Nov	\$597,623	\$(1,430,907)	\$(3,863,605)	\$567,229	\$(2,197,799)
23-Dec	\$2,585,138	\$(1,819,690)	\$(3,098,156)	\$432,818	\$(999,532)
2023 Total	\$20,296,672	\$(18,384,587)		\$730,412	

¹⁵ The DSM balancing account is the mechanism used for managing the DSM Tariff Rider revenues and actual DSM-incurred expenditures.

¹⁶ Monthly expenditures for approved energy efficiency programs. Note: Starting in late 2022, Demand Response expenses initially went into the System Benefits Charge balancing account instead of a deferred account. When that was identified, the Company reversed the demand response expenses out of the SBC balancing account with a single credit adjustment in December 2023. As of December 2023, the demand response expenses are in a deferred account in alignment with the Petition for Accounting Order (Docket UE-220848).

¹⁷ Revenue collected through the DSM Tariff Rider.

¹⁸ Current balance of the account; a running total of account activities, excluding the accrued cost. A positive balance means cumulative expenditures exceeds cumulative revenue; a negative balance means cumulative revenue exceeds cumulative expenditures.

¹⁹ Two accrual entries are made each month for expenditures of energy efficiency programs. One estimates the incurred cost not yet processed, and the other reverses the estimate from the previous month. The amount shown here is the net of the two entries. This accounting principle was applied to the balancing account but would not be included when calculating the carrying charges.

²⁰ Current balance of the account including accrued costs. A positive balance means cumulative expenditures exceeds cumulative revenue; a negative balance means cumulative revenue exceeds cumulative expenditures.

Table 2: Washington Results January 1, 2023 – December 31, 2023²¹

Energy Efficiency Program	kWh Savings (at site)	kWh Savings (at gen)	Estimated Systems Benefit Expenditures
Low Income Weatherization (114)	154,807	166,690	\$1,122,473
Home Energy Savings (118)	4,994,042	5,377,384	\$6,187,859
Home Energy Reports (N/A)	4,466,880	4,809,758	\$435,105
Total Residential Programs	9,615,729	10,353,832	\$7,745,437
Wattsmart Business (140) Commercial	31,698,688	34,108,422	\$9,445,025
Wattsmart Business (140) Industrial	3,693,438	3,945,146	\$1,100,507
Wattsmart Business (140) Irrigation	805,266	867,078	\$239,939
Total Business Program	36,197,392	38,920,646	\$10,785,471
Northwest Energy Efficiency Alliance	3,415,622	3,676,952	\$954,497
Distribution Efficiency	0	0	\$0
Production Efficiency	133,136	133,136	\$0
Total Other Conservation Initiatives	3,548,758	3,810,088	\$954,497
Be Wattsmart, Begin at Home			\$51,135
Customer outreach/communication			\$170,587
Program Evaluations (& savings verification)			\$162,487
Potential study update / analysis			\$49,695
System Support			\$73,183
End use load research & RTF Funding			\$36,119
Total Portfolio -Level Expenses			\$543,205
Total PacifiCorp Conservation	45,946,256	49,407,614	\$19,074,112
Total System Benefits Charge Conservation	49,361,879	53,084,566	\$20,028,609
Total Conservation	49,361,879	53,084,566	\$20,028,609

²¹ Gross Savings

Table 3: 2023 Washington ACP²²

Energy Efficiency Program	2023 from PacifiCorp Washington 2023 ACP			2023 PacifiCorp Washington DSM Actual		
	kWh Savings (at site)	kWh Savings (at gen)	Estimated Systems Benefit Expenditures	kWh Savings (at site)	kWh Savings (at gen)	Estimated Systems Benefit Expenditures
Low Income Weatherization (114)	130,100	140,086	\$1,193,659	154,807	166,690	\$1,122,473
Home Energy Savings (118)	3,600,300	3,876,659	\$5,665,780	4,994,042	5,377,384	\$6,187,859
Home Energy Reports (N/A)	3,558,528	3,831,681	\$462,996	4,466,880	4,809,758	\$435,105
Total Residential Programs	7,288,928	7,848,426	\$7,322,435	9,615,729	10,353,832	\$7,745,437
Wattsmart Commercial (140)	24,052,821	25,881,317	\$8,838,620	31,698,688	34,108,422	\$9,445,025
Wattsmart Industrial (140)	16,179,211	17,281,824	\$4,591,939	3,693,438	3,945,146	\$1,100,507
Wattsmart Irrigation (140)	766,007	824,805	\$264,069	805,266	867,078	\$239,939
Total Business Program	40,998,039	43,987,946	\$13,694,628	36,197,392	38,920,646	\$10,785,471
Northwest Energy Efficiency Alliance	3,664,463	3,491,523	\$877,438	3,415,622	3,676,952	\$954,497
Distribution Efficiency		83,000				
Production Efficiency				133,136	133,136	
Total Other Conservation Initiatives	3,664,463	4,024,523	\$877,438	3,548,758	3,810,088	\$954,497
Be Wattsmart, Begin at Home			\$70,008			\$51,135
Customer outreach/communication			\$250,000			\$170,587
Program Evaluations (& savings verification)			\$254,497			\$162,487
Potential study update / analysis			\$15,368			\$49,695
System Support			\$98,378			\$73,183
End use load research & RTF Funding			\$65,500			\$36,119
Total Portfolio – Level Expenses			\$753,751			\$543,205
Total PacifiCorp Conservation	48,286,967	51,919,372	\$21,770,814	45,946,256	49,407,614	\$19,074,112
Total System Benefits Charge Conservation	51,951,430	55,860,895	\$22,648,252	49,361,879	53,085,566	\$20,028,609
Total Conservation	51,951,430	55,860,895	\$22,648,252	49,361,879	53,085,566	\$20,028,609

²² Consistent with requirements under WAC 480-109-120 (3)(b)(ii) and (iii), provides a comparison of the Company’s business plan to actual program performance.

Table 4: Estimated Peak Contribution

Description	Value
First year Energy Efficiency program MWh savings acquired during 2023 (@ Generator)	53,085
Conversion factor: Coincident MW/MWh	0.000179233
Estimated coincident peak MW contribution of 2023 Energy Efficiency acquisitions	9.51
Estimated Lifecycle Energy Efficiency program MWh savings from savings acquired in 2023 (@ Generator)	697,456

Table 5: Direct Benefit to Customers²³

Program or Initiative	Expenditures	Direct Benefits to Customers	% Direct Benefit to Customers
Low Income Weatherization (114) ²⁴	\$1,122,473	\$963,969	86%
Home Energy Savings (118) ²⁵	\$6,187,859	\$3,195,656	52%
Home Energy Reports	\$435,105	\$0 ²⁶	0%
Total Residential Programs	\$7,745,437	\$4,159,655	54%
Wattsmart Business (140) Commercial	\$9,445,025	\$6,132,535	
Wattsmart Business (140) Industrial	\$1,100,507	\$919,728	
Wattsmart Business (140) Irrigation	\$239,939	\$189,412	
Total Business Programs²⁷	\$10,785,471	\$7,241,675	67%
Northwest Energy Efficiency Alliance (NEEA)²⁸	\$954,497	\$659,314	69%
Be Wattsmart, Begin at Home	\$51,135		
Customer outreach/communication	\$170,587		
Program Evaluations (& savings verification)	\$162,487		
Potential study update / analysis	\$49,695		
System Support	\$73,183		
End use load research & RTF Funding	\$36,119		
Total Portfolio – Level Expenses	\$543,205		
Total PacifiCorp Conservation	\$19,074,112		
Total System benefits Charge Conservation	\$20,028,609		
Total Conservation	\$20,028,609	\$12,719,957	64%

²³ This additional metric to assess program impacts is consistent with conversations between Commission Staff and the Company that occurred during the preparation of prior conservation plan(s) and reports. Direct benefits are in addition to the benefits all customers receive through implementation of cost-effective energy efficiency resources, lower energy costs.

²⁴ Low Income Weatherization: Payments to community action agencies for measure installation were classified as incentives.

²⁵ Home Energy Savings: Customer and partner incentives are included in the direct benefit to customer calculation.

²⁶ No incentives are paid to customers participating in the Home Energy Reports program. This is a behavioral program that informs customers on energy reduction solutions to lower their utility bills.

²⁷ Wattsmart Business: Customer and vendor incentives (\$6,851,283) and expenditures for customer site specific energy engineering (\$390,392) are included in the direct benefit to customer calculation.

²⁸ NEEA: Company subtracted for NEEA program administration. Calculation utilized the assumption provided by WUTC staff that 70% of the NEEA expenditures are a direct benefit to customers.

GROSS SAVINGS BY MEASURE CATEGORY

Table 6: 2023 Annual Savings by Home Energy Savings

Measure Category	Total kWh (at Site)	Total Incentive	Total Measure Quantity
Appliances	13,934	\$11,919	71
Building Shell	126,570	\$161,104	173,244 sq ft
HVAC	3,904,269	\$2,771,537	3,727
Lighting	272,564	\$52,457	26,250
Water Heating	68,048	\$41,029	46
Whole Home	26,661	\$29,000	10
Electronics	581,996	\$128,640	4,288
Grand Total	4,994,042	\$3,195,686	

Table 7: Participation by Manufactured Home Residents

Program	2016	2017	2018	2019	2020	2021	2022	2023
Low Income Weatherization Homes	49	45	41	7	12	8	12	86
Home Energy Savings Participants	403	954	872	648	169	813	781	1,950
Appliances	10	4	8	2	11	6	2	3
Building Shell	0	0	0	0	0	0	0	0
Cooling	0	0	0	0	0	0	0	1
Duct Sealing	12	795	492	488	9	618	433	1,356
Direct Install	0	0	0	0	0	0	0	0
Heat Pump	18	79	90	67	99	121	114	146
Heat Pump Water Heater	1	3	0	0	0	0	1	1
Smart Thermostat	0	0	0	0	0	0	4	12
Kits	362	73	282	42	0	0	0	0
Lighting	1	0	0	0	0	244	222	426
Lighting Buy Down	54,508	50,953	33,936	34,791	19,400	0	0	0
Weatherization [FK3]	3	1	4	2	1	2	0	1
Whole Home	0	0	0	0	0	10	5	4

Table 9: Low Income Homes Served and Measures Installed

Measure Type	Installed
Air Sealed/Infiltration	133
Insulation	259
Attic Ventilation	60
Lighting CFL/LED	89
Weather Strip Doors	17
Duct Sealing and/or Insulation	39
Ductless Heat Pump	12
Thermal Doors and/or Window Replacement	12

Measure Type	Installed
Water Heater Replacement	8
Low Flow Shower Heads and Faucet Aerators	57
Ground Cover	72
Thermostat	10
Refrigerator Replacement	2
Total Number of Homes Served	95
Total kWh Savings @ Site	154,807

Table 11: Wattsmart Business Savings by Sector

Sector	Total kWh (at Site)	Total Incentives
Commercial	31,698,688	\$5,801,936
Industrial	3,693,438	\$870,146
Irrigation	805,266	\$179,201
Grand Total	36,197,392	\$6,851,283

Table 12: 2023 Annual Savings by Wattsmart Business

Measure Category	Total kWh (at Site)	Total Incentives	Total Projects
Additional Measures	993,790	\$216,507	6
Compressed Air	413,606	\$32,754	4
Energy Management	6,052,657	\$151,317	14
Food Service Equipment	9,822	\$1,250	1
HVAC	996,546	\$178,373	23
Irrigation	575,539	\$124,067	30
Lighting	13,511,898	\$4,178,360	422
Motors	1,606,357	\$370,856	8
Refrigeration	11,379,956	\$1,441,490	36
Building Shell	29,558	\$8,878	8
Wastewater	623,163	\$146,964	1
Farm & Dairy	4,500	\$468	1
Grand Total	36,197,392	\$6,851,283	

COST EFFECTIVENESS

Program cost effectiveness is performed using a Company specific modeling tool, created by a third-party consultant. The tool is designed to incorporate PacifiCorp data and values such as avoided costs, and generally follows the methodology specified in California’s Standard Practice Manual. The analysis assesses the costs and benefits of DSM resource programs from different stakeholder perspectives, including participants and non-participants, based on four tests described in the Standard Practice Manual (TRC, UCT, PCT and RIM) as well as an additional fifth test, PTRC.

Each of the cost-effectiveness tests for Pacific Power’s programs is outlined below.

- PacifiCorp Total Resource Test (PTRC) is the total resource cost test with 10% added to the net benefit side of the benefit/cost formula to account for non-quantified environmental and non-energy benefits of conservation resources over supply side alternatives consistent with practices used by the Northwest Power and Conservation Council (NWPCC).
- Total Resource Cost (TRC) Test considers the benefits and costs from the perspective of all utility customers, comparing the total costs and benefits from both the utility and utility customer perspectives.
- Utility Cost (UCT) Test also called the program administrator cost test, provides a benefit to cost perspective from the utility only. The test compares the total utility cost incurred to the benefit/value of the energy and capacity saved and contains no customer costs or benefits in calculation of the ratio.
- Participant Cost Test (PCT) compares the portion of the resource paid directly by participants to the savings realized by the participants.
- Ratepayer Impact Cost Test (RIM) examines the impact of energy efficiency expenditures on non-participating ratepayers overall. Unlike supply-side investments, energy efficiency programs reduce energy sales. Reduced sales typically lower revenue requirements while putting near-term upward pressure on the rates remaining fixed costs are spread over fewer kWh.

All cost effectiveness calculations assume a net-to-gross (NTG) of 1.0, consistent with the Northwest Power and Conservation Council’s methodology. Portfolio level cost effectiveness includes portfolio costs such as the Process and Impact Evaluations, Class 2 demand-side management (DSM) Potential Assessment, End Use Load Research, and the DSM system database. Consistent with the Northwest Power and Conservation Council’s methodology, the Company includes quantifiable non-energy benefits at the portfolio and program level. *Low Income Weatherization* is not included in the portfolio or sector-level cost effectiveness analysis per WAC 480-109-100(10)(c). Appendix A provides 2023 cost effectiveness performance.

Table 13: 2023 Cost-Effectiveness Results by Program

Program	Benefit/Cost Test				
	PTRC	TRC	UCT	PCT	RIM
Total Portfolio (not inc. NEI or NEEA)	1.91	1.73	2.09	3.52	0.67
Total Portfolio (inc. NEI and NEEA)	2.32	2.14	2.19	4.32	0.67
Residential	0.79	0.71	0.94	1.77	0.49
Residential (inc. NEEA)	1.00	0.91	1.16	2.25	0.54
Residential (inc. NEIs)	0.94	0.87	0.94	2.02	0.49
Residential (inc. NEEA and NEIs)	1.14	1.05	1.16	2.50	0.54
Home Energy Savings	0.74	0.67	0.90	1.68	0.47
Home Energy Savings (inc. NEI)	0.90	0.83	0.90	1.93	0.47
Home Energy Reports	1.63	1.48	1.48	Pass ²⁹	0.70

²⁹ The Participant Cost Test passes, but cannot be calculated due to \$0 participant costs, which results in a zero-division error.

Program	Benefit/Cost Test				
	PTRC	TRC	UCT	PCT	RIM
Low Income Weatherization (not inc. NEI)	0.17	0.16	0.18	Pass ³⁰	0.15
Wattsmart Business	2.78	2.52	2.90	4.61	0.73
Wattsmart Business (inc. NEEA)	2.79	2.53	2.90	4.67	0.73
Wattsmart Business (inc. NEIs)	3.24	2.99	2.90	5.29	0.73
Wattsmart Business (inc. NEEA and NEIs)	3.24	2.99	2.90	5.35	0.73

EVALUATIONS

Evaluations are performed by independent external evaluators to validate energy and demand savings derived from the Company’s energy efficiency programs. Industry best practices are adopted by the Company with regards to principles of operation, methodologies, evaluation methods, and protocols including those outlined in the National Action Plan for Energy Efficiency Program Impact Evaluation and the California Evaluation Framework guides.

A component of the overall evaluation efforts is aimed at the reasonable verification of installations of energy efficient measures and associated documentation through review of documentation, surveys and/or ongoing onsite inspections.

Verification of the potential to achieve savings involves regular inspection and commissioning of equipment. The Company engages in programmatic verification activities, including inspections, quality assurance reviews, and tracking checks and balances as part of routine program implementation and may rely upon these practices in the verification of installation information for the purposes of savings verifications in advance of more formal impact evaluation results.

Evaluation, measurement, and verification tasks are segregated within the Company organization to ensure they are performed and managed by personnel who are not directly responsible for program management.

Information on evaluation activities completed or in progress during 2023 are summarized in the chart below. Completed evaluation reports are available at the following link, under the “Reports and program evaluations by state” section:

<https://www.pacificorp.com/environment/demand-side-management.html>

³⁰ The Participant Cost Test passes, but cannot be calculated due to \$0 participant costs, which results in a zero-division error.

Table 14: 2023 Evaluation Activities

Evaluation	Responsible Consultant	Status	Published
Wattsmart Business Evaluation 2022-2023	ADM	In-progress	est. 11/24
Low Income Weatherization Program Evaluation 2018-2018	Opinion	Complete	2023

APPENDIX A – COST-EFFECTIVENESS

APPENDIX B – NEEA SUPPLY CHAIN MEMOS (3)

APPENDIX C – NEEA 2023 SAVINGS REPORT MEMO