PACIFIC POWER®
A DIVISION OF PACIFICORP

2025 Demand Response Annual Report
Washington

June 26, 2026

Pacific Power
825 NE Multnomah St., Suite 2000
Portland, OR 97232
https://www.pacificorp.com/environment/demand-side-management.html

TABLE OF CONTENTS

EXECUTIVE SUMMARY 4

DEMAND RESPONSE PORTFOLIO SUMMARY 4

Curtailment Events 5

Customer Participation 5

NEEA End-Use Load Flex Project 6

PACIFICORP DEMAND RESPONSE PROGRAMS 7

REGULATORY ACTIVITY 7

WASHINGTON STAKEHOLDER ENGAGEMENT 8

IRRIGATION LOAD CONTROL 10

Program Description 10

Participation 10

Curtailment Events 10

Program Costs 11

Cost Effectiveness 11

Key Findings and Future Changes 12

WATTSMART BUSINESS DEMAND RESPONSE 13

Program Description 13

Participation 14

Curtailment Events 14

Program Costs 16

Cost Effectiveness 16

Key Findings and Future Changes 17

COOL KEEPER 18

Program Description 18

Summary of 2025 Activity 18

Program Costs 18

Cost Effectiveness 19

WATTSMART BATTERY PROGRAM 19

Program Description 19

2025 Participation Targets and Enrollment 19

Battery Program Events 20

Program Costs 20

Cost Effectiveness **20**

Key Findings and Future Changes **21**

EXECUTIVE SUMMARY

PacifiCorp's Washington demand response (DR) portfolio is a core component of the Company's integrated resource strategy, designed to provide cost-effective, flexible capacity, enhance grid reliability, and support Washington's clean energy goals and grid-reliability strategy under the Clean Energy Transformation Act (CETA). Authorized under Schedule 106 by the Washington Utilities and Transportation Commission (UTC or Commission), the Company's portfolio currently includes residential, commercial and industrial (C&I), and agricultural (irrigation) programs, with continued expansion planned through the 2020s. Collectively, these programs enable customers to reduce or shift electricity usage during peak or system-constrained periods in exchange for financial incentives, avoiding higher-cost supply-side investments and reducing peak demand.

DEMAND RESPONSE PORTFOLIO SUMMARY

PacifiCorp's Washington Demand Response (DR) portfolio is designed to reduce peak system demand, improve grid reliability, and provide flexible load resources to support Washington's clean-energy transition. The portfolio consists of multiple customer-focused DR programs, each evaluated annually for performance, participation, cost-effectiveness, and future improvements. PacifiCorp's DR portfolio in Washington includes several programs:

Cool Keeper[1]: Cool Keeper is a direct load control program for residential-scale central cooling equipment. The Program installs load control switches on the compressor unit of residential and small commercial-size air-conditioning and heat pump systems, to enable aggregated use of this load for grid management.

Wattsmart Business Demand Response (WSB DR)[2]: PacifiCorp partners with third-party aggregators (notably Enel North America) to deliver C&I DR products that provide both economic and reliability value. These programs offer multiple dispatch options (e.g., 60-minute, 7-minute, and real-time products), allowing large customers to earn performance-based incentive payments for curtailing load during system stress events. This segment represents a significant and highly dispatchable source of flexible capacity in the utility's Oregon service territory.

Irrigation Load Control[3]: Targeting agricultural customers, this long-standing program uses direct load control technologies to temporarily reduce irrigation pumping during peak periods. The irrigation program continues to deliver dependable summer peak reductions and remains an important seasonal resource for managing system constraints in rural areas.

Wattsmart Battery[4]: Wattsmart Battery is a customer-facing, incentive-based energy storage demand response program. The program enables PacifiCorp to aggregate customer-owned battery systems into a distributed energy resource (DER) network, functioning as a virtual power plant (VPP) that can be dispatched to address grid needs.

Demand response is a preferred resource in PacifiCorp's Washington planning framework due to its low cost, fast deployment, and operational flexibility. DR helps defer or avoid new generation and transmission investments, reduces reliance on high-cost peaking resources, and enhances system resilience during extreme weather and high-load conditions.

PacifiCorp's DR portfolio directly supports Washington's clean energy policies, including the Clean Energy Transformation Act, by enabling flexible load that complements variable renewable generation. PacifiCorp's long-term planning anticipates continued expansion of demand response capacity in Washington, with DR playing

[1] https://www.pacificpower.net/savings-energy-choices/home/cool-keeper.html
[2] https://www.pacificpower.net/savings-energy-choices/business/CIDR.html
[3] https://www.pacificpower.net/savings-energy-choices/business/wattsmart-efficiency-incentives-washington/wa-agriculture.html
[4] https://www.pacificpower.net/savings-energy-choices/wattsmart-battery-program.html

a growing role alongside energy efficiency, storage, and renewable resources. Future program refinements are expected to focus on greater automation, equity-focused participation, and increased MW scale, positioning demand response as a foundational element of PacifiCorp's least-cost, least-risk resource mix.

By the end of 2025, PacifiCorp's Demand Response (DR) Programs provided a total of 7.44 MW of available curtailable load at generation. Table 1 summarizes the Demand Response capacity contributed by active programs during 2025. Overall, Demand Response resources achieved 20% of the 37.4 MW Clean Energy Implementation Plan (CEIP) target established for 2025. At the end of 2024, PacifiCorp's DR programs provided a total of 7.8 MW of available curtailable load at generation;[5] the year-over-year difference was driven by the cancellation of the Optimal Time Rewards program at the end of 2024 and the launch of the Cool Keeper program in 2025.

Table 1: 2025 Available Demand Response Capacity[6]

Program	MW at Site	MW at Generation
Irrigation Load Control	3.20	3.40
WSB DR	3.70	4.01
Wattsmart Battery	0.03	0.03
Cool Keeper	0	0
Total Portfolio	**6.93**	**7.44**
% of 2022-2025 CEIP Target of 37.4 MW		**20%**

Curtailment Events

PacifiCorp utilized resources from all active demand response programs to support grid management operations throughout 2025. Table 2 summarizes the curtailment events and associated activity by program for the year.

Table 2: 2025 Demand Response Curtailment Activity by Program

Program	Number of Events	Average Duration of Events (Hour)	Average Curtailed Load per Event (MW at Site)
Irrigation Load Control	11	3.5	1.8
WSB DR	47	0.66	0.718
Wattsmart Battery	46	.08	.03
Cool Keeper	n/a	n/a	n/a
Total Portfolio[7]	**104**	**0.70**	**0.53**

Customer Participation

PacifiCorp's 2025 demand response portfolio provided participation opportunities across all major customer classes, including residential, commercial, industrial, and irrigation. Many participating customers enrolled in multiple meters or controllable devices within their respective programs. Table 3 summarizes both the number of unique customer accounts enrolled and the total number of controlled loads participating in each program. At the end of 2024, PacifiCorp's DR programs had 428 customers and 703 controlled loads enrolled; the year-over-year

[5] PacifiCorp's *Demand Response Portfolio 2024 Annual Report* filed June 30, 2025, in Docket UE-220550 (https://www.utc.wa.gov/casedocket/2022/220550/docsets) – Table 1.

[6] Total available demand response capacity is calculated as the aggregate of the curtailable capacity contributed by each program participant, based on the specific requirements and operating parameters of each program at year-end. Because these contributions vary by participant and program conditions, not all capacity is always available.

[7] The total portfolio average duration of events and average curtailed load per event are weighted based on the number of events within each program.

difference was driven by the cancellation of the Optimal Time Rewards program at the end of 2024, which alone had 367 customers and 386 controlled loads enrolled.[8]

Table 3: 2025 Year-End Participation by Program

Program	Number of Customers	Number of Controlled Loads Enrolled[9]
Irrigation Load Control	51	178
WSB DR	13	37
Wattsmart Battery	2	3
Cool Keeper	0	0
Total	**66**	**218**

In 2025, PacifiCorp incurred $572,062 in total expenditures for all demand response program activities in Washington, as summarized in Table 4. The Optimal Time Rewards program was cancelled in November 2024, but residual close out activity, including issuing incentives that had not been processed previously, extended through early 2025. In 2024, PacifiCorp incurred $891,818 in total expenditures for all demand response program activities in Washington.[10]

Table 4: 2025 Demand Response Program Costs

Program	Incentives	Delivery	Internal Costs	Marketing	Total Annual Program Cost
Irrigation Load Control	$75,627	$151,944	$13,395	$0	$240,966
WSB DR	$60,052	($2,865)	$30,230	$0	$87,418
Wattsmart Battery	$9,000	$26,052	$134	$0	$35,185
Cool Keeper	$0	$86,628	$21,525	$17	$108,170
NEEA EULF[11]	$0	$78,129	$26	$0	$78,155
Optimal Time Rewards Close Out	$14,900	$5,838	$1,431	$0	$22,169
Total	**$159,580**	**$345,725**	**$66,741**	**$17**	**$572,062**

NEEA End-Use Load Flex Project

PacifiCorp was one of 10 utility funders and a member of the steering committee for the Northwest Energy Efficiency Alliance (NEEA) End Use Load Flex (EULF) project. NEEA is a utility alliance that supports market development for energy efficiency and demand response-capable technology. The EULF is a NEEA initiative to organize regional utilities, identify common obstacles to the growth of demand response resources, and explore opportunities for NEEA to support accelerated growth of demand response in the Pacific Northwest.

2025 marked the second and final year of the project. In 2025, NEEA completed the following tasks:

- Completed several studies related to using domestic hot water heaters for demand response, including a pilot study of a self-install program design for CTA-2045 modules and lab study of demand response capability of different make and models of water heaters using CTA-2045 modules.
- Completed lab studies on the demand response capability of multi-family baseboard thermostats, multifamily central hot water, and variable speed heat pumps.

[8] PacifiCorp's *Demand Response Portfolio 2024 Annual Report* filed June 30, 2025, in Docket UE-220550 (https://www.utc.wa.gov/casedocket/2022/220550/docsets) – Table 3.
[9] In the ILC and Cool Keeper programs, a controlled load refers to a single controllable device—an irrigation pump, or central cooling system, respectively. In the WSB DR program, each meter site is considered a unique controlled load.
[10] PacifiCorp's *Demand Response Portfolio 2024 Annual Report* filed June 30, 2025, in Docket UE-220550 (https://www.utc.wa.gov/casedocket/2022/220550/docsets) – Table 4.
[11] See Appendix 3 for a summary of the NEEA EULF Project Status.

- Assess cybersecurity risk of different connection pathways.
- Developed strategic and business plan for a follow-on four-year plan.

Additional details on NEEA's 2024-2025 EULF activities can be found in Appendix 3 to this report.

PACIFICORP DEMAND RESPONSE PROGRAMS

PacifiCorp's demand response portfolio, initiated in 2022, supports the Company's targets outlined in the 2022–2025 Clean Energy Implementation Plan (CEIP) and fulfills requirements under Washington's Clean Energy Transformation Act (CETA).[12] In that 2022-2025 CEIP, the Company indicated that it anticipated launching multiple demand response programs to achieve a capacity target of 37.4 MW of demand response by the end of 2025. While program enrollment continues to grow rapidly, PacifiCorp is unlikely to meet this target. The Company will establish a new target—reflecting the outcomes of the 2025 IRP and actual program performance—in the 2026–2029 CEIP, which was filed in October 2025 [13].

Schedule 106, the umbrella tariff governing PacifiCorp's demand response programs, was established in 2022 in Docket UE-220550. In 2025, the Company offered the following programs under Schedule 106:

- **Irrigation Load Control (ILC)** filed on July 22, 2022, in Docket UE-220550 and became effective on August 26, 2022.[14] The program began recruiting participants in January 2023.
- **Wattsmart Business Demand Response (WSB DR)** filed on November 16, 2022, in Docket UE-220848 and became effective on December 23, 2023.[15] The program began recruiting participants in February 2023.
- **Cool Keeper** filed on February 18, 2025, in Docket UE-220848[16] and became effective on April 10, 2025, through Order 03 in Docket UE-220848. Throughout 2025, the program was in a start-up phase and had not yet begun enrolling participants by the end of the year.
- **Wattsmart Battery** filed on November 20, 2024, in Docket UE-220848[17] and became effective on April 10, 2025, through Order 03 in Docket UE-220848. The program began recruiting participants on April 11, 2025.

REGULATORY ACTIVITY

In 2025, PacifiCorp's Washington demand response regulatory activity was primarily focused on the approval of latest programs for the portfolio, but also included compliance reporting, efforts to streamline deferral requests, and contributions to the Company's Clean Energy Implementation Plan (CEIP).

November 20, 2024 – In Docket UE-220848, PacifiCorp filed the Wattsmart Battery program for approval under the Company's Schedule 106, as well as a petition to amend Order 02 from Docket UE-220848, seeking to include that program's costs in the deferral recording demand response program costs. That same petition also sought Commission authorization to establish a balancing account for all demand response programs approved by the Commission under Schedule 106, the amortization of which would be sought through Schedule 191 in future proceedings.[18]

---

[12] PacifiCorp's *2021 Clean Energy Implementation Plan, Revised CEIP*, filed Mar. 13, 2023, in Docket UE-210829 (https://apiproxy.utc.wa.gov/cases/GetDocument?docID=277&year=2021&docketNumber=210829)
[13] PacifiCorp's *2025 Clean Energy Implementation Plan*, filed Oct. 1, 2025, in Docket UE-250617 (https://apiproxy.utc.wa.gov/cases/GetDocument?docID=16&year=2025&docketNumber=250617)
[14] https://apiproxy.utc.wa.gov/cases/GetDocument?docID=7&year=2022&docketNumber=220550
[15] https://apiproxy.utc.wa.gov/cases/GetDocument?docID=11&year=2022&docketNumber=220848
[16] https://apiproxy.utc.wa.gov/cases/GetDocument?docID=66&year=2022&docketNumber=220848
[17] https://apiproxy.utc.wa.gov/cases/GetDocument?docID=53&year=2022&docketNumber=220848
[18] https://www.utc.wa.gov/casedocket/2022/220848/docsets

February 18, 2025 – PacifiCorp filed the Cool Keeper Demand Response Program in Docket UE-220848 for approval under the Company's Schedule 106.[19]

March 5, 2025 – In Docket UE-220848, the Company filed an amended petition to Order 02 from Docket UE-220848, seeking authorization for the deferral of costs to all of the Company's demand response programs with no interest on the accrued balance, meaning that PacifiCorp would not need to request updates to subsequent Orders each time the Company launched a new demand response program.[20]

April 10, 2025 – UTC Commissioners issued Order 03 in Docket UE-220848, granting PacifiCorp's amended petition to Order 02 in Docket UE-220848 filed on March 5, 2025, and approving the Wattsmart Battery and Cool Keeper programs.[21]

June 10, 2025 – In Docket UE-250460, PacifiCorp filed a petition for partial waiver of WAC 480-107, relating to the Company's 2025 "All Source" Request for Proposals (RFP), which was requested by the Commission with Order 16 from Docket UE-210829. PacifiCorp's petition included a request not to include demand response within the 2025 "All Source" RFP, as there exists a separate process for demand response program RFPs. The Commission granted PacifiCorp's petition with Order 01 in Docket UE-250460 on July 3, 2025.[22]

June 30, 2025 – PacifiCorp filed its 2024 Demand Response Annual Report in Docket UE-220550.[23]

October 1, 2025 – PacifiCorp filed its 2025 Clean Energy Implementation Plan in Docket UE-250617. The 2025 Clean Energy Implementation Plan (CEIP) covers a four-year compliance period of 2026-2029 and identifies demand response as a key demand side resource for Washington's clean energy transformation standards and grid reliability. The CEIP also includes specific capacity targets for the Company's response portfolio of programs to achieve by the end of the compliance period. The Commission acknowledged these targets with Order 01 in Docket UE-250617 on March 27, 2026, approving PacifiCorp's 2025 CEIP.[24]

WASHINGTON STAKEHOLDER ENGAGEMENT

PacifiCorp's Demand-Side Management (DSM) Advisory Group and Equity Advisory Group are important forums for the Company to share updates on demand response programs and to receive stakeholder feedback on program change proposals or adaptive management strategies for incorporation into program designs or customer outreach strategies. These Advisory Groups hold 12 meetings combined per year on average. Advisory Groups are also provided with draft filings prior to being submitted to the UTC as well as program change proposals as part of the Company's Schedule 106 program change process;[25] these activities help stakeholders shape the design and implementation of demand response programs to help provide more beneficial and equitable customer impacts.

Key takeaways and activities with the DSM and Equity Advisory Groups in 2025 included discussion of the Company's draft targets for demand response that would be included in the 2025 Clean Energy Implementation Plan for the 2026-2029 compliance period, and stakeholder feedback and questions that helped inform the Company's approach to, and considerations for, its development of an Equity Plan for the demand response portfolio.

[19] Ibid.
[20] Ibid.
[21] Ibid.
[22] https://www.utc.wa.gov/casedocket/2025/250460/docsets
[23] https://www.utc.wa.gov/casedocket/2022/220550/docsets
[24] https://www.utc.wa.gov/casedocket/2025/250617/docsets
[25] For more information on this program change process, see Attachment D to PacifiCorp's *Revised Tariff Schedule 106*, filed July 22, 2022, in Docket UE-220550 (https://www.utc.wa.gov/casedocket/2022/220550/docsets).

March 21, 2025 – Joint Demand-Side Management (DSM) Advisory Group and Equity Advisory Group Meeting
PacifiCorp convened a joint DSM and Equity Advisory Group meeting in March 2025. The Company shared updates on planned customer engagement activities involved in launching new demand programs (Cool Keeper and Wattsmart Battery) and planned regulatory filings for 2025.[26]

June 6, 2025 – Equity Advisory Group Meeting
PacifiCorp's presentation at this EAG meeting included several topics relating to demand response programs. The Company held a period for questions and feedback from stakeholders regarding the draft 2024 Demand Response Annual Report. PacifiCorp also presented on the draft targets for demand response (DR) that would be included in the 2025 Clean Energy Implementation Plan for the 2026-2029 compliance period. Finally, PacifiCorp provided updates on the Wattsmart Business DR program and details on the Company's newly launched demand response programs (Cool Keeper and Wattsmart Battery).[27]

June 18, 2025 – Demand-Side Management (DSM) Advisory Group Meeting
PacifiCorp held a DSM Advisory Group meeting on June 18, 2025, as part of its ongoing Washington stakeholder engagement process. In this meeting, the Company held a period for questions and answers on the 2024 Demand Response Annual Report and shared updates on the Wattsmart Business DR program and details on the Company's newly launched demand response programs (Cool Keeper and Wattsmart Battery).[28]

July 16, 2025 – Demand-Side Management (DSM) Advisory Group Meeting
PacifiCorp presented the draft targets for demand response (DR) and the demand response specific actions that would be included in the 2025 Clean Energy Implementation Plan for the 2026-2029 compliance period, as well as the contribution that demand response programs make to the Company's Customer Benefit Indicator that tracks increase in Company energy programs.[29]

August 26, 2025 – Clean Energy Implementation Plan (CEIP) Engagement Series
PacifiCorp presented the draft targets for demand response (DR) and the demand response specific actions that would be included in the 2025 Clean Energy Implementation Plan for the 2026-2029 compliance period.[30]

December 11, 2025 – Joint DSM Advisory Group and Equity Advisory Group Meeting
PacifiCorp presented a 2025 review of demand response programs, which included updates on selected programs, and a review of demand response portfolio capacity actuals relative to those initially forecasted for 2025. The Company also provided a preview of the demand response portfolio for 2026, which included a capacity forecast for 2026 and future years, demand response specific actions in the Company's 2025 Clean Energy Implementation Plan, a proposed plan for creating an Equity Plan for the demand response portfolio, and plans for a future demand response RFP (request for proposals).[31]

---

[26] https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/community/washington-ceip/WA_Joint-DSM-EAG_Meeting_2025-03_March_2025_Slides.pdf
[27] https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/community/washington-ceip/EAG_Meeting_2025-6_June_2025_Slides.pdf
[28] https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/community/washington-ceip/WA_DSM-AG-Meeting_2025-06_June_2025_Slides.pdf
[29] https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/community/washington-ceip/WA_DSM-AG-Meeting_2025-07_July_2025_Slides.pdf
[30] https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/community/washington-ceip/WA_CEIP_Meeting_2025-08_August_2025_Slides.pdf
[31] https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/community/washington-ceip/WA-EAG-DSM_Meeting_2025-12_December_2025_Slides.pdf

IRRIGATION LOAD CONTROL

Program Description

PacifiCorp's Irrigation Load Control (ILC) program is a demand response offering available to eligible irrigation customers in Washington designed to reduce system peak demand and support grid reliability during periods of high energy use. Under the program, participating customers allow PacifiCorp to temporarily curtail electric irrigation pump operation during designated load management events in exchange for financial incentives.[32]

The program operates during the irrigation season, generally from early June through September, with dispatch events occurring during peak load hours, between 2 p.m. and 9 p.m. Events are limited in frequency and duration and are called only as needed to address system conditions or elevated market prices.

Participation is voluntary and open to Washington irrigation customers served on Schedule 40 who can temporarily shut off eligible electric irrigation pumps. PacifiCorp, through its program administrator[33], installs load control and monitoring equipment at no cost to participants to enable automated curtailment during events. Customers retain the ability to opt out of individual events or the program entirely if operational conditions require continued irrigation.

Participants receive seasonal bill credit incentives based on the average electrical load available for curtailment during eligible hours and their performance during load control events. Incentive levels vary by customer, with higher incentives offered to customers who participate in all mandatory events. Incentives may be prorated for non-participation or opt-outs.

The ILC program supports PacifiCorp's demand response objectives under Washington's Clean Energy Transformation Act by providing a flexible, cost-effective resource that helps manage peak demand, mitigate wholesale energy cost exposure, and maintain system reliability while offering participating irrigators an opportunity to reduce their overall energy costs.

Participation

In 2025, 51 customers representing 289 pumps participated in the program during the operating season. Following the end of the season, 111 pumps were removed, resulting in a total of 178 pumps enrolled at year-end. During the season, the program's maximum available capacity was 4.4 MW, with an average available capacity of 3.2 MW. The maximum curtailed capacity reached 3.0 MW, while the average curtailed capacity was 1.8 MW. Including devices that were unenrolled after the season, PacifiCorp estimates the program had 3.9 MW of total capacity at year-end 2025.

Curtailment Events

Table 5 outlines the ILC events and performance. During 2025, there were 11 curtailment events during the season.

[32] https://www.pacificpower.net/content/dam/pcorp/documents/en/pacificpower/savings-energy-choices/agriculture/PP_ILC_WA.pdf

[33] See Appendix 1 for Irrigation Load Control administration details.

Table 5: 2025 ILC Curtailment Events

Date	Event Start	Event Length (Hours)	Baseline Load (MW at site)	Curtailed Load (MW at site)	Performance
7/11/2025	17:00	3	3.9	3.0	77%
7/14/2025	15:00	4	2.7	1.6	59%
7/15/2025	15:00	4	2.1	1.9	90%
7/17/2025	15:00	3	2.0	1.3	65%
7/28/2025	17:00	4	2.6	1.9	73%
7/30/2025	16:00	4	2.9	2.5	86%
8/5/2025	17:00	3	2.7	2.0	74%
8/11/2025	17:00	3	2.5	1.7	68%
8/12/2025	17:00	3	2.1	1.1	52%
8/13/2025	18:00	3	2.1	1.5	71%
9/2/2025	16:00	4	2.2	1.1	50%

Program Costs

Program costs for the ILC program in 2025 are summarized in Table 6. These costs include participant incentives, program delivery costs, and PacifiCorp internal costs. Participant incentives were provided to customers in the form of bill credits. Program delivery costs encompassed control of equipment and installation, administrative fees paid to Connected Energy, and marketing expenses. PacifiCorp internal costs consisted of labor and material expenses directly attributable to program operations.

Table 6: 2025 ILC Program Costs

Category	2025 Cost
Incentives	$75,627
Delivery	$151,944
PacifiCorp Internal Costs	$13,395
Total	**$240,966**

Connected Energy, the program administrator, is responsible for the procurement, installation, and ongoing maintenance of load control devices**.** In 2025, the total cost to procure and install these devices was $108,238, representing approximately 45 percent of total program costs for the year. The full cost of each device and its installation is incurred in the year of installation; however, the associated capacity benefits continue to accrue in subsequent years.

Cost Effectiveness

PacifiCorp applied the discount factors specified in the California Public Utilities Commission Demand Response Cost-Effectiveness Framework (“Framework”) in evaluating program cost effectiveness. Cost-effectiveness was assessed at the program level. Program benefits were calculated using a 10-year levelized estimate of avoided costs by benefit category. Capacity values per dispatch were based on the maximum load reduction achieved across all 2025 events for each program tier and were adjusted to account for line losses.

Consistent with the 2024 Annual Report and following an evaluation of the applicable business rules and administrative complexity associated with registering demand response resources in the California Independent System Operator (CAISO) Energy Imbalance Market (EIM), PacifiCorp elected not to pursue EIM registration in 2023. Accordingly, CAISO EIM reserve value benefits remain excluded from the 2025 cost-effectiveness analysis for both the hour-ahead and day-ahead product offerings.

Participant costs reflect the value of foregone service, transaction costs, incremental management effort, and other costs participants may incur because of program enrollment and participation. These costs vary across participants and are not directly observable or readily quantifiable. However, participant willingness to enroll in the program provides evidence that such costs are less than the direct benefits received. Consistent with the Framework and with assumptions adopted by the Northwest Power Planning and Conservation Council, PacifiCorp modeled participant costs as 75 percent of participant incentives, as reflected in the PacifiCorp Total Resource Cost (PTRC) Test. The PTRC Test, but not the Utility Cost Test (UCT), incorporates the 10 percent Northwest Power Act conservation adder applied to avoided costs.

Table 7: 2025 ILC Retrospective Cost Effectiveness for 2025 Program Year[34]

Parameter	2025
Curtailed Load (MW)[35]	3.0
Per-Unit Avoided Cost Rate ($/kW)	$118.67
Program Costs (excluding incentives)	$165,338
Total Resource Cost Test (TRC1)	**1.87**
Utility Cost Test (UCT)	**1.70**
PacifiCorp Total Resource Cost Test (TRC2)	**1.70**

The improvement in cost-effectiveness for the Irrigation Load Control program from 2024 to 2025 was primarily driven by a significant reduction in total program costs, specifically delivery-related expenditures, alongside modestly increased customer participation. In 2024, program costs totaled $609,361 for 46 customers and 332 enrolled pumps, largely driven by delivery costs. In contrast, 2025 total program costs declined to $240,966 despite slightly higher participation of 51 customers and 289 enrolled pumps. This reduction in program costs reflects more efficient program delivery, while maintaining comparable load control capability. The combination of lower overall costs and stable program performance resulted in a material improvement in cost-effectiveness metrics year over year.

Program cost effectiveness is expected to improve over time, as the primary capital and labor costs associated with load control device installation are incurred on a one-time basis for each device. In future program years, PacifiCorp expects that a substantial portion of participating devices will have been installed in prior years, such that capacity benefits will continue to accrue without incurring corresponding installation costs.

Key Findings and Future Changes

Key Findings – Washington Irrigation Load Control Program

1. **Program is Performing Reliably During Peak Events**
   - The ILC program consistently delivers predictable and dispatchable load reductions during summer peak demand periods, supporting system reliability and reducing peak capacity needs.
   - Curtailment events are limited in number and duration, occurring only a few times per season and typically lasting no more than four hours per event.[36]
2. **Strong Alignment with Washington Clean Energy Goals**
   - The program directly supports PacifiCorp's commitments under Washington's Clean Energy Transformation Act (CETA) by providing non-emitting demand-side capacity resources.
   - Demand response resources like ILC help offset the loss of dispatchable thermal generation as the system becomes more renewable-heavy.

[34] See Appendix 4 for cost effectiveness details.
[35] Maximum achieved load reduction across all events in 2025 at site.
[36] https://capitalpress.com/2024/03/21/pacific-power-how-irrigation-load-control-works-for-irrigators/

3. **Customer Participation is Growing but Remains Niche**
    - Enrollment in Washington began in early 2023, and participation has grown steadily but remains concentrated among large irrigation customers with operational flexibility.
    - Customer retention is strong once enrolled, particularly among irrigators who can shift pumping schedules or have water storage capacity.
4. **Cost-Effective Resource Compared to Supply-Side Alternatives**
    - The ILC program is considered cost-effective when compared to traditional generation or capacity procurement, particularly due to low program delivery and incentive costs.
    - Avoided costs from peak demand reduction flow through to all customers in the form of lower system costs, not just program participants.
5. **Performance Varies Based on Water Availability and Operations**
    - Program performance is influenced by irrigation practices, crop types, and water availability, which can affect customers' willingness to participate in events.
    - Occasionally customers opt out of events during critical irrigation periods, which reduces delivery load but is accounted for in incentive design.

Future Changes and Enhancements Under Consideration

1. **Expanded Enrollment and Market Reach**
    - PacifiCorp is evaluating opportunities to expand ILC enrollment by targeting additional irrigation customers and improving outreach through agricultural partners and trade groups.
    - Improved education around event frequency and operational impacts is expected to help address participation barriers.
2. **Refinements to Incentive Structures**
    - Adjustments are being considered to better align incentive levels with actual delivered load and performance consistency.
3. **Integration with Broader Demand Response Portfolio**
    - PacifiCorp plans to increasingly coordinate ILC with its Commercial and Industrial Demand Response and other flexible load programs to create a more integrated demand response portfolio in Washington.
    - Lessons learned from ILC are being applied to newer programs enabled under Schedule 106.
4. **Improved Measurement, Verification, and Reporting**
    - Future enhancements include improved interval data analysis and reporting to better quantify load impacts and support regulatory review.
    - The program is expected to play a key role beyond 2025 as PacifiCorp works towards its demand response capacity targets under CETA.

WATTSMART BUSINESS DEMAND RESPONSE

Program Description

The Wattsmart Business Demand Response (WSB DR) program provided incentives to participating commercial and industrial customers who agreed to curtail electrical load at PacifiCorp's request under defined dispatch parameters. PacifiCorp contracted with Enel X to administer the program, including customer enrollment, dispatch notifications, and event activation on PacifiCorp's behalf.

Participants could choose from three program products, each differentiated by the amount of advance notice provided prior to a dispatch event. Table 8 summarizes the features of the product offerings.[37]

Table 8: WSB DR Product Offers Available in 2025

Dispatch Parameter	Product		
	60 Minute	7 Minute	Real Time
Eligible Period	May 1 – Sept 30	Jan 1 – Dec 31	Jan 1 – Dec 31
Eligible Days	Weekdays, non-holidays	7 days a week	7 days a week
Eligible Hours	3:00 pm to 9:00 pm	24 hours/day	24 hours/day
Max Dispatch Hours/Yr	40 hours	60 hours	5 hours
Max Dispatch Events	1 event/day	25 events/year	50 events/year
Max Durations	~ 3 hours	~4 hours	~15 minutes
Min Advance Notification to Customer	60 minutes	7 minutes	None
Incentive Rate ($/kW-yr)	$30	$75	$85

Participation

At the end of 2025, the WSB DR program included 13 customers across 38 enrolled sites, representing a total subscribed maximum curtailed load of 5.96 MW. Table 9 provides a breakdown of enrollment by program products.

Table 9: Year End Program Enrollment

	PAC 60M	PAC 7M	PAC RT	Total
Number of Customers	7	5	1	**13**
Number of Sites	13	21	4	**38**
Maximum Curtailed Load (MWs)	2.88	2.35	0.73	**5.96**

Curtailment Events

Dispatch events lasted between 5 minutes and three hours. Participation declined over the course of the season following the removal of extreme underperforming customers. For Peak Management event, all events were dispatched during late afternoon and evening hours, consistent with PacifiCorp's summer peak demand periods. Customers received a minimum of 60 minutes' advance notice for all events. Real time events were dispatched once a customer was enrolled late in the year. For the 7 Minute advance notice product, events were called at all hours of the day.

[37] For a more detailed description of the program activities and events in 2025, see the Wattsmart Business Demand Response Program – Administrator Report, in Appendix 2.

Table 10: 2025 WSB Curtailment Events, 60 Minute Product

Date	Event Start	Event Length (Hours)	Nominated Load (MW @ site)	Curtailed Load (MW @ site)	Performance
5/27/2025	17:00	1	1.150	0.249	22%
6/25/2025	19:00	1	1.535	0.860	56%
7/14/2025	17:00	3	1.735	2.884	166%
7/16/2025	16:00	2	1.735	1.241	72%
8/05/2025	18:00	3	1.735	0.564	33%
8/11/2025	17:00	3	1.735	0.782	45%
8/12/2025	17:00	3	1.735	1.045	60%
8/13/2025	18:00	3	1.735	1.424	82%
8/22/2025	18:00	3	1.735	0.679	39%
9/2/2025	17:00	3	1.255	0.732	58%

Table 11: 2025 WSB Curtailment Events, 7 Minute Product

Date	Event Start	Event Length (Hours)	Nominated Load (MW @ site)	Curtailed Load (MW @ site)	Performance
01/21/25	09:01	0.33	0.900	1.018	113%
05/27/25	13:07	0.33	1.490	1.478	99%
06/25/25	12:37	0.33	1.490	1.239	83%
07/14/25	18:00	0.75	1.390	1.167	84%
07/15/25	18:00	0.75	1.390	1.730	124%
07/24/25	12:24	0.33	1.390	1.199	86%
09/04/25	06:42	0.33	1.405	1.651	118%
10/27/25	07:40	0.33	1.576	2.066	131%
11/21/25	09:02	0.33	2.072	2.349	113%
12/22/25	06:14	0.33	1.901	1.317	69%

Table 12: 2025 WSB Curtailment Events, Real Time Product

Date	Event Start	Event Length (Hours)	Nominated Load (MW @ site)	Curtailed Load (MW @ site)	Performance
12/2/25	09:15	0.0833	0.411	0.660	161%
12/3/25	09:12	0.0833	0.411	0.644	157%
12/4/25	21:00	0.0833	0.411	0.616	150%
12/6/25	17:05	0.0833	0.411	0.727	177%
12/11/25	01:13	0.0833	0.411	0.708	172%
12/11/25	07:43	0.0833	0.411	0.593	144%
12/11/25	10:23	0.0833	0.281	0.322	115%
12/12/25	10:00	0.0833	0.281	0.475	169%
12/13/25	10:25	0.0833	0.256	0.485	189%
12/16/25	11:52	0.0833	0.411	0.549	134%
12/17/25	07:00	0.0833	0.411	0.559	136%
12/17/25	14:38	0.0833	0.256	0.199	78%
12/19/25	18:18	0.0833	0.411	0.594	145%
12/20/25	07:35	0.0833	0.411	0.599	146%
12/22/25	06:47	0.0833	0.411	0.519	126%
12/23/25	02:18	0.0833	0.411	0.536	130%
12/31/25	13:39	0.0833	0.256	0.385	150%

Program Costs

Table 13 presents the program costs for the WSB Demand Response program for 2025. In that year, costs were incurred across the 60-Minute, 20-Minute, and 7-Minute product offerings.

Table 13: 2025 WSB DR 2025 Program Costs

Category	Amount
Incentives	$60,052
Delivery[38]	($2,865)
Marketing Costs	$0
PacifiCorp Internal Costs[39]	$30,230
Total Cost	**$87,417**

As designed, incentives represented the largest cost category in 2025. Because the program is currently focused on enrolling new customers, metering costs remain higher during growth years. In future years, the proportion of total costs attributable to meter upgrades is expected to decline, while incentive and delivery costs are projected to increase as overall program capacity expands.

Cost Effectiveness

For the retrospective cost-effectiveness analysis of the 2025 program year, PacifiCorp evaluated the cost effectiveness of each product with enrolled capacity in 2025, as well as the program in aggregate. Consistent with its approach for other demand response programs, PacifiCorp applied the California Standard Practice Manual framework as a guide in conducting the retrospective analysis.

Capacity values per dispatch were based on the 2025 maximum event load reduction by program category and were adjusted for line losses. Program benefits were calculated using a 10-year levelized benefit stream. A discussion of the cost components and the two cost-effectiveness tests applied is provided above in the Irrigation Load Control: Cost Effectiveness section.

The value of reserve capacity was excluded from the analysis for the peak shaving and real-time product offerings over the 10-year period, as well as for the 7-Minute product in the near term. In addition, there was no participation in the real-time product offering in Washington in 2025.

Detailed cost effectiveness results for the 2025 program year are presented in Table 14.

Table 14: 2025 WSB DR Retrospective Cost Effectiveness[40]

Parameter	2025
Curtailed Load (MW)[41]	5.96
Per-Unit Avoided Cost Rate ($/kW)	$152.12
Incentives	$60,052
Delivery and Meter Upgrades	($2,865)
PacifiCorp Internal Costs	$30,230
Participant Costs for PTRC	$87,417
Total Resource Cost Test (TRC1)	**7.67**
Utility Cost Test (UCT)	**6.97**
PacifiCorp Total Resource Cost Test (TRC2)	**6.97**

[38] Vendor incurs penalties for low performance.
[39] The PacifiCorp internal costs of $30,230 included metering costs of $5,119.
[40] See Appendix 4 for cost effectiveness details.
[41] Maximum achieved load reduction across all events in 2025, at site.

Key Findings and Future Changes

Key Findings from 2025 Performance (Informing 2026)

1. **Strong cost-effectiveness across all tests**
   The Wattsmart Business DR program demonstrated robust cost-effectiveness in 2025, with a TRC and UCT of 3.59 and a PTRC of 3.95. These results indicate that program benefits exceeded costs from both total resource and utility system perspectives. The consistently high ratios suggest the program is delivering significant system and participant value relative to expenditures**.**
2. **Demand Response remains highly efficient resource strategy.**
   The magnitude of the cost-effectiveness results reflects the inherently low incremental cost of demand response relative to avoided capacity and energy benefits. Program performance reinforces DR as a cost-efficient resource for peak demand management and supports its continued role in PacifiCorp's least-cost resource strategy.
3. **Target participation and dispatch drove value realization.**
   Program outcomes indicate that participating customers provided meaningful and reliably dispatchable load reductions during peak events. Even with a potentially limited number of participants, the program achieved disproportionately high benefits, highlighting the effectiveness of targeted recruitment and event performance.
4. **Incentive structure effectively balances participation and value.**
   Program incentives are well-calibrated, supporting customer enrollment and performance while maintaining high cost-effectiveness. This proves that the current incentive levels are sufficient to drive participation without over-subsidizing load reductions.
5. **Opportunity for measured program expansion**
   Given the strong economic performance, the program is well-positioned for targeted expansion in 2026. Increasing participation – particularly among high-load, dispatchable customer – could further enhance system benefits while maintaining favorable cost-effectiveness.
6. **Sensitivity to participation levels and event frequency**
   While 2025 results are strong, overall program outcomes remain sensitive to participation levels and dispatch frequency. Continued focus on customer retention, recruitment, and event optimization will be important to sustain performance in 2026.

Future Changes and Strategic Direction for 2026

1. **Targeted expansion of high-value participants**
   PacifiCorp will pursue targeted outreach to large commercial and industrial customers with high, dispatchable load potential to expand program participation while maintaining strong cost-effectiveness. Emphasis will be placed on customers with operational flexibility and demonstrated performance capability.
2. **Optimization of dispatch strategy and event design**
   The Company will refine event timing, duration, and frequency to better align with system peak conditions and evolving load shapes. Enhanced event design is expected to improve realized demand reductions while minimizing customer disruption.
3. **Integration with evolving system needs and resource planning**
   Demand response is expected to play an increasing role in addressing peak capacity constraints supporting grid reliability. The program will continue to be aligned with PacifiCorp's integrated resource planning objectives, particularly as system peak shifts due to load growth and electrification.
4. **Enhancement of customer engagement and retention strategies**
   Efforts in 2026 will prioritize participant retention through improved communication, event notification, and performance feedback. Strengthening the customer experience is expected to support consistent participation and reliable load curtailment.

COOL KEEPER

Program Description

Cool Keeper aggregates residential and small commercial cooling load as a grid management resource. Pacific Power provides and installs a load control switch on the customer's outdoor compressor unit, in exchange for a $30-$60 bill credit. The switch uses cellular technology to receive control signals and transmit data back to a central cloud-based platform. Pacific Power has integrated the control software with its enterprise grid management system, allowing Cool Keeper to respond instantly to both automated and manual-dispatch curtailment events. Cool Keeper is dispatched for frequency response and contingency reserve events. These are grid needs that require fast response, but only short-duration curtailment, to avoid participant discomfort. Cool Keeper participants with systems under 5.5 tons (which includes over 95% of enrolled devices) receive up to $30 in annual bill credits. Larger systems, up to 15 tons, receive up to $60 in annual bill credits.

Summary of 2025 Activity

Pacific Power filed the program design and dispatch parameters on February 18, 2025, and the program was effective as of March 28, 2025. Pacific Power and its implementer, Franklin Energy, completed several start-up activities in 2025:

- Developing the program filing, including stakeholder review and comment period
- Market assessment of penetration of central cooling systems compatible with Cool Keeper equipment, at zip code level
- Creation of Washington-specific marketing materials, and transcreation of marketing materials into Spanish
- Scouting locations for office/warehouse to support local technician.
- Reviewing state licensing requirements for local technician
- Posting open position for local technician (interviews underway in December 2025).
- Interviews with HVAC installers in the Yakima and Walla Walla areas to explore partnerships, to provide flex capacity for installation and maintenance.

Program Costs

Cool Keeper costs for 2025 included administrative delivery costs, EM&V, and internal administrative costs. There were no expenditures for participant bill credits or equipment purchase or installation, since there was no participation during the year.

Table 15: 2025 Cool Keeper Program Costs

Category	Cost
Incentives	$0
Delivery	$86,628
Marketing Costs	$17
PacifiCorp Internal Costs	$21,525
Total	**$108,170**

Cost Effectiveness

Table 16: 2025 Cool Keeper Retrospective Cost Effectiveness for 2025 Program Year[42]

Parameter	2025
Curtailed Load (MW)	0
Per-Unit Avoided Cost Rate ($/kW)	$152.50
Program Costs (excluding incentives)	$108,170
Participant Costs (PTRC)	$108,170
Total Resource Cost Test (TRC)	**0**
Utility Cost Test (UCT)	**0**
PacifiCorp Total Resource Cost Test (PTRC)	**0**

WATTSMART BATTERY PROGRAM

Program Description

PacifiCorp's Wattsmart Battery Program is a customer-facing, incentive-based energy storage demand response program in Washington designed to enhance grid reliability, reduce system costs, and support the state's clean energy and decarbonization goals. The program enables PacifiCorp to aggregate customer-owned battery systems into a distributed energy resource (DER) network, functioning as a virtual power plant (VPP) that can be dispatched to address grid needs.[43]

The program is one component of PacifiCorp's broader Washington Clean Energy Implementation Plan (CEIP) and Integrated Resource Plan (IRP) strategy. By leveraging behind-the-meter battery storage, PacifiCorp can defer or avoid investments in traditional peaking resources, reduce reliance on higher-cost and higher-emission generation, and improve system flexibility as renewable penetration increases. The program also supports Washington's Clean Energy Transformation Act (CETA).[44]

Eligible residential and nonresidential customers who install qualifying battery storage systems may enroll in the program and agree to allow PacifiCorp to dispatch a portion of their battery capacity during grid events. Dispatches are typically short-duration, and customers retain backup power functionality for outages based on their system configuration.

2025 Participation Targets and Enrollment

The program offers a strong upfront financial incentive to drive adoption:

- $600 per kilowatt (kW) of eligible battery capacity, capped at $3,000 per battery for residential customers (two-battery limit per home)
- Ongoing annual bill credits of $15 per kW, beginning in year two.
- A four-year participation commitment is required to retain the upfront incentive.
- Commercial customers installing battery systems larger than 30 kW work with the utility to customize participation based on the specifics of the project.

[42] The Cool Keeper demand response program was approved with a March 28, 2025, effective date. While program costs were incurred in 2025 to support initial implementation, marketing, and early enrollment activities, the program did not generate sufficient participation or dispatch activity within the reporting period to produce measurable curtailment or demand reduction benefits. As such, cost-effectiveness results are not presented, as a representative evaluation requires additional program maturity and operating data. See Appendix 4 for cost effectiveness details.

[43] https://www.pacificpower.net/savings-energy-choices/wattsmart-battery-program.html

[44] PacifiCorp's *2021 Clean Energy Implementation Plan, Revised CEIP*, filed Mar. 13, 2023, in Docket UE-210829 (https://apiproxy.utc.wa.gov/cases/GetDocument?docID=277&year=2021&docketNumber=210829)

These incentives can be stacked with other programs and federal tax credits,[45] to reduce net customer costs and improve accessibility.

Battery Program Events

Table 17: Wattsmart Battery Program Events

Month	Number of Events	Estimated Average Performance at Site (MW)
October	12	0.03
November	17	0.03
December	17	0.03

Table 18: Program Performance for Wattsmart Batteries

Maximum Potential MW (at Site)	0.03
Total Participating Batteries	2

Program Costs

Table 19: 2025 Wattsmart Battery Program Costs

Category	Amount
Customer Incentives	$9,000
Program Delivery	$26,052
Internal Administrative Costs	$134
Total Cost	**$35,185**

Cost Effectiveness

Table 20: 2025 Battery Cost Effectiveness[46]

Parameter	2025
Per-Unit Avoided Cost Rate ($/kW)	$318.92
Incentives	$9,000
Program Delivery	$26,052
PacifiCorp Internal Costs	$134
Participant Costs for TRC	$35,185
Total Resource Cost Test (TRC1)	**0.32**
Utility Cost Test (UCT)	**0.29**
PacifiCorp Total Resource Cost Test (TRC2)	**0.29**

[45] Federal tax credits ended at YE2025.

[46] The Wattsmart Battery demand response program remains in the initial stages of implementation under Schedule 106. In 2025, program costs were incurred to support customer enrollment, system integration, and program administration; however, participation levels and dispatch frequency were limited and did not yet produce sufficient demand reduction benefits. As a result, the program did not meet cost-effectiveness thresholds for the reporting period (TRC: 0.40, UCT: 0.40, PTRC: 0.44), as initial program costs exceeded realized benefits. These results are not indicative of expected long-term performance, as increased participation and dispatch activity are anticipated as the program matures. See Appendix 4 for cost effectiveness details.

Key Findings and Future Changes

1. **Customer-sited batteries are a cost-effective grid resource.**

Early program design and regulatory review concluded that aggregated, customer-owned batteries can provide local grid support at lower cost than traditional generation, particularly when used for short-duration dispatch events (minutes rather than hours).

2. **Customer uptake is driven by upfront incentives.**

Stakeholder comments and market response showed that meaningful upfront incentives are essential to drive participation, especially given the high capital cost of battery storage.

- The approved $600/kW upfront incentive (up to $3,000 per battery) was viewed as sufficient to stimulate early adoption.
- Stacking with federal tax credits materially improves affordability.

3. **The Wattsmart Battery Program aligns with Clean Energy Transformation Act and Clean Energy Implementation Plan needs.**

The Washington UTC and stakeholders recognized the Wattsmart Battery Program as a practical implementation tool that also supports emissions reductions.

- Distributed storage supports renewable integration.

4. **Expansion will be implemented gradually over time.**

The Program will continue to scale up, with an anticipated increase in both participant enrollment and battery system eligibility. Early participation forecasting has been adjusted to reflect adoption rates in the first year of the Program.

5. **Enhanced integration with Clean Energy Implementation Plan and IRP**

As an expansive VPP inclusive of battery systems throughout PacifiCorp service area, the Wattsmart Battery Program may evolve over time into a program treated as an operational resource.

- Battery enrollment could inform distribution system planning.
- Participating battery storage systems could be coordinated with broader IRP storage targets.

6. **Other rebates and incentives fall short of prioritizing battery storage systems capable of addressing prioritized grid needs.**

Incentivizing battery storage systems able to be dispatched by the utility stacks the benefits to the larger grid community atop those of the individual customer, but battery storage systems are costly and remain out of reach for many customers.

Key findings confirm that customer-sited batteries provide real system value, align with Clean Energy Transformation Act decarbonization goals, and offer a cost-effective alternative to traditional utility response-to-grid needs. The next phase focuses on scaling enrollment and expanding the list of eligible battery systems.