TACOMA POWER

Clean Energy Implementation Plan

2026-2029





RESOLUTION NO. U-11567

A RESOLUTION authorizing the approval and adoption of the Tacoma Power's Clean Energy Implementation Plan.

WHEREAS the City of Tacoma, Department of Public Utilities, Light

Division ("Tacoma Power") is requesting the approval and adoption of the Clean

Energy Implementation Plan, as required by the Clean Energy Transformation

Act ("CETA"), Chapter 19.405 RCW, and

WHEREAS the landmark law imposes clean energy mandates on electric utilities in Washington as well as planning and reporting requirements, and

WHEREAS the CEIP is a planning document to make sure that utilities are prepared to meet CETA's clean energy requirements, and

WHEREAS CETA mandates a transition to clean electricity supply with specific milestones: eliminating coal-fired electricity by 2025, achieving greenhouse gas neutrality by 2030, and sourcing 100% of electricity from non-emitting resources by 2045, and

WHEREAS in addition to these goals, the CEIP places a critical focus on equity, requiring the utilities to involve the public the planning process to ensure the benefits of this transition are distributed equitably and the burdens are minimized, and

WHEREAS this plan outlines Tacoma Power's strategies and commitments achieving both clean energy targets and an equitable transition; Now, therefore,



BE IT RESOLVED BY THE PUBLIC UTILITY BOARD OF THE CITY OF TACOMA:

That the Public Utility Board of the City of Tacoma hereby authorizes the approval and adoption of Tacoma Power's Clean Energy Implementation Plan.

Approved as to form:

Chief Deputy City Attorney

Charlese Jacob

Chair Secretary

Adopted_

10-22



Contents

3

Background

4

Clean Energy: Specific and Interim Targets

5 Equitable Transition

7
Indicators and
Forecasts

14

Alignment with the Integrated Resource Plan/Clean Energy Action Plan

> 15 Conclusion

Background

The Clean Energy Implementation Plan (CEIP) is a four-year action plan for electric utilities to meet the requirements of the state's Clean Energy Transformation Act (CETA), which was enacted in 2019. CETA mandates a transition to a clean electricity supply with specific milestones: eliminating coal-fired electricity by 2025, achieving greenhouse gas neutrality by 2030, and sourcing 100% of electricity from renewable or non-emitting resources by 2045.

In addition to these environmental goals, the CEIP places a critical focus on equity. It requires utilities to involve the public in the planning process to ensure the benefits of this transition are distributed equitably and its burdens are minimized. This plan outlines Tacoma Power's strategies and commitments to achieving both clean energy targets and an equitable transition.



Clean Energy: Specific and Interim Targets

Key components of the CEIP include specific targets for energy efficiency, demand response, and renewable energy acquisitions. Utilities are required to establish an interim target for the percentage of their retail load to be served by clean energy and to identify how they will achieve this through specific actions.

Clean Energy Type	Units	2026	2027	2028	2029	4-year period
Renewable	%	87%	87%	87%	87%	87%
Non-emitting	%	7%	7%	7%	7%	7%
Total		94%	94%	94%	94%	94%

Table 1. Interim targets

Table 1 summarizes our interim targets. We are expected to meet 94% of our load with renewable and non-emitting energy in all four compliance years, which exceeds the minimum required target of 80% by 2030. This percentage was calculated using the Integrated Resource Plan (IRP) planning standard, which does not count excess energy generated in any given hour toward the total clean energy percentage.

Resource Category	Units	2026	2027	2028	2029	4-year Period
Renewable Energy	MWh	3,923,430	3,891,081	3,890,608	3,876,882	15,582,001
Energy Efficiency	MWh		26,214		26,214	52,428
Demand Response	MW	-	-	-	2	2

Table 2. Specific targets

Table 2 summarizes the specific targets for 2026-2029. We have a specific target of 15,582,001 MWh of renewable energy, 52,428 MWh of energy efficiency, and up to 2 MW of demand response. The renewable energy amount aligns with the 2024 IRP results and will be achieved through a combination of our own hydro resources as well as renewing our long-term power contract with Bonneville Power Administration. The energy efficiency amount is based on the results of our 2026 Conservation Potential Assessment. Lastly, the 2 MW of demand response is based on a proposed load curtailment program with a large industrial customer and was included in the IRP following a 2023 demand response potential assessment.



Equitable Transition

Public Process

We engaged in one-on-one conversations with local non-profit organizations, academic researchers, local public agencies, and community members with lived experience in poverty. This was done to gather diverse perspectives on the definition of "vulnerable populations." To reduce barriers to participation, we offered financial incentives to individual participants not representing an employer.

During these conversations, participants were asked to:



Define vulnerability

in the context of their experiences and the impacts of fossil fuel emissions.



Suggest appropriate indicators to track across vulnerable populations.

Vulnerable Populations Definition:

The stakeholder feedback provided valuable insights that shaped our approach to identifying vulnerable populations and resulted in the following definition:

communities and individuals within
Tacoma Power's service area who face
a disproportionately higher risk of
harm from the adverse effects of fossil
fuel pollution and climate change...

...due to a combination of systemic inequities, environmental exposures, and socio-economic factors that limit their ability to prepare for, cope with, and recover from these impacts."

This definition emphasizes the systemic drivers of vulnerability and moves away from deficit-based language, focusing instead on the increased risk of harm. It acknowledges the importance of considering both direct environmental health exposures and the underlying social and economic conditions that shape a community's or an individual's vulnerability.



We used a data-driven approach, informed by community engagement, to identify these populations within our service area. Vulnerable populations meet one or more of the following criteria:



Located in an area with "Very Low" Environmental Health AND Economic components of Tacoma Equity Index



Located in a heat island



Unable to pay bills

(at least one service disconnection in a year or "credit worthiness score of six (6) or more¹)



Low Income Senior or Disabled (enrolled in LIE or BCAP discount rates)



Relies on electric medical equipment

Highly Impacted Communities

Highly impacted communities (HIC) are defined by the State of Washington Department of Health (DOH) as meeting one or more of the following criteria:

- 1. A census tract covered or partially covered by Indian Country
- 2. A census tract scoring nine or 10 on the DOH Environmental Health Disparities Map

The DOH maintains a HIC Data Table, which identifies highly impacted communities in Washington by census tract. We used this data table to identify the highly impacted communities in our service area. Because the criteria used by the DOH to develop the environmental health disparities map are similar to some of the criteria we used to develop the equity index, there is significant overlap between vulnerable populations and highly impacted communities.

The pie chart in **Figure 1** shows the percentage of our residential customers that fall into the category of Vulnerable Populations (VP), HIC, both VP and HIC, or neither of these Named Communities². Because of the broad environmental health and economic criteria used to define these communities, a large portion of our customers (57%) fall into the category of VP, HIC, or both VP and HIC.

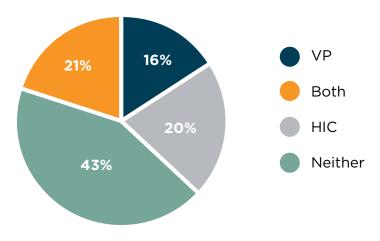


Figure 1. Distribution of named communities



Indicators and Forecasts

We updated our set of indicators to include specific actions that provide more meaningful outcomes for vulnerable populations and highly impacted communities. As part of the public process, we sought input from our stakeholders on which indicators and metrics we should track. Public stakeholders suggested several metrics to include in an equity analysis framework.

These metrics spanned three (3) categories:



Affordability



Reliability



Direct customer benefits

The list below summarizes:



Indicators that spell out **high-level** equity goals.



Specific actions aimed at realizing these high-level goals.



Outcome metrics that we will use to track progress towards our highlevel goals.



A narrative forecast of the **expected impact of our actions** on the outcome metrics.

The first two indicators as well as their associated specific actions and outcome metrics were developed by our staff. The outcome metrics for the third indicator were developed based on input from our stakeholders during the public process.



List of Indicators, Specific Actions, Outcome Metrics and Forecasts:

INDICATOR 1

High-quality input from community stakeholders - including members of vulnerable populations - influencing utility energy planning

a. Specific Actions:

- i. Improve IRP and CEIP stakeholder outreach by offering focused one-on-one conversations if group meetings are inaccessible to the general public or overburdened nonprofit staff.
- ii. Offer financial incentives to defray the cost of community participation.

b. Outcome Metrics:

i. Increased and easier participation in the planning process among groups with historic difficulty attending traditional stakeholder meetings (e.g., residential customers, non-profit staff, people with lived experience, and vulnerable populations).

ii. Evidence that stakeholder input is driving decisions at the utility.

c. Forecast:

i. This year, we included two
(2) community members with
lived experience in poverty
and electricity shutoffs in the
CEIP stakeholder process. In
four years, we aim to have no
less than two (2), but ideally
increase participants from HIC
and vulnerable populations
participating and influencing
utility planning.

INDICATOR 2

Renters participating in Customer Energy Solution Programs

a. Specific Actions:

i. Expand the income-qualified renter program to allow more access to conservation program benefits.

b. Outcome Metrics:

i. Increase the number of renters benefitting from lower bills by participating in customer energy solutions programs.

c. Forecast:

i. The pilot program started with 25 customers. Expanding this program will cause this indicator to increase over time.



INDICATOR 3

Projects and programs evaluated for equity impacts across three (3) equity areas identified by public process

a. Specific Actions:

i. Evaluate new and proposed services with an equity framework that prioritizes affordability, reliability, and direct benefits for Named Communities

b. Outcome Metrics:

i. Affordability:

- O1. Ability to Pay: Percentage of customers with service disconnections or bills sent to collections due to non-payment (across owner and tenant populations
- **O2.** Normalized Home Energy Cost: Average home energy cost per square foot of home

ii. Reliability:

- **01.** Average Annual Outage Frequency (for customers with outages)
- **02.** Average Annual Outage Duration (for customer with outages)

iii. Direct Customer Benefits:

- O1. Enrollment in Bill
 Assistance: Percentage of
 eligible customers in
 low-income bill
 assistance programs
- O2. Enrollment in Customer Energy Solutions (CES) Programs: Percentage of customers benefitting from CES programs

c. Forecast:

- i. Grid modernization projects will be evaluated with the Equity Analysis Framework (EAF), which will influence project prioritization.
- ii. We expect a gradual improvement over time in metrics across the three (3) equity areas.



Community Benefit/Outcome Metrics

The equity outcome metrics under Indicator #3 serve as the primary means for determining the impact of our specific actions on Named Communities. Below, we look at trends from 2022-2029 to provide a partial frame of reference for measuring the impact of our actions.

It's important to note that the customer experience is complex and influenced by factors outside the utility's control, such as overall inflation and societal dynamics and housing conditions. Still, examining these past trends can be useful.

AFFORDABILITY METRICS:

Percentage of customers with service disconnections or bills sent to collections

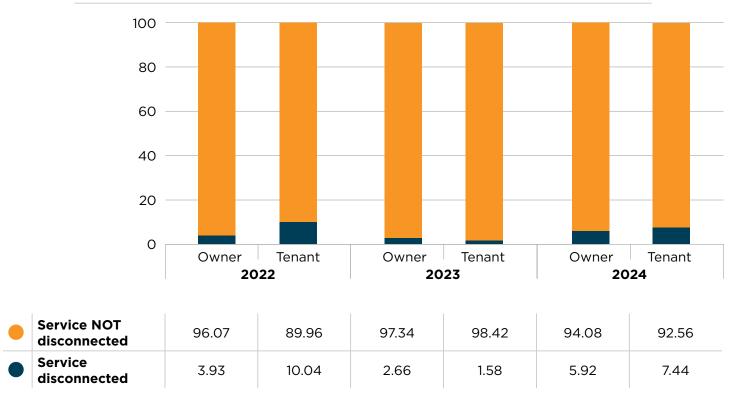


Figure 2. Customers with service disconnections

Figure 2 shows trends in service and bills sent to collections for tenants versus homeowners from 2022 to 2024. This dynamic period followed the end of pandemic-related eviction and utility shutoff moratoria in and bills sent to collections. In general, the data show that tenants are more likely to experience a service and bills sent to collections due to non-payment.



Average Home Energy Cost (\$/SQ FT) - Electrically Heated Homes

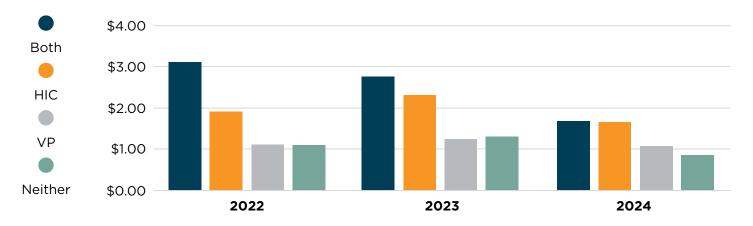


Figure 3. Average home energy cost (\$ per square foot) for electrically heated homes

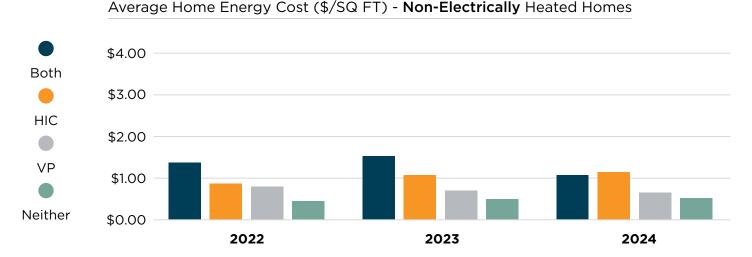


Figure 4. Average home energy cost (\$ per square foot) for non-electrically heated homes

Figures 3 and 4 show the average home energy cost per square foot of home for electrically-heated homes and non-electrically-heated homes, respectively. High values in this metric can indicate many things, including (but not limited to) poor housing quality and/or the absence of energy-efficient appliances. In general, Named Communities pay more per square foot than the general population. Note, these values are not weather-normalized, and 2024 was a warmer-than-average year. In Figure 3, the stark difference between 2022 and 2024 highlights how Named Communities in electrically-heated homes can be more susceptible to weather-induced swings. While Named Communities in non-electrically-heated homes also pay more in electric bills per square foot than the general population, this difference is not related to heating costs.



RELIABILITY METRICS

Average Annual Outage Frequency (Excludes customers without outages)

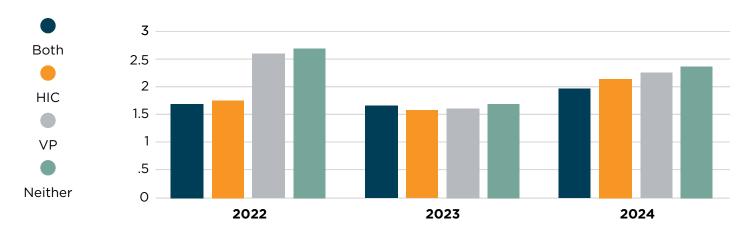


Figure 5. Average number of outages per year (includes customers with outages only)

Average Annual Outage Duration (Excludes customers without outages)

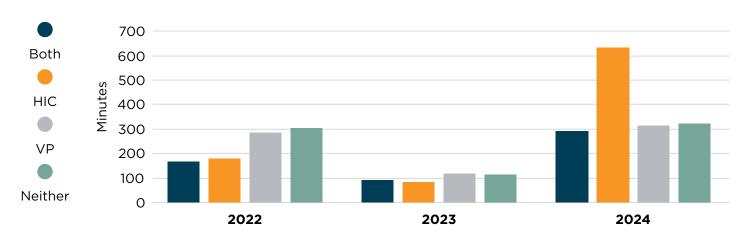


Figure 6. Average duration of outage (includes customers with outages only)

Figures 5 and 6 summarize the frequency and duration of outages for Named Communities compared to the general population between 2022 and 2024. Note, these values do not exclude major event days (like severe storms). The results indicate that Named Communities do not experience more frequent outages. With the exception of 2024, they also were not found to experience longer outages either.



DIRECT CUSTOMER BENEFITS

We offer two bill assistance programs for low-income households: The Bill Credit Assistance Plan (BCAP) and the Low-Income Elderly/Disabled (LIE/D) discount rate. The **BCAP** provides an automatic monthly credit on the utility bill for income-eligible households, with the credit amount based on the number of services received from Tacoma Public Utilities. This plan is designed to provide consistent, ongoing relief and help prevent financial crises. The **LIE/D discount rate** offers a percentage-based discount (currently 35%) on utility bills for customers who are 62 years or older or are receiving disability income, provided they also meet specific income qualifications. Both programs help make utility costs more manageable for those on limited or fixed incomes.

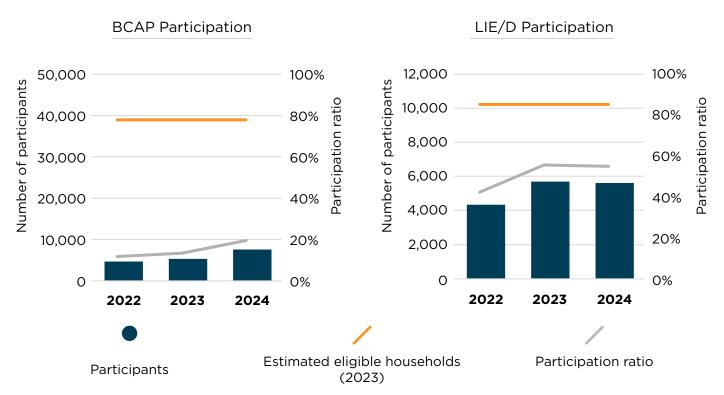


Figure 7. BPCAP participation ratio; Number of eligible households enrolled in BCAP

Figure 8. LIE/D participation ratio; Number of eligible households enrolled in the LIE/D Discount Rate

We recently performed an analysis of our customers to estimate how many qualify for these programs based on 2023 estimates of customer income. Nearly 40,000 households qualify for BCAP, and just over 10,000 qualify for the Discount Rate.

Figures 7 and 8 show the participation ratio of these programs. In 2024, 20% of eligible households were enrolled in BCAP and 55% in the LIE/D Discount Rate. We continue to do significant outreach to help more eligible customers benefit from these programs.



Percent Served by CES Programs

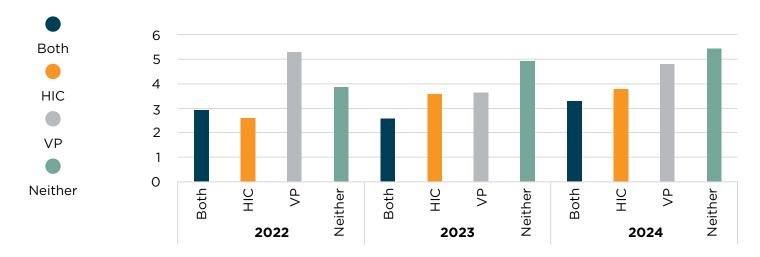


Figure 9. Percentage of named communities benefiting from customer energy solutions programs compared to the general population

Figure 9 summarizes and compares the percentage of Named Communities that have benefitted from any of our customer energy solutions (such as energy efficiency, electrification, or distributed energy resource programs) between 2022 and 2024. While it can vary from year to year, Named Communities benefit from these programs at almost the same rate as other communities.

Alignment with the Integrated Resource Plan/Clean Energy Action Plan

The interim targets and specific actions in this plan are aligned with our Integrated Resource Plan (IRP) and Clean Energy Action Plan (CEAP). The most recent IRP calls for continued investment in energy efficiency and conservation as the most cost-effective resource to meet future needs. The CEIP seeks to expand conservation opportunities for vulnerable populations and prioritize and protect Named Communities from disproportionate cost and reliability impacts due to grid investments and/or grid modernization projects.



Conclusion

This report outlines our comprehensive strategy for a clean and equitable energy transition.

For 2026-2029 targets we are:



Exceeding clean energy targets



Meeting or exceeding energy efficiency targets



On track to meet demand response targets

For specific actions towards an equitable transition, we are:



Improving the quality of public stakeholder experiences in planning



Increasing targeted customer energy solutions programs for renters



Systematically evaluating planned programs, services and infrastructure investments for impact on Named Communities

The CEIP represents a critical step in our journey toward a 100% clean energy future. This four-year plan aligns our clean energy targets with a dedicated focus on equity, using a refined approach to community engagement and data analysis. Our defined actions and measurable outcomes demonstrate a commitment to protecting and benefiting vulnerable populations and highly impacted communities. We will continue to evaluate our progress against these metrics to ensure a transition that is not only clean and reliable but fundamentally fair for all.



Endnotes

- A credit worthiness score is an internally assigned score. Customers have credit worthiness points added to their account when they are late paying bills. A customer with a score six (6) or more is required to provide a deposit.
- Note: For conciseness, we use the term "Named Communities" when referring to Vulnerable Populations and Highly Impacted Communities as a single group.