

Washington Transportation Electrification Plan

**Outreach and Education Program
Program Application**



2023

Table of Contents

List of Tables	2
List of Figures.....	2
About PacifiCorp.....	3
1. Introduction	4
2. Description Of Pilot Program Measure	4
2.1 Measure Elements.....	5
2.2 Objectives.....	6
2.3 Timelines	6
2.4 Market Baseline Assumptions	6
2.5 Participation Eligibility	8
3. Market Barriers & Mitigation Strategies	9
4. Performance Areas	10
5. Program Development Process.....	10
5.1 Stakeholder Engagement Process.....	10
5.2 Efforts to Coordinate with Related State Programs	11
6. Alignment with the Company’s Long-Term TE Strategy.....	11
7. Program Budget	11
7.1 Estimated Costs, Incentives, Program Delivery, Evaluation, Marketing and Administration	11
8. Learning Objectives.....	12
9. Data Collection and Reporting.....	12
Appendix A: Stakeholder Comments	13

List of Tables

Table 1. Program timeline.....	6
Table 2. Anticipated Participation	8
Table 3. Potential Barriers and Mitigations Strategies.....	9
Table 4. Performance Metrics Defined by Staff Guidance & Applicability to Pilot.....	10
Table 5. Outreach and Education Budget	11

List of Figures

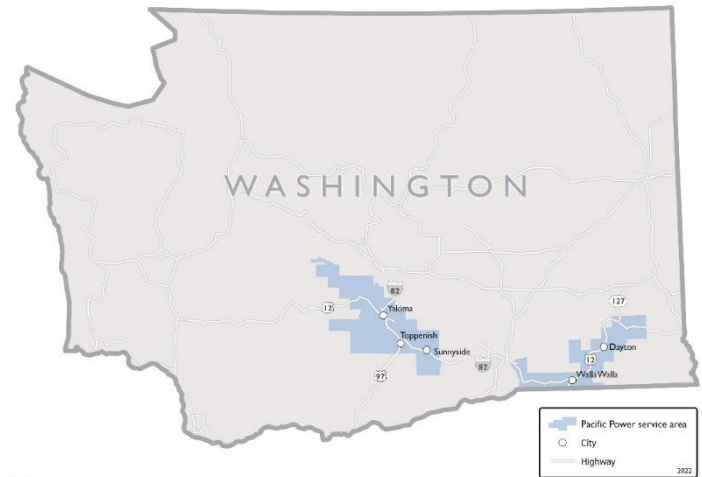
Figure 1. Program Implementation Timeline	8
---	---

About PacifiCorp

PacifiCorp d/b/a Pacific Power & Light Company is a multijurisdictional, vertically integrated utility that serves nearly two million customers in six western states: California, Idaho, Oregon, Utah, Washington, and Wyoming. In Washington, PacifiCorp serves approximately 140,000 customers throughout Yakima, Walla Walla, Columbia, Benton, Cowlitz, and Garfield counties. The company’s generation and transmission systems span the West and connect customers to safe, reliable, affordable, and increasingly renewable electricity. Our integrated transmission system connects thermal, hydroelectric, wind, solar, and geothermal generating facilities with markets and loads. The diversity of this integrated system benefits all of PacifiCorp’s customers in all six states.

PacifiCorp’s large regional footprint enables delivery of low-cost generation from some of the best wind and solar sites in the country and the Company remains actively engaged in finding ways to leverage the benefits of geographic diversity for our customers as the Company develops and implement plans to deliver the targets set forth in Washington’s Clean Energy Transformation Act (CETA).

PacifiCorp Service Area—Washington



Over the past 13 years, PacifiCorp has successfully reduced its greenhouse gas (GHG) emissions and improved reliability while simultaneously delivering energy cost savings to our customers. The company has achieved these results by collaborating with others and through the visionary and collaborative efforts of our own generation, transmission, information technology, and energy supply management teams. PacifiCorp has been a key player in the creation of an open and connected western grid. All these factors have brought PacifiCorp into a very favorable position to achieve Washington’s decarbonization goals.

1. Introduction

From 2018 through 2021, PacifiCorp engaged in customer EV outreach and education by ramping up communications to customers about the benefits of electric transportation technology and self-service resources that allow customers to compare saving opportunities that electric vehicle ownership can offer. The Company offered community events such as ride and drives where customers had the opportunity to meet in a centralized location to test drive a variety of different EV models and speak with EV experts without having to visit a dealership. These events served as a call to action for the Company to promote to customers and an opportunity for customers to foster relationships with dealerships that had EV inventory ready to be purchased as well as creating an organic environment for customers to learn more about the Company's TE program offerings. Over the course of the pilot, outreach actions were taken resulting in customers taking action to read outreach materials, attend ride & drive events and increase understanding of electric transportation. However, with the onset of the pandemic and limited ability to conduct in-person events, most of the outreach and education was done virtually. While outreach and education seemed to reach a general population, continued focus on both virtual and in person outreach and education is key to increasing the awareness of the benefits of EV technology.

On May 20, 2022, PacifiCorp filed its 2022 "Washington State Transportation Electrification Plan" (TEP or Plan) with the Washington Utilities and Transportation Commission (Commission) under Docket UE-220359. PacifiCorp supplemented its original filing with an addendum filed on September 28, 2022. This is PacifiCorp's first filed TEP since enabling legislation was enacted in 2019. The Commission acknowledged the plan on October 27, 2022, enabling PacifiCorp to begin development of the proposed outreach and education program acting as an extension of the past efforts.¹

PacifiCorp plans to continue to develop its TE program offerings for customers in Washington over the next several years, initial priority will be given to efforts driving EV market growth, informing and educating customers. The program will support PacifiCorp in preparing for widespread electrification by gaining learnings and insights through surveys and customer feedback about what outreach efforts and TE offerings advance EV adoption most effectively in the communities that the Company serves in the state of Washington.

2. Description Of Pilot Program Measure

Increased adoption of electric transportation has the ability to improve local air quality, reduce noise pollution, reduce greenhouse gas emissions, improve public health and safety, and generate financial benefits for drivers. With careful planning, electrified transportation also has the potential to benefit low- and moderate-income (LMI) customers and historically disadvantaged communities. Through a variety of outreach and education efforts, online research tools and free technical assistance the Company expects to increase awareness and access of electric vehicle technology to the communities that the Company serves in the state of Washington.

Awareness is the first step along the EV purchasing journey, and many customers are not aware of EVs and their potential benefits. Many customers also do not fully understand how EVs operate, nor realize that they can be easily charged at a 110-volt outlet (e.g., at home or work). Customers may assume that the price premium for EVs is higher than the real cost of charging, and many are not aware of the various federal and state economic incentives that could be available to them. Through targeted outreach and marketing

¹ [UTC Case Docket Document Sets | UTC \(wa.gov\)](#).

campaigns, PacifiCorp can help to dispel misconceptions around buying and owning an EV and highlight the financial and societal benefits of EV ownership.

2.1 Measure Elements

The Company will offer outreach and education to customers in its Washington service area through a variety of avenues.

- **Online tools.** The Company offers self-education resources and is looking to evaluate and identify online tools on the Company website. These tools serve as a highly viable way to keep our customers aware of the latest transportation electrification advancements and our transportation electrification offerings.
- **Customer Communication.** For communication to customers the Company expects to deliver EV promotion through 150-250 radio ads, 600,000-700,000 digital impressions annually, 500,000-600,000 paid social media impressions, facilitate 12,000 bill inserts annually and send out 15,000-20,000 emails annually. Additionally, we will engage in educating customers at community gatherings through the ride and drive events, conferences and through events organized by our e-mobility grant partners.
- **EV education at schools.** PacifiCorp will offer educational programs to schools in the Company's service area that include live 30–45-minute presentations that will provide students and teachers with an educational and engaging classroom experience focused on electric vehicles. The programs will provide take home education materials and other resources that are offered in English and Spanish. This program will be promoted to schools in PacifiCorp's Washington service area via direct engagement and through targeted engagement at outreach events and conferences. These programs will also serve as a way for the Company to gain insight on how to improve future education and outreach efforts through surveys and customer feedback.
- **Ride and Drive events.** The Company will provide brand neutral hands-on experiences in EVs to customers by offering ride and drives throughout our Washington service area. Ride and drive events give customers the opportunity to test drive a variety of EVs with an EV expert without having to visit a dealership. Local dealerships will be invited to participate in these ride and drive events to increase the number of vehicles available at the ride and drive events and to help foster relationships with sales specialists with EV inventory for customers who are ready to purchase an EV. Additionally, surveys will be administered to customers that participate in the ride and drive event to capture insights on what motivates customers to switch to an EV as well as what barriers exist.
- **Technical Assistance.** Non-residential customers inclusive of multi-family customers, that are interested in building out EV charging infrastructure to offer charging to their customers, employees, renters or electrify their fleets can get a free technical assistance report through the pilot. EV infrastructure experts will collect information about the site and create a report that will include: An electricity utilization assessment, equipment assessment, site design assessment, electric rate advising, a preliminary site layout plan and a preliminary project installation cost estimate. Fleet sites will also include advising on vehicle selection and availability, as well as a calculation of potential Clean Fuel Credits to be earned with the customer's fleet.
- **Dealership engagement and used EVs.** The Company will be working with dealerships in our Washington service area that stock new and used EVs to provide dealerships EV 101 trainings and access to an eLearning platform that their sales staff can use as reference to gain more knowledge about EVs. By combining the informational kiosks, dealership sales EV 101 trainings, and eLearning platforms, the Company expects these efforts to greatly improve the customer EV shopping experience as well as make it easier for dealerships in our service area to sell EVs. Through dealership inventory

Outreach and Education Program Application

tracking and reports the Company will have insight into which dealerships have the most used EV inventory available as well as which dealerships are having the most success selling EVs. This will help inform the Company’s targeted promotional efforts around used EVs as well as provide insight into market trends around used and new EV sales in PacifiCorp’s Washington Service area.

2.2 Objectives

PacifiCorp proposes the following objectives for the program:

- Increase customer EV awareness
- Increase customer EV access
- Provide technical support and resources for installing customer owned EV charging infrastructure

2.3 Timelines

Table 1. Program timeline

Outreach and Education Program		Y1				Y2				Y3				Y4				Y5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.0 Launch																					
1.1	Update website to include other self-education online resources for the state of Washington																				
2.0 Event scheduling and promotion																					
2.1	Finalize outreach event schedule and post the schedule on the Company website																				
2.2	Begin outreach event promotion																				
2.3	Begin dealership engagement and start delivery of informational kiosks and offering EV 101 trainings																				
3.0 Program delivery																					
3.1	Offer ride and drive events																				
3.2	Offer technical assistance to non-residential customers																				
3.3	Offer dealership trainings and access to eLearning platforms																				
3.4	Engage in customer communications for TE offerings																				
4.0 Evaluation																					
4.1	Hire third-party evaluation firm to conduct mid-term and final pilot evaluation																				

2.4 Market Baseline Assumptions

EV penetration and charging infrastructure

Over the next 10 years, the Company anticipates a gradual growth in electric vehicle (EV) registrations in the Washington service area, which will result in relatively minimal impacts to the local distribution grid and utility operations. There are currently more than 850 registered EVs² within PacifiCorp's Washington service area, or about 5 EVs per 1,000 customers. However, distribution of electric vehicle penetration is somewhat lopsided, with more rapid adoption occurring in western Washington and in urban areas. PacifiCorp's Washington service area, by comparison, lies in the central and eastern portions of the state and is almost entirely comprised of customers in rural settings and smaller cities and towns.

Lack of consumer education

Range anxiety remains a major consumer barrier. A 2020 E Source survey found that over 80 percent of Americans drive fewer than 30 miles a day, yet most said they needed 350 to 500 miles of range.³ Additionally, more than half of surveyed respondents did not know that it was possible to charge an EV at home with a simple Level 1 plug.⁴ Another barrier to adoption is that many people believe that electric vehicles are all prohibitively expensive. While this was true a decade ago, when options under \$70,000 were almost nonexistent, at least 7 models are now available at a price of less than \$40,000. A total of 13 EV models now sell for under \$50,000.^{5,6} Addressing these knowledge gaps is an important role that PacifiCorp can play through informational campaigns and stakeholder engagement.

A diversifying marketplace

This ever-growing selection of vehicles is beginning to address the long-standing problem that buyers haven't always been able to find an EV model that meets their needs and taste. Most notably pickup trucks are now available from Manufacturers such as Rivian, Chevrolet, and Ford. Until now, the complete lack of electric pickup trucks and affordable electric SUVs has kept many customers from considering electric vehicle alternatives. This barrier to participation particularly affects rural areas and the new electric pickup trucks on the market today create opportunities for electric vehicle technology to reach new demographics.

Major Performance Milestones

- Launch program
- Update website to include other self-education online resources for the state of Washington
- Deliver ride and drive events in at least three Washington communities
- Supporting customers with technical assistance
 - Mid-term milestone: Support 35 Washington customers with technical assistance
 - Final project milestone: Support 70 Washington customers with technical assistance
- Deliver dealership trainings and beacon installations
 - Mid-term milestone: Deliver the first 1 dealership training and complete the first beacon installation
 - Final-term milestone: Deliver 2 dealership trainings and final beacon installation
- Engage with 1,500 students and faculty by end of program

² State of Washington. Electric Vehicle Population Data. [Electric Vehicle Population Data | Data.WA | State of Washington](#). Accessed January 31 2023.

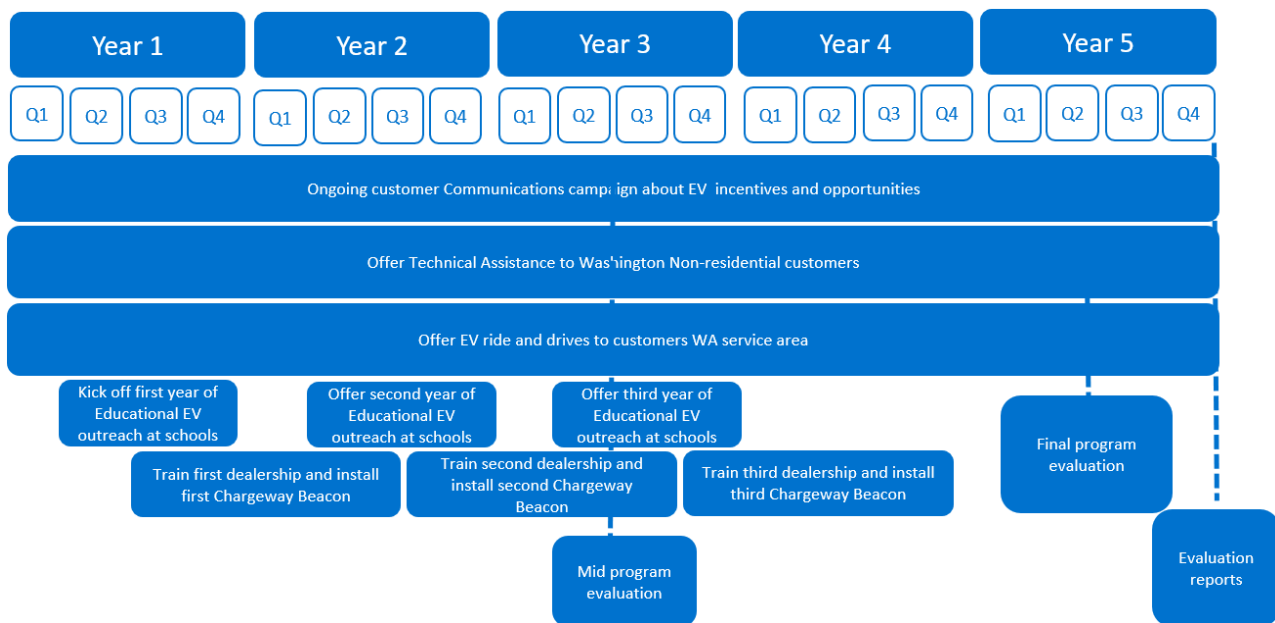
³ LeBlanc, B. (2020, July 15). *Why do people have electric vehicle range anxiety?* E Source. <https://www.esource.com/001202aicx/why-do-people-have-electric-vehicle-range-anxiety>

⁴ *ibid*

⁵ Goodwin, A., Ewing, S., & Hyatt, K. (2021, November 17). *Every electric car and its range for 2021*. CNET. <https://www.cnet.com/roadshow/news/every-electric-car-ev-range-2021/>

⁶ Krisher, T. (2021, October 2). *US vehicle sales tumble amid chip shortage, record prices*. Associated Press via USA Today. <https://eu.usatoday.com/story/money/cars/2021/10/02/chip-shortage-causes-slump-us-vehicle-sales/5968022001/>

Figure 1. Program Implementation Timeline



2.5 Participation Eligibility

Table 2. Anticipated Participation

Type of Engagement	Anticipated Participation	Eligibility requirements
Technical Assistance	70 customers (3-year estimate)	<ul style="list-style-type: none"> Must be non-residential customers in PacifiCorp’s Washington service area Must be willing to accommodate an in-person site visit Participating customers must be able to provide a main project contact and coordinate an in-person site assessment
Customer Communications (radio, digital, social, e-mail in Spanish)	Reach 50,000-75,000 customers with TE program offerings	No eligibility requirements
Dealership Engagement	1-2 dealerships	<ul style="list-style-type: none"> Dealerships must be in PacifiCorp’s Washington service area Be able to sell new and used EVs Be willing to dedicate sales staff time for EV 101 trainings Have high visibility space available at the dealership to host informational kiosks
Educational Outreach at Schools	1,000- 2,000 students and school faculty	<ul style="list-style-type: none"> Participating school districts must be in PacifiCorp’s Washington service area Participating school districts must be willing to engage and support the addition of EV curriculum

Online tools	1,000 – 2,000 customer website visits	No eligibility requirements
Ride and Drives	50-100 participants	<ul style="list-style-type: none"> Participants will need to be 18 years or older, have car insurance and be able to show proof of a valid driver's license

3. Market Barriers & Mitigation Strategies

Table 3. Potential Barriers and Mitigations Strategies

Barrier	Description	Mitigation Strategies
Negative perception of electric vehicles	In some rural areas of the Company's service area there is a perception that EVs are burdensome to own and less capable compared to ICE vehicles.	With a lower cost of ownership and an increasing number of available EV models the Company expects that an increase of outreach and education will help decrease these negative perceptions as EV manufactures continue to develop more cost effective and capable all-wheel drive and pickup models.
Higher upfront costs of electric vehicles	Electric Vehicles have a \$10,000 higher average sticker price more than ICE vehicles, but the cost of ownership savings is estimated at \$15,000 more than an ICE vehicles ⁷	With incentives some EVs such as Nissan Leaf's and Chevrolet Bolts can be purchased new for under \$30,000 with incentives. Focusing our outreach efforts on these more affordable models and models that qualify for state and federal incentives should increase awareness of the more affordable models.
Lack of used EVs on the market	EV market share of new vehicle purchases has been increasing over the last decade, but used EVs are less available than use ICE vehicles and are sometimes still sold at a premium due to demand	As leased vehicles are swapped out with newer vehicles and more EV owners are upgrading to newer models with more range the inventory of used EVs continues to increase. Focusing promotion on affordable models and used vehicles should increase awareness of used EVs. These promotional efforts paired with the Company's dealership engagement training sessions should help make it easier for dealerships to sell EVs and easier for customers to purchase more affordable and used EVs.
Lack of EV pickup trucks available on the market	Until recently EV pickup trucks were not available on the market and few options are still available today, but Ford, GM, Rivian, Tesla and others are starting to produce EV pickup trucks and pre orders	Focusing new vehicle promotion on Electric pickup trucks through advertisements and community ride and drive events will help increase awareness of the growing number of models of EVs on the market.

⁷ *Ev vs ice: An apples to apples comparison.* EV vs ICE: An Apples to Apples Comparison. (n.d.). Retrieved February 22, 2023, from <https://www.evcs.com/blog/ev-vs-ice-an-apples-to-apples-comparison>

	and sales for these vehicles are increasing rapidly so it is expected that vehicle manufactures will continue to product these vehicles	
--	---	--

4. Performance Areas

Table 4. Performance Metrics Defined by Staff Guidance & Applicability to Pilot

Metric	Discussion
Community-focused efforts and investments (customer benefit indicator in the CEIP)	PacifiCorp proposes to count the number of outreach and education events implemented in named communities and estimate the number of beneficiaries.
Participation in PacifiCorp energy and efficiency programs and billing assistance programs (customer benefit indicator in the CEIP)	Participation in the outreach and education events will be tracked throughout the program life and reported on during reporting periods.
Charging adequacy (equitable access)	PacifiCorp will track which non-residential customers are interested in owned and operating EV charging infrastructure through the technical assistance program.
Grid Benefits	This metric will be monitored in other programs within the TE portfolio.
Environmental Benefits	As stated above, this metric will be monitored in other programs within the TE portfolio.

5. Program Development Process

5.1 Stakeholder Engagement Process

Prior to the program application being developed, PacifiCorp engaged a number of stakeholders during development of the TE Plan⁸, which included engagement directly with the Washington Utility Transportation Commission EVSE Working group, the Equity Advisory Group (EAG), and one-on-one conversations with interested stakeholders as well as reaching out to stakeholders via e-mail to solicit feedback and insights into the TE Plan. The TE Plan included an in-depth discussion of this program and potential benefits from the program.

⁸ PacifiCorp. (2022). Washington Transportation Electrification Plan. [UTC Case Docket Document Sets | UTC \(wa.gov\)](#)

Outreach and Education Program Application

For development of this program application, PacifiCorp hosted working sessions with EAG members to develop, refine and define the outreach and education program. Furthermore, the initial concept and following details were shared with the WUTC EVSE working group⁹. Drafts of the applications were shared with stakeholders on Q1 of 2023 and final feedback received end of Q2 2023. Stakeholder comments are addressed in Appendix A of this program application.

5.2 Efforts to Coordinate with Related State Programs

PacifiCorp’s technical assistance program will be available to non-residential customers within the Company’s service territory that are interested in applying for the Discretionary Grant Program for Charging and Fueling Infrastructure program. The technical assistance support, site layout plan and preliminary cost estimate reports can help inform non-residential customers grant applications.

At this current moment the Company has not been informed of any state EV outreach and education programs. However, PacifiCorp will work diligently to collaborate with and assist any state led EV outreach and education efforts that are launched during the Company’s outreach and education program.

6. Alignment with the Company’s Long-Term TE Strategy

PacifiCorp’s long-term TE strategy aims to support all customers and organizations that are shifting to using electric vehicles for their personal use and for their fleets with a focus on helping underserved communities electrify their transportation. PacifiCorp is committed to meeting electrification and decarbonization goals through resource planning and customer programs, while also ensuring that the benefits of electrification can be enjoyed by all.

During this pilot program the Company will evaluate if these outreach and educational efforts are supporting and enabling market transformation for communities that otherwise wouldn’t be electrifying their transportation. By the end of this pilot PacifiCorp will better understand the barriers and opportunities to increase EV adoption, identify areas to improve utility processes related to outreach and education, and better understand impacts of EV adoption on the grid.

7. Program Budget

7.1 Estimated Costs, Incentives, Program Delivery, Evaluation, Marketing and Administration

The pilot’s estimated budget is \$626,000 during the five-year implementation phase (Table 5). The overall pilot budget has increased slightly due to additions in program administration and evaluation costs from the proposed \$575,000 provided in the TE Plan.

Table 5. Outreach and Education Budget

Outreach and Education Budget	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Customer Communications	██████	██████	██████	██████	██████	██████
Technical Assistance	██████	██████	██████	██████	██████	██████

⁹ EAG working sessions occurred Feb, March, April and October of 2022. <https://www.pacificorp.com/energy/washington-clean-energy-transformation-act-equity.html>

Outreach and Education Program Application

Dealership Engagement	████████	████████	████████			████████
School EV Education Program	████████	████████	████████			████████
Admin	████████	████████	████████	████████	████████	████████
Evaluation			████████		████████	████████
Total Program Costs	\$170,500	\$203,500	\$113,190	\$60,500	\$78,320	\$626,000

8. Learning Objectives

- Better understand customer barriers and opportunities in increasing EV adoption
- Better understand customer barriers and opportunities in increasing customer owned EV infrastructure
- Determine if dealership engagement accelerates EV adoption
- Identify utility best practices for outreach and education
- Identify what customers are focused on electrifying informed by technical assistance reports
- Uncover learnings from data gathered during the pilot related to utilization, EV adopted, grid impacts, etc.

9. Data Collection and Reporting

PacifiCorp will release periodic reports to TEP stakeholders focusing on major program progress or changes, expenses, and revenues, with the first report released in Q4 2023, which will be an interim report on progress to date of the TE plan activities. A more detailed report will be released by end-of-year 2025 and may include updates on EV adoption and forecasts by type, updates on load and grid impacts, product activities and progress, lessons learned, expenses to date, and cover comprehensively the last two years of the TE Plan. In 2026, another interim report will be released covering the previous year. By the end of 2027, PacifiCorp will deliver a final TE Plan report that will cover the last five years comprehensively as we also develop a new TE Plan.

Appendix A: Stakeholder Comments

Item No	Category	Comment Provided	PacifiCorp Response
1	Overview	What types of outreach has PacifiCorp done for these draft programs and pilot applications? What types of feedback did PacifiCorp receive?	PacifiCorp worked directly with the Equity Advisory Group during the drafting and creation of the named communities grant program as well as the outreach and education program. Furthermore, the WUTC EVSE Stakeholder Group was consulted and informed during the development of these programs as well as the managed charging program. The programs were originally discussed and detailed in the Washington Transportation Electrification Plan approved by the Commission in in October 2022.
2	Overview	In PacifiCorp's TEP it noted that about a third of the budget is set aside for the named communities grant program and that more than 50% of investments from the TEP would serve named communities. Could PacifiCorp outline for staff how these objectives are being achieved with the current applications? Further could PacifiCorp outline how these applications compare to the \$3.5 million budget described in the TEP?	The communities grant makes up about 28% of the budget. While the proposed utility-owned infrastructure program makes up about 30% of the budget, these projects are meant to serve named communities and be placed in named communities. Those two programs applications are estimated to be around \$2million dollars over the next five years. The rest is planned for workplace and utility-owned infrastructure programs.
3	Managed Charging	Page 5, section 2.1, has PacifiCorp investigated any of the privacy concerns that might arise from this degree of control? Were any less invasive alternatives considered? Are there any other management techniques that might facilitate customers better managing charging on their own? Has PacifiCorp investigated any ways to mitigate or assuage privacy or control concerns?	PacifiCorp proposes the active managed charging pilot in an effort to add another "tool" in the flex load "tool chest" along with other demand response programs and a time of use rate pilot. Having flexible load with this degree of control is an important clean energy resource for PacifiCorp's Energy Supply Management and is a part of the specific actions proposed by Company's Clean Energy Implementation Plan. Please refer to WAC 480-100-610 (4)(a) for the mandate required of PacifiCorp to "pursue all cost-effective, reliable, and feasible conservation and efficiency resources and demand response." The Company has contemplated layering in behavioral / passive managed charging as a part of the pilot, as well, and anticipates working with the selected vendor to determine the most appropriate strategy. Among stakeholders and interveners, such as Northwest Energy Coalition and

			<p>Verde, comments have been generally supportive, especially relating to the similar proposed program in PacifiCorp's Oregon Transportation Electrification Plan.</p> <p>The Company acknowledges the importance of customer privacy and would like to emphasize a number of points relating to the proposed pilot:</p> <p>First, the pilot will be voluntary. While the program will pay customers incentives in exchange for the right to actively control when their electric vehicle charges, it is possible that some customers will still not be comfortable with the concept. There will be no obligation for them to join the program. Additionally, participants will also still be able to opt out of a certain amount of the active management during the pilot and still be considered active participants who are eligible for incentive payments. They can also unenroll from the program altogether at any point; there will likely be no "clawback" of incentives in those cases. The program will also ensure minimum charging thresholds are maintained for all participating vehicles. A program webpage will display customer-facing program information and frequently asked questions outlining how the program will work and what customers are signing up for. Customers will also be required to agree to terms and conditions before enrolling.</p> <p>Second, the SEPA research cited in the program application suggests that other markets have been successful in running programs with similar designs: customers have willingly chosen to participate and, in some instances, have even over-subscribed. Similar programs are happening at PSE and Avista already in Washington.</p> <p>Finally, the Company has rigorous cyber security terms which define data protections for customers. The implementation vendor will have to agree to those before PacifiCorp will execute a contract.</p>
4	Managed Charging	Page 7, section 2.4, subsection 3, there is a reference to "tailored program design" and "varying program design elements" Could you explain what PacifiCorp might have in mind? What variables is PacifiCorp considering?	The program elements referenced in that section which the Company and chosen vendor may tailor during the pilot include: telematics vs EVSE, incentive level, incentive method, incentive timing, and messaging. Please refer to page 19, section 9.

<p>5 Managed Charging</p>	<p>Page 8, section 2.4, subsection 6, “EV detection modeling strategy developed.” Is this type of detection consistent with customer data privacy? Has PacifiCorp considered how customers might react to getting a notification about their EV if they never informed PacifiCorp? Is this a practice used by PacifiCorp in other applications or by other utilities to detect EV ownership? Has PacifiCorp investigated other means of locating EV drivers in its service territory?</p>	<p>PacifiCorp acknowledges the importance of customer privacy. Please see response to item number 3. While still being compliant with data privacy rules and regulations, PacifiCorp aspires to investigate whether EV detection modeling is cost effective, accurate, and feasible at scale during the pilot. A number of vendors in this space offer this type of modeling as a service and conduct it for utilities at scale across North America, in compliance with data rules and regulations. This type of modeling is also similar to what is done by other DSM programs, such as Bring Your Own Device programs, and within other industries.</p> <p>The Company plans to do mass marketing for the program across the Washington service area and will look to leverage multiple inputs to drive results. Customers can opt out of the messaging if they choose and will be excluded from marketing if they are on the Do Not Contact list. Conducting data analysis to drive tailored marketing and outreach to promote DSM programs, in addition to or in conjunction with mass marketing, has helped meet increasing energy efficiency and demand response goals over the last decade or more. Finding out who owns an EV in the Company's Washington service area can help enhance marketing and could increase the speed of the program's adoption rate. While there are other sources of data about who owns an EV, such as DMV data or data from third-party EV apps, there could be inaccuracies about where charging occurs, and so having another data source can help cross-verify findings. PacifiCorp aims to select a vendor with a successful track record for implementing managed programs that meet objectives and maintain high levels of customer satisfaction and trust; PacifiCorp expects the selected vendor to have experience messaging to end-customers and doing so in a way that minimizes negative reactions when doing outreach.</p>
---------------------------	---	---

6	Managed Charging	<p>Page 12, it states “PacifiCorp is planning to study the potential for managed charging on all three of these types of DR, which is one learning objective of the Pilot (Section 13).” How will this be experienced by program participants?</p>	<p>PacifiCorp aims to select a vendor with a successful track record for implementing managed programs that meet objectives and maintain high levels of customer satisfaction and trust. The program will ensure that minimum charging thresholds are met and that customers can easily override if needed. Ideally, from a customer perspective, participating in the program will become a "set it and forget it" experience: they plug in their vehicle when they get home from work and expect it to be charged and ready to use when they leave the next morning, regardless of whether that day PacifiCorp employed a load shed, shift, or shimmy strategy. The "shed" and "shimmy" type demand response events, which respond to frequency or contingency events could happen off peak, are generally rare, and commonly do not last more than 30-45 minutes. Validating this assumption and understanding whether these strategies are actually noticeably experienced by participants will be an important learning objective of the pilot.</p>
7	Managed Charging	<p>Page 14, Section 2.7, it states “residential-based, user-owned EVSE and vehicle telematics” has PacifiCorp investigated other customer types such as industrial or commercial managed charging? Or how community based organizations might take advantage of managed charging?</p>	<p>At this time, the pilot plans to focus on residential customers. Non-residential charging could be explored as a "phase 2" project after the initial pilot term, depending on how the customers use their EVs.</p>
8	Managed Charging	<p>Page 15, section 2.8, it states “PacifiCorp expects that the majority of the Pilot’s early adopters will be customers living in single-family housing, though it is also interested in exploring ways to reach and include customers living in multi-unit dwellings.” Has PacifiCorp considered renters in single-family homes?</p>	<p>Yes. PacifiCorp believes that it will be reasonable to accommodate renters in single-family homes in the case that the renter has the electricity account with PacifiCorp and has access to / control over the EV charging at the home. The program webpage and materials can confirm those details for prospective customers. Customers living in multi-unit dwellings are likely to be harder to reach on the offset and one of the learning objectives will be to explore potential ways to allow them to participate in the program.</p>
9	Communities Grant Program	<p>Could PacifiCorp describe how it arrived at the budget size for this program?</p>	<p>PacifiCorp estimated funding three to five projects a year with a range of funds equaling about \$50-100k per project. From previous experience, average funding awards are around \$70-80k.</p>

Outreach and Education Program Application

10	Communities Grant Program	Appendix A, Table 5, Staff appreciates the ambition reflected in the categories and subcategories for scoring. Could PacifiCorp provide more information on how this scoring rubric will be implemented? Are there objective bases for applying scores to various proposals that might be received?	The suggested scoring criteria was created in conjunction with the Equity Advisory Group (EAG) on how to best to award grant funds. The scoring rubric is meant to be used by a third-party grant evaluator when scoring each application. The third-party evaluators would be neutral third-parties reviewing grant applications providing objective analysis.
11	Overview	All three documents include tables with budget information. In the tables, the totals are shown, but not broken down by category (admin, incentives, etc.). Is this information known or still being sorted out? It's helpful to see all the numbers by category as well, so it would be great if you are able to include it.	PacifiCorp will file the budget information as both confidential and redacted. The filings will be filed under confidential protection. Both staff and public counsel are covered under statute and be available to review. NDAs will need to be signed with specific parties that want access to confidential information.
12	Overview	<p>Regarding the Outreach and Education Program, I'm curious about how much your team has been learning from or adapting the methods used by either PSE or Avista in developing this program.</p> <p>I'm glad to hear (and expected) that you'd reviewed PSE and Avista's outreach efforts. And I agree that Pac's territory in Washington is a bit unique, though Avista serves some more rural areas as well. Avista's recent annual report mentioned having a couple of displays in partnership with the Spokane Public Library, which seemed like an interesting approach to consider. The other thought I had was about partnering up with Avista for ride or drive events with local dealerships. I grew up in a rural area where people would drive pretty far to check out a vehicle if it was the right make/model/price</p>	PacifiCorp has gained several insights from reviewing PSE and Avista's outreach and education programs. Avista's partnership with the Spokane Public Library is similar to the Company's proposed dealership engagement program. PacifiCorp is aiming to have a similar type of partnership with the local dealerships in the Company's Washington service area that will empower the dealerships that the Company partners with EV educational trainings, materials and tools that will be similar to those provided to the Spokane Public Library by Avista. The Company believes that the resources provided will position dealership partners to be trusted advisors that customers can rely on for information about EV ownership, charging and available incentives. PacifiCorp appreciates the comment regarding collaborative ride and drive events with Avista and local dealerships. The Company has had similar partnerships with Clark PUD for the last couple of years to offer EV education and test drives at the Portland Autoshow's Electric Avenue. The partnership has been mutually beneficial and collaborative outreach as proved to be a valuable way of stretching outreach funds further. The Company plans to reach out to neighboring utilities to set up a meetings to discuss future engagement events and collaboration opportunities in the TE space moving forward.

<p>13 Overview</p>	<p>Regarding the Managed Charging Program, the document mentions (p. 15) that PacifiCorp “will better define ‘active enrollment’ upon launch of the Pilot.” Do you have a sense of when you might have that term defined? The document also notes that there may be terms of the pilot that change—how will you work to make sure that customers understand/acknowledge that possibility?</p> <p>As far as defining ‘active enrollment,’ maybe I’m not quite understanding why that term wouldn’t be defined prior to the program being approved. Is the point that Pac isn’t quite sure where the cutoff should be and needs more information from running the program? Key to me is communicating well to customers whatever the definition ends up being and that any changes to the definition would also be broadcast widely.</p>	<p>The Company aims to create an inclusive program that provides customers needed flexibility to override / opt out of active management, to use their vehicle at unexpected times. Allowing this flexibility and paying incentives on an ongoing basis will be an important step towards the goal of earning customer trust in the program and it is the Company's expectation that the majority of participants will offer reliable load shift in exchange. On the other hand, the Company recognizes that there likely should be a minimum amount of ongoing participation for customers to be considered an "active" part of the program to ensure that there is still grid benefit in exchange for the incentive payments.</p> <p>According to industry research, including by SEPA, other utilities running similar managed charging programs have defined "active participation" in various ways. Some base incentive payments on the amount of actual load shift performance, others have a "three strikes, you're out" rule on a monthly basis, while others use even different approaches. Given the wide array of options available, and an ever-evolving landscape, PacifiCorp is seeking further information before deciding exact structure. PacifiCorp plans to collaborate with the selected implementation vendor to decide the most appropriate method for defining this cutoff for "active enrollment." During the onboarding phase, the Company will conduct a thorough review of the implementation vendor's proposed options and recommended best practices, based on their experience running other managed charging pilots and programs, and make a decision that will work best. Once a vendor is selected to support program launch and implementation, PacifiCorp will file a tariff sheet explaining all the terms associated with the program for WUTC approval.</p> <p>The comment about transparency is well received. PacifiCorp acknowledges that customers will need to understand what they are signing up for and how the incentives work. PacifiCorp plans to communicate the final definition clearly and openly to customers and potential participants via the Company's program website and other collateral, like an FAQ document, customer implementation manual,</p>
--------------------	--	--

Outreach and Education Program Application

			using plain language an average customer would be able to understand. Customers who sign up for the program will also need to read and agree to terms and conditions.
14	General	Staff appreciates that PacifiCorp sought feedback on the three applications from the following sources: Equity Advisory Group, WUTC EVSE Stakeholder group, Flex Charging, and Public Counsel. Staff questions if PacifiCorp could expand on lessons learned during the TEP drafting process to improve outreach within its service territory.	PacifiCorp appreciates this comment and will investigate opportunities on how to best improve outreach and lessons learned during the drafting of the next TEP.
15	General	Staff lauds PacifiCorp for aiming to exceed the goal of 50% of investments from the TEP serving named communities. Staff questions if PacifiCorp can present these budgetary goals and the intended flows of resources to named communities within the application documents.	PacifiCorp has added in a section in the named communities grant program application discussing the budgetary goals of spending in named communities.
16	General	Staff notes that the total TEP budget has expanded. Staff asks if PacifiCorp could clearly communicate the expected TEP budget changes especially as they relate to the total budget within the application documents.	The overall TE budget was estimated at \$3.5 million over the next five years. The current proposed applications equal a proposed budget of \$2.3 million. The remaining funds are to support the future workplace/multifamily program as well utility-owned public infrastructure program. At this time, PacifiCorp anticipates a potential increase in the utility-owned public infrastructure program costs due to equipment cost increases. However, strategies can shift and allow PacifiCorp to stay within the \$3.5million anticipated budget. At this time, PacifiCorp believes that the overall TE budget has not been exceeded.
17	Managed Charging	Page 5, section 2.1, Staff has reservations about degree and directness of control over the charging of customer vehicles. Staff would like to see assurances within the application that customers will be fully informed of the degree and directness of control over the charging of customer vehicles. Staff would like more clarity around customers' ability to override the managed charging. Staff would appreciate more clarity within the application on why this approach was chosen over other less invasive alternatives.	Please refer to the response to item number 3. The state of Washington's CETA rules obligate PacifiCorp to pursue all available, cost-effective flexible load.

Outreach and Education Program Application

18	Managed Charging	<p>Page 7, section 2.4, subsection 3, there is a reference to “tailored program design” and “varying program design elements”. Staff would appreciate more clarity in the application about what tailoring and variables the program will entail.</p>	<p>Please refer to the response to item number 4. As discussed earlier, PacifiCorp will be filing a tariff sheet in alignment with the managed charging upon vendor award. WUTC and stakeholders will have an opportunity to revisit the program eligibility requirements and parameters.</p>
19	Managed Charging	<p>Page 8, section 2.4, subsection 6, “EV detection modeling strategy developed.” Staff questions if this strategy is consistent with the following statutes: RCW 19.29A.110: Persons—Customer information—Capture, obtain, or disclosure for commercial purpose—Requirements—Application of consumer protection act. (wa.gov) RCW 19.29A.100: Electric utilities—Customer information—Sale or disclosure—Requirements—Exemptions—Application of consumer protection act. (wa.gov) RCW 19.94.585: Charging session—Consumer data disclosure. (wa.gov)</p> <p>If this practice is consistent with law, Staff would appreciate greater clarification around the ethics of this strategy and the public interest. Staff wonders if PacifiCorp might investigate alternative strategies to contact EV owners in its service territory such as targeted Google or Facebook ads for users who search for EV related products or partnering with dealerships to sign up customers when they first purchase an EV.</p>	<p>Please refer to the response to item number 5 for discussion about EV detection modeling at a high level. The response to item number 3 also discusses data privacy.</p> <p>Specific to this item, PacifiCorp conducted a preliminary review of the statutes cited in WUTC Staff's comment and the following represent the initial conclusions: RCW 19.94.585 -- Does not appear to be applicable as PacifiCorp does not sell the data and the Company is not considered an EVSP. RCW 19.29A.100 -- See subsection (5)(a), it appears it will not prevent a third party from sharing information back to the customer. PacifiCorp will have a contract with a third party, in which it will be directly related to utility business and that has a provision that prevents disclosing or selling the data to any other entity. Additionally, Subsection 7 states that if the marketing material is provided in the billing package, the messaging is allowable. RCW 19.29A.110-- Appears to apply to persons, as opposed to electric utilities (see subsection (3)).</p>
20	Managed Charging	<p>Page 14, Section 2.7, it states “residential-based, user-owned EVSE and vehicle telematics”. Staff would like clarity regarding whether participation by community-based organizations was considered as an option?</p>	<p>Please refer to the response to item number 7.</p>

21	Managed Charging	<p>Page 15, section 2.8, “PacifiCorp expects that the majority of the Pilot’s early adopters will be customers living in single-family housing, though it is also interested in exploring ways to reach and include customers living in multi-unit dwellings.” Staff lauds Pacificorp’s goal to include multi-unit dwellings. Staff also supports Pacificorp’s use of telematics to include renters who may not be able to physically modify their home with EVSE.</p>	<p>Please refer to the response to item number 8.</p>
22	Managed Charging	<p>Page 13, section 2.5 – “SEPA estimated that there are at least 22 ‘network service providers’ active in providing the underlying software to enable the EVSE-driver interface, at least 42 EVSE manufacturers offering managed charging capabilities, and at least nine vehicle OEMs offering vehicle telematics capable of being applied to managed charging” Staff questions if the pilot might also be an opportunity to investigate interoperability and apply lessons to other related EV developments.</p>	<p>At this time, PacifiCorp does not see a direct link with the managed charging pilot and interoperability standards. However, PacifiCorp will work to make connections and bring out lessons learned as they unfold.</p>
23	Managed Charging	<p>Page 15, section 2.8 – “Customers likely will not need to be enrolled in a TOU rate in order to participate in the Pilot, though they would likely benefit financially from doing so.” Staff would like clarification about the effectiveness of existing TOU rate programs, where they exist, and the expected benefits of managed charging over these other programs.</p>	<p>Beginning in May 2021, PacifiCorp launched residential and non-residential service time of use pilots. The residential pilot (Schedule 19) targets single family residential customers and is available for up to 500 customers on a first-come, first-served basis. As of May 2023, there are 23 Washington customers on Schedule 19.</p> <p>PacifiCorp is studying the efficacy of the TOU pilot. Managed charging will be another tool that allows the Company to further leverage the potential flexibility of charging loads. Customers will not be required to participate in the TOU rate, but will be an added option. See also the response to item number 3.</p>
24	Managed Charging	<p>Page 15, section 2.8 – “Ongoing incentive payments for continued active enrollment, paid one or more times a year, in the range of \$25 to \$100.” Staff would like clarification about whether any other methods of incentivizing customers were considered.</p>	<p>Yes. Please refer to the response to item number 4.</p>

Outreach and Education Program Application

25	Managed Charging	Page 17, section 4 - "During the program design stage of the Pilot, the Company plans to explore the feasibility of offering incentive tiers based on income · The Pilot could explore how to engage with EV owners living in multi-unit housing" Staff is generally supportive of these measures and would like to see them explored more.	PacifiCorp appreciates the positive feedback on this item.
26	Managed Charging	Page 20, Section 12.1, table 4, – Staff would appreciate greater clarity regarding the anticipated values in the table.	PacifiCorp provided general budgetary information in light of sensitive market data. PacifiCorp will be filing both a redacted and confidential version of this program application.
27	Managed Charging	Further, Staff would like clarity around how the company anticipates customers who work nonstandard hours will participate	PacifiCorp aims to select a vendor with a successful track record for implementing managed programs that meet objectives and maintain high levels of customer satisfaction and trust. The Company would expect to work with the vendor during the onboarding phase to determine the strategy for reaching customers like the ones referenced in this comment. It may depend on these customers' typical charging habits, whether they have load that is available during the times it is needed for curtailment. It is possible that by staggering the off-peak charging and the testing of shedding and shimming, these customers may end up being eligible to participate.
28	Managed Charging	Additionally, Staff would like clarification about whether the program applies to or considers customers who do not charge at their home, and other non-standard charging arrangements.	At this time, the pilot plans to focus on residential customers who charge their EV at home. Non-standard charging arrangements could be explored as a next phase after the pilot period is completed or via another program.
29	Communities Grant Program	Page 11, section 8, table 4. Staff would appreciate more clarity about the anticipated allocation of the budget between incentives, administration and evaluation. Further, Staff would appreciate more clarity around the ability of the grant program to scale up if it proves effective.	PacifiCorp will provide a confidential unredacted version for staff to review the anticipated allocation of incentives, administration and evaluation for each program application. To scale the future grant program, PacifiCorp can either shift funds from future programs (i.e. workplace/charging or utility-owned infrastructure) or PacifiCorp is planning to participate, at this time, in the WA Clean Fuels Program which will also add additional funds into the grant pool. PacifiCorp is currently a registered participant, however, 2023 is a compliance year and no credits are being sold and monetized at this time.

Outreach and Education Program Application

30	Communities Grant Program	Page 12, Appendix A, Table 5, Staff appreciates the ambition reflected in the categories and subcategories for scoring. Staff would appreciate more clarity on the steps of the approval process and how scoring criteria will be weighed.	PacifiCorp, at this time, has not defined the full approval process or awardee process for the grants as this would like be done in conjunction with the third-party evaluator that will be leading this effort. Scoring criteria weightings will be discussed with EAG and others once the third-party evaluator is hired.
31	Outreach & Education	Page 5, Section 2.1, Staff questions whether technical assistance should also be available to multi-family units	PacifiCorp agrees that Technical Assistance should be available to multi-family unit dwellings and will offer technical assistance to multi-family dwelling customers that are on both a commercial and/or residential rate.

<p>32</p>	<p>Managed Charging</p>	<p>Incorporate a customer-friendly interface A customer-friendly interface, available to customers via web and/or as a stand alone mobile app, can best facilitate the numerous customer interactions that we understand PacifiCorp will seek from its implementation vendor. As a vendor that has successfully co-branded web and mobile app interfaces on behalf of the utilities we partner with, we have seen firsthand that a customer-friendly interface can provide the following functionalities which on the whole will maximize pilot performance:</p> <ul style="list-style-type: none"> a. Maximized customer eligibility via a hardware-agnostic APIs across a range of both vehicles and chargers; b. Seamless 3-step program enrollment with guided instructions c. Customer transparency over the status of their EV battery level and optimized charging schedule, including the capability for a customer to set their preferences for managed charging e.g. desired departure time and battery level; d. Customer control over charging if needed (e.g. temporarily override active managed charging or opt out of a DR event); e. Detailed history of customer EV charging consumption, costs, savings and incentives earned, along with direct payment functionality for the customer to redeem/cash out any off-bill incentives; and f. Behavioral nudges and messaging via mobile push notifications and/or pop-up messages. 	<p>PacifiCorp acknowledges this comment. The Company aims to select a vendor with a successful track record for implementing managed programs that meet objectives and maintain high levels of customer satisfaction and trust.</p>
-----------	-------------------------	--	---

33	Managed Charging	<p>Optionally expand the size of the pilot.</p> <p>We appreciate PacifiCorp’s ambition to enroll between 5% and 15% of EV drivers in its service territory. However, given both the continued growth of EVs in Washington State and the proposed use of EV load detection modeling, we believe that PacifiCorp will be positioned to achieve an even greater level of enrollment. In addition, the benefits of a larger pilot are that PacifiCorp will have a richer data set from which to derive findings, the pilot size will increase excitement and awareness for the program among customers, and every customer who wishes to participate can do so. We would suggest that PacifiCorp incorporate an optionality clause that can further increase the size of the pilot once the enrollment caps are reached.</p>	<p>PacifiCorp is not currently planning on putting a cap on enrollment during the pilot. The 5-15% enrollment growth quoted in the program application was for demonstrative purposes only. If the program vendor acquires greater than 15% customer participation, nothing will prohibit those additional customers from enrolling. The more customers who participate, the higher the grid benefits will be.</p>
34	Managed Charging	<p>Develop checkpoints to increase the budget as needed.</p> <p>Based on the pilot plan, we understand that PacifiCorp is planning on a \$375K budget over the three years of the program. We applaud PacifiCorp for incorporating a number of advanced elements into the managed charging program, including testing for “shimmy” EV response, developing EV load detection, and proposing meaningful customer incentives. We believe that if the budget were increased it would make it more likely that the final program will be able to incorporate all of these components. In addition, this would create potential space for the pilot to increase should the enrollment targets be exceeded.</p>	<p>The budget provided by PacifiCorp is an estimated budget at this time. The RFP process and procurement negotiation step will confirm the final administrative budget needed to run the pilot in Washington. Then the program onboarding phase will confirm the final plan for customer incentives.</p>

35	Managed Charging	<p>PacifiCorp should give consideration to ensuring that potential applicable fees for OEM connected services, which are a necessary precursor for a telematics-based managed charging program, do not pose a hurdle for customers to participate. The OEM fees can vary between free to over \$200 a year depending on manufacturer of the electric vehicle and whether the manufacturer offered free connectivity for a few years. While Section 12.2 explicitly states that participant costs are expected to be zero, some participants may need to activate their telematics for a fee before they are able to participate in this pilot program.</p>	<p>PacifiCorp acknowledges this comment. The Company will seek to understand the extent of the cost impacts of OEM API fees during the RFP and onboarding process, and will want to monitor these fees during the course of the pilot. The Company would expect the program to cover these costs, as opposed to the end-customer, so that there are no out-of-pocket costs to participate in the program.</p>
36	Managed Charging	<p>PacifiCorp may be able to push further from a perspective of enabling and quantifying greenhouse gas emissions savings. While the pilot assumes no ICE to EV conversions and therefore doesn't claim any of those fuel emissions savings, the shift in managed charging times may align with greenhouse gas emissions savings for the pilot. FlexCharging has integrated with WattTime to allow for managed charging based on emissions savings by using the day ahead hourly generation mix of power to quantify savings when charging patterns are shifted. The quantification of these savings may improve the business case for a future program while also allowing for greater customer satisfaction based on improved emissions. Specifically, after scaling a program, the reduction in CO2 emissions per vehicle will help PacifiCorp achieve Washington's CO2 reduction requirements without building new resources. Relatedly, offering customers an option to charge from their on-site DERs may also have both customer satisfaction and emissions savings benefits, not to mention localized distribution system advantages.</p>	<p>PacifiCorp acknowledges this comment. Table 3 under Section 4 Performance Areas, outlined the metrics that the Company plans to track as part of the pilot. "Environmental Benefits" is the performance area most closely aligned with this comment. PacifiCorp will likely seek input from an evaluator to estimate these environmental impacts, one of the pilot's learning objectives. Additionally, PacifiCorp will aim to select a vendor with a successful track record for supporting a 3rd party evaluation.</p>

<p>37</p>	<p>Managed Charging</p>	<p>There are a variety of program design elements that can make for a better pilot by improving participant customers' experiences, which can improve expected outcomes related to customer enrollment, minimum percentages of charging load shifted to off-peak times, and continuous participation in the pilot throughout the pilot life. Having run managed charging programs across North America and Australia since 2018, FlexCharging would offer the following as critical elements for inclusion in an RFP for evaluating bids from EV telematics companies:</p> <ul style="list-style-type: none"> o Ensuring a smooth customer journey for EV drivers by focusing on the creation of an easy and quick enrollment process to better capture interested parties and translate those into ongoing participants. o The user experience in terms of added battery drain through telematics access is not identified as a potential market barrier, but could have a detrimental effect on continued user participation. FlexCharging has developed a patented adaptive polling algorithm to ensure 15-minute interval data access for charging without contributing to appreciable range loss to customers participating in managed charging programs. Telematics companies should speak to their capabilities for minimizing vampire drain issues and this should be considered for part of the RFP evaluation criteria. o Telematics companies should speak to their ability to work with a variety of customers that reflects the urban and rural nature of PacifiCorp's footprint, including on strategies for retention of participants. o The EV telematics space is rapidly evolving, such that the capabilities of existing and future makes and models of EVs today may not be reflective of the state of affairs in the months and years to come. Given that this is a three-year pilot, the managed charging RFP should consider asking for details on EV telematics companies' respective roadmaps of increasing OEM/vehicle coverage as more capabilities become possible over time. This would allow PacifiCorp to consider expanding 	<p>PacifiCorp acknowledges this comment.</p>
-----------	-------------------------	---	--

the initial program eligibility to a greater number of customers, thereby increasing the robustness of data collected.

- o Given that the cost savings from deferred maintenance of the distribution system is one of the goals that this pilot is looking to quantify, RFP respondents should be asked for their ability to and experience with mapping customer charging stations to distribution substations.
- o Data-driven analysis of the program impacts is critical for providing meaningful evaluation, measurement, and verification of the pilot. FlexCharging has the ability to support EM&V activities, particularly around counterfactual creations that we have developed and currently provide to support other managed charging programs. To better support the pilot's learning objectives, the RFP should consider asking respondents to speak to their experience providing quantitative support to better inform verification activities and ultimately actionable conclusions and recommendations.