

December 27, 2016

VIA ELECTRONIC FILING AND OVERNIGHT DELIVERY

Public Utility Commission of Oregon 201 High Street SE, Suite 100 Salem, OR 97301-3398

Attn: Filing Center

RE: UM ___ - PacifiCorp's Transportation Electrification Outreach and Education Pilot Program

In compliance with section 29 of Senate Bill 1547¹ and OAR 860-087-0030, PacifiCorp d/b/a Pacific Power (Pacific Power or Company) submits the attached application for its transportation electrification Outreach and Education Pilot program.

The Outreach and Education pilot represents one component of Pacific Power's initial efforts to accelerate transportation electrification in its Oregon service area. Other components of the Company's efforts to accelerate transportation electrification include a Public Charging pilot program, a Demonstration and Development pilot program, and a proposed Public Direct Current Fast Charger Transitional Rate. Application filings for these components will be made concurrently with this application.

These initial efforts recognize the diverse and dispersed nature of Pacific Power's service area, which includes regions of the state that can present unique challenges with respect to adoption of emerging technologies. These components comprise the initial phase of the Company's longer-term transportation electrification strategy and are designed to establish a foundation by which Pacific Power can partner with its customers and communities to better understand the most effective future roles for the Company in expanding support for transportation electrification as this dynamic market continues to mature.

The enclosed pilot program application includes estimated cost information that is commercially-sensitive, which if disclosed could expose the Company to competitive harm. Confidential information is provided as confidential under OAR 860-001-0070.

It is respectfully requested that all formal data requests to the Company regarding this filing be addressed to the following:

By e-mail (preferred): <u>datarequest@pacificorp.com</u>

¹ Oregon Laws 2016, Chapter 28, Section 29.

By regular mail: Data Request Response Center

PacifiCorp

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Please direct any informal inquiries to Natasha Siores, Manager, Regulatory Affairs, at (503) 813-6583.

Sincerely,

R. Bryce Dalley

Vice President, Regulation

Enclosure

CERTIFICATE OF SERVICE

I certify that I served a true and correct copy of PacifiCorp's Application for Transportation Electrification Outreach and Education Pilot Program on the parties listed below via electronic mail as a courtesy to interested parties.

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Dated this 27th of December, 2016.

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Senior Coordinator, Regulatory Operations



Outreach and Education Pilot

PacifiCorp's, d/b/a Pacific Power (Pacific Power or Company) stakeholder process identified lack of consumer awareness of electric transportation options, costs, and benefits as a significant barrier to widespread adoption. As a trusted advisor for customers, Pacific Power proposes a three-year outreach and education pilot to increase awareness of electric transportation options and help customers make informed decisions about the adoption and operation of plug-in electric vehicles and charging infrastructure. The pilot program will test the effectiveness of different outreach tactics on accelerating transportation electrification, through direct communication with customers, online tools and resources, technical assistance for non-residential customers considering infrastructure projects and partnership at community events.

The Outreach and Education pilot represents one component of Pacific Power's initial efforts to accelerate transportation electrification in its Oregon service area. These initial efforts recognize the diverse and dispersed nature of Pacific Power's service area, including regions of the state that can present unique challenges with respect to adoption of emerging technologies. This initial phase of the Company's longer-term transportation electrification strategy is designed to establish a foundation by which Pacific Power can partner with its customers and communities and better understand the most effective future roles for the Company in expanding support for transportation electrification as this dynamic market continues to mature.

This application is structured to clearly demonstrate how this pilot program complies with the Transportation Electrification Program Application Requirements under OAR 860-087-0030. Elements that are common to all three pilot programs proposed by the Company are included in appendices to this application to facilitate an efficient review by the Public Utility Commission of Oregon and other interested parties.

PROGRAM DESCRIPTION: OAR 860-087-0030 (1) (a)

Program elements, objectives, timeline, and expected outcomes: OAR 860-087-0030 (1) (a) (A)

Program Elements

As a trusted advisor for customers, Pacific Power proposes a three-year outreach and education pilot to increase awareness of electric transportation options and help customers make informed decisions about the adoption and operation of plug-in electric vehicles and charging infrastructure. The proposed outreach and education pilot program includes three primary elements designed to address market barriers and support the Company's long-term electric transportation strategy presented in Appendix A.

1. Education and Awareness

Pacific Power will develop resources and messaging designed to educate customers on transportation electrification options and considerations, to promote Pacific Power electric transportation programs, rates and initiatives and to make customers aware of other resources, such as state and federal tax credits.

Ensuring that customers are aware of educational resources is vital to program success and Pacific Power's transportation electrification strategy. Pacific Power will leverage its extensive customer education- and awareness-building experience to deploy customer education strategies that maximize exposure while optimizing the use of program funds. The Company will look to partner with, and leverage resources of, other organizations working to accelerate transportation electrification in Oregon to contribute to efficient and consistent messaging to customers. Education and awareness efforts will focus on the following activities:

- Developing educational web content that provides information on electric transportation options, available incentives, Pacific Power rates, considerations when installing vehicle charging equipment and the importance of charging vehicles during off-peak periods;
- Engaging third-party contractors to develop self-service tools for customers, which may
 include customizable analysis of the costs and benefits of plug-in electric vehicle ownership,
 fleet conversion analysis, or other tools identified through a competitive procurement process;
- Enhancing customer service agents' ability to provide basic electric transportation information and direct customers to available tools and resources;
- Performing direct customer outreach (e.g., email, direct mail, bill inserts).to ensure customers are aware of electric vehicle technology and the resources available from Pacific Power and other entities;
- Targeted media engagement;
- Targeted advertising and social media engagement; and
- Developing of educational collateral for public distribution, including at community events and auto dealerships (e.g. fact sheets, brochures).

2. Technical Assistance

Pacific Power will sponsor customized technical assistance for non-residential customers considering electric transportation infrastructure projects in its Oregon service area. Through a competitive bidding process, the Company will develop a network of qualified consultants to perform on-site infrastructure feasibility assessments for interested non-residential customers. Qualified consultants will be required to demonstrate experience performing the requested services and the ability to serve customers across Pacific Power's Oregon service territory. This service draws on best practices developed through other customer programs, such as energy efficiency engineering services provided through the wattsmart Business program for California and Washington customers.

Eligible customers will request a custom analysis by submitting an online or written application. Consultants will be deployed to non-residential customer sites to perform custom analysis of charging infrastructure technology options, costs, rates, and best practices for siting, configuring, installing and managing equipment. Pacific Power will receive copies of consultant analysis and will follow up with participants through its program evaluation efforts to understand the usefulness of the analysis and whether customers are implementing consultant recommendations. Experience developed through the pilot program will inform future program budgets and program parameters, such as additional eligibility requirements or maximum contractor hours allowed per feasibility study.

3. Community Partnership

Pacific Power will provide financial support and partnership for community events focused on promoting transportation electrification in its Oregon service area throughout the three year pilot period. Although electric transportation event sponsorship is a relatively new arena for Pacific Power, the Company will draw on its extensive experience in sponsorship and support for community engagement events focused on voluntary customer programs such as energy efficiency and green power. At this point, the Company does not assume a particular type of event or model of involvement and will manage the target annual budget for financial sponsorship to ensure optimal use of program funds. Opportunities will be planned jointly with partners and assessed on an individual basis using criteria that include:

- Requested funding amount and share of overall event funding;
- Anticipated Pacific Power customer attendance/reach;
- Diversity of technologies represented (i.e., preference for events that present multiple vehicle makes or infrastructure types);
- Ability to leverage sponsorship time and/or dollars for awareness building opportunities (e.g., booth placement, stage announcements, media acknowledgement, branding opportunities); and
- Opportunity to efficiently coordinate sponsorship with other Company programs (e.g., energy efficiency, green power).

Pacific Power will utilize existing communication channels to encourage participation in these events. Promotional support may include bill inserts, emails, paid advertisements, website and social media.

Program Objectives

The pilot program is designed to test Pacific Power's ability to accelerate transportation electrification through education and outreach to its customers; a core component of the Company's transportation electrification strategy. The Company's strategy and an overview of current and forecasted plug-in electric vehicle ownership and public charging infrastructure are provided in Appendix A of this document. Program objectives to support this strategy include:

- Build upon Pacific Power's status as a trusted advisor with regular communication with customers to raise awareness and provide objective information about electric transportation options, benefits, available funding sources, Pacific Power programs and other resources;
- Make it easy for customers to locate and understand information required to make informed decisions about investments in transportation electrification;
- Encourage customers to make efficient use of the electrical system by charging vehicles during off-peak periods;
- Coordinate messaging with Portland General Electric and other entities working to accelerate transportation electrification in Oregon to provide efficient and consistent messaging to customers;
- Explore market drivers, consumer interest, and barriers to adoption specific to Pacific Power's Oregon communities to inform future planning efforts; and
- Support electric transportation goals of the state and local communities, including outreach to underserved populations.

Program Timeline

Upon Commission approval of this application, the Company will begin implementing the program elements described above. Solicitations for program services may be issued in advance of Commission approval in order to expedite program ramp-up.

Expected Outcomes

In addition to satisfying the objectives listed above, Pacific Power anticipates this pilot program will result in the following outcomes:

- Robust online resources readily available to Pacific Power customers, including online tools that provide customizable electric transportation cost and benefit information;
- Increased customer awareness of electric transportation technology, costs, benefits, Pacific Power programs and additional resources;
- Increased understanding of efficient use of the electrical system by charging vehicles during off-peak periods; and
- Implementation of a network of technical assistance providers that can be deployed to aid nonresidential customers in understanding their transportation electrification opportunities, costs and benefits.

Formal program evaluation will measure the extent to which the pilot resulted in the above outcomes. Data gathered during the pilot period will inform future program metrics and goals.

Market baseline assumptions: OAR 860-087-0030 (1) (a) (B)

See Appendix A.

Major performance milestones: OAR 860-087-0030 (1) (a) (C)

The pilot consists of three primary elements with the following major performance milestones:

Education and Awareness Milestones

- Issue an RFP for online educational tool development;
- Select vendors based on RFP responses and launch online tool(s) that provides customizable electric transportation cost and benefit information;
- Re-design Pacific Power's existing electric transportation web content to ensure educational resources meet the objectives stated above;
- Engage Pacific Power's advertising agency to develop and execute an annual marketing plan informed by annual budgets discussed in the "Estimated Program Costs" section below and industry best practices and, over time, historic performance of electric transportation education and outreach strategies; and
- Enhance resources for Pacific Power customer contact center representatives.

Technical Assistance Milestones

- Issue a request for proposals to contractors capable of performing onsite technical assistance for non-residential customers;
- Select vendor(s) to provide services in the request for proposals; and
- Launch technical assistance services for customers and begin informing customers of their availability.

Community Partnership Milestones

- Inform communities and customers that funding and resources are available for events promoting electric transportation;
- Agree to co-sponsor an initial event in Pacific Power's Oregon service area;
- Publicize initial event using existing communications channels;
- Sponsor an initial event; and
- Modify community partnership process, as necessary, based on lessons learned and sponsor additional events.

Where applicable, a description of program phases, including a proposal for when each subsequent program phase will be submitted for commission review: OAR 860-087-0030 (1) (a) (D)

The proposed pilot program represents the first phase of Pacific Power's customer outreach and education efforts around electric transportation. During the pilot period, the Company will engage a third party consultant to evaluate the effectiveness of the pilot, including estimating benefits to customers. Based on program evaluation results, the Company may request an expansion of the program in 2019 or 2020.

Expected utilization, participation eligibility, and any incentive structure: OAR 860-087-0030 (1) (a) (E)

Education and Awareness

Education and awareness efforts are designed to increase access to, and awareness of, resources across customer segments. Pacific Power may target particular activities to test specific outreach tactics and/or utilize budgets most effectively, however, the goal of education and awareness campaigns is to ensure that all customers are aware of, and can easily access, robust electric transportation information and resources.

While the purpose of the proposed pilot is to test the effectiveness of outreach and education on accelerating transportation electrification to inform future efforts, it is also important that customers are aware of and utilizing available resources. The Company will track customer impressions by communication channel throughout the pilot period and include this information in its annual report to the Commission. As an example of what a mature outreach campaign in a well-understood market looks like, Pacific Power currently generates roughly 80 total impressions per dollar spent promoting energy efficiency to Oregon customers.¹

Technical assistance

On-site technical assistance will be available to non-residential customers in Oregon contemplating electric transportation infrastructure projects. The budget for these services is designed to fund up to 100 on-site assessments during the pilot period.² The Company will track actual costs and customer demand for these services throughout the pilot period to manage to the overall program budget.

¹ Pacific Power's energy efficiency education and outreach efforts represent a mature program. Results of a new program, such as the proposed transportation electrification outreach and awareness program, may result in lower initial impressions per dollar.

² This number is subject to change once vendor pricing is established through the RFP and contracting processes.

Community Partnership

The Company does not assume a particular type of event or model of involvement. Pacific Power will target events that serve a diverse population with maximum customer exposure to the benefits and considerations of electric transportation. The Company anticipates sponsoring and/or participating in at least three events per year.³ Although attendance will vary, the Company expects events to draw approximately 40-70 participants on average.

Identification of market barriers, program implementation barriers and program strategies to overcome identified barriers: OAR 860-087-0030 (1) (a) (F)

Adoption of a new and evolving technology such as electric transportation requires thorough consumer understanding of what is available and how it is beneficial. The program elements described above are designed to directly address market barriers to widespread transportation electrification identified through Pacific Power's stakeholder engagement process and industry research, including:

- Lack of understanding of the technology, features and its readiness;
- Lack of understanding of the economics of ownership, including cost to purchase, operate and maintain vehicles and charging equipment;
- Concern about charging logistics, including access to charging infrastructure (range anxiety); and
- Lack of awareness of environmental and community/social benefits of adopting electric transportation.

The Company has extensive experience implementing the types of outreach and education efforts proposed in this program and does not anticipate any implementation barriers.

Description of the electric company's role and, if applicable, a discussion of how the electric company proposes to own or support charging infrastructure, billing services, metering, or customer information: OAR 860-087-0030 (1) (a) (G)

Pacific Power's role in this program is to provide accessible, pertinent and consistent information to customers to address barriers to the adoption of electric transportation and charging infrastructure and to encourage efficient use of the electrical system. To maximize value for customers, the Company will explore opportunities to integrate education and awareness efforts with other organizations working to accelerate transportation electrification.

Whether transportation electrification adoption attributed to the program will likely necessitate distribution system upgrades: OAR 860-087-0030 (1) (a) (H)

The extent to which the pilot program accelerated transportation electrification above the baseline projection (provided in Appendix A) will be assessed through the program evaluation activities discussed later in this document. At this time, there is insufficient data to estimate the additional adoption that may be attributed to this pilot, and, more importantly, in the context of distribution upgrades, how concentrated this adoption will be and where charging will occur. For example, ten new plug-in electric vehicles in a concentrated area will have different impacts on the distribution system than ten new vehicles dispersed across the Company's Oregon service territory.

³ This number may not be achievable in 2017, depending on the time required for regulatory approval and program startup.

A key component of Pacific Power's electric transportation strategy, and this pilot program, is to encourage customers to charge vehicles during off-peak hours. The Company intends to reinforce this message at public charging stations (proposed to be installed through the Public Charging Pilot program) with pricing that varies by time of day. This clear and consistent messaging should further reduce the likelihood of increased distribution system costs as a result of this program.

Where applicable, a discussion of ownership structure: OAR 860-087-0030 (1) (a) (I)

Not applicable. Pacific Power will not be owning any equipment through this program.

Where applicable, a discussion addressing interoperability of invested equipment; OAR $860-087-0030\ (1)\ (a)\ (J)$

Not applicable. This program does not include any invested equipment.

Where applicable, a discussion of any national standards for measurement and communication: OAR $860-087-0030\ (1)\ (a)\ (K)$

As national standards for measurement and communication develop, this information will be incorporated into technical assistance and educational materials related to electric transportation infrastructure.

<u>DATA USED TO SUPPORT THE DESCRIPTIONS PROVIDED IN PARAGRAPHS (1)</u> (A) (A)-(L) OF THIS RULE: OAR 860-087-0030 (1) (b)

Where available, supporting data have been provided above or in Appendix A. Through the pilot, the Company will gather data specific to its service territory that can be used to inform future planning efforts.

<u>A DESCRIPTION OF PROGRAM COORDINATION THAT INCLUDES A</u> <u>DESCRIPTION OF: OAR 860-087-0030 (1) (c)</u>

Stakeholder involvement in program development: OAR 860-087-0030 (1) (c) (A)

See Appendix B.

Efforts to coordinate with related state programs: OAR 860-087-0030 (1) (c) (B)

See Appendix B.

Coordination, if any, of delivery with other market actors and activities, and how the market and other market actors can leverage the underlying program or projects within the program: OAR 860-087-0030 (1) (c) (C)

As detailed in Appendix B, Pacific Power has, and will continue to, engage stakeholders in the development of this pilot program. A primary objective of this program is to coordinate messaging with Portland General Electric, Drive Oregon, and other entities working to accelerate transportation electrification in Oregon to provide efficient and consistent messaging to customers.

A DESCRIPTION OF THE ELECTRIC COMPANY'S LONG-TERM STRATEGY TO ACCELERATE TRANSPORTATION ELECTRIFICATION IN ITS SERVICE TERRITORY IN AN EFFECTIVE AND EFFICIENT MANNER AND HOW THE

PROPOSED PROGRAM FITS WITHIN THE LONG-TERM STRATEGY: OAR 860-087-0030 (1) (d)

See Appendix A.

A DESCRIPTION OF PROGRAM COSTS THAT INCLUDES, BUT IS NOT LIMITED TO: OAR 860-087-0030 (1) (e)

Estimated total program costs, including incentives, program delivery, evaluation, marketing, and administrative costs: OAR 860-087-0030 (1) (e) (A)

Pacific Power estimates the program costs during the pilot period, including program administration, evaluation and reporting, at roughly \$1.1 million, as presented in **Table 1**. Estimated expenditures by program element are intended to be indicative of the Company's priorities for this pilot program. Actual expenditures by program element will be dictated by customer and community demand for offered outreach and education services and the Company will manage budgets at the program level. As shown, 2017 spending is expected to be lower than 2018 and 2019, reflecting time required for regulatory approval and program start-up.

Table 1. Estimated Program Costs

Program Element	2017	2018	2019	Total
Education and Awareness				
Technical Assistance				
Community Partnership				
Program Evaluation				
Program Administration				
Total				\$1,105,000

Estimated participant costs OAR 860-087-0030 (1) (e) (B)

Pacific Power intends to offer services through this program at no cost to customers. Customers who choose to adopt electric transportation or charging infrastructure as a result of services received through this program will be responsible for the cost of purchasing, installing, and maintaining equipment without financial assistance from the Company.⁴

Custom technical assistance will require a customer time commitment such that Pacific Power does not anticipate the need for safeguards to ensure program spending is limited to participants likely to implement projects. The Company will monitor participation to ensure that services are being deployed as intended and may implement a nominal participation fee, if needed.

How the electric company proposes to recover costs: OAR 860-087-0030 (1) (e) (C)

The costs associated with the proposed program will be incremental to cost levels currently included in customer rates. The Company proposes to implement a surcharge to recover the operating costs of the pilot program through its existing Schedule 95, Pilot Program Cost Adjustment. The Company further proposes to use a balancing account to track the actual costs and surcharge collections. A tariff advice filing will be made to implement this proposed surcharge during the pendency of the proceeding to review the proposed pilot programs, expected to be in

⁴ Non-residential infrastructure projects may be eligible to receive funding through Pacific Power's proposed Demonstration and Development pilot program.

the spring of 2017. The Company will review the balancing account periodically to determine if changes to the surcharge are necessary.

Upon Commission approval of this application, the Company will make an advice filing to modify Schedule 95 (Pilot Program Cost Adjustment) to fund this program. Pacific Power estimates that program costs will result in an average 0.03% rate impact over the pilot period.

A DESCRIPTION OF THE EXPECTED PROGRAM BENEFITS THAT INCLUDES: OAR 860-087-0030 (1) (f)

Program benefits, including to whom and when the benefits are accrued: OAR 860-087-0030 (1) (f) (A)

While electric transportation currently represents a small share of Pacific Power's total revenues, it also represents an opportunity for growth. As discussed in Appendix A, only two out of every 1,000 cars registered in Pacific Power's Oregon service territory currently utilize plug-in electric technology,⁵ but based on current trends, the number of plug-in electric vehicles registered in the Company's Oregon service territory may quadruple by 2025. This revenue growth is a benefit to all Pacific Power customers, particularly if charging is performed in a manner that supports grid efficiency, minimizes required distribution system upgrades and improves operational flexibility. The proposed pilot seeks to accelerate transportation electrification, increasing and pulling forward revenue benefits for customers.

The proposed pilot program, and additional pilots concurrently proposed, represent the Company's initial efforts increase and pull forward the benefits of transportation electrification in its Oregon service area. Given the time required for regulatory approval, program ramp-up, vendor selection, tool development, launch of resources and services and for customers to utilize available resources and adopt electric transportation options, the benefits of this program will not likely begin accruing until 2018. Program experience in 2018 and 2019 will provide valuable information for program evaluation and future planning, however, the majority of revenue generated from the program will accrue after the pilot period. The pilot program is designed to establish a foundation by which long-term revenue, and associated customer benefits, may be realized as the Company investigates its ability to effectively and efficiently accelerate the adoption curve in through outreach and education to its customers and communities.

The tools, information and awareness building efforts provided through this program are expected to help customers capitalize on the financial benefits associated with electric transportation. Participants in the custom technical assistance program and users of the standard tools will receive information that can customers can use to maximize these financial benefits.

While the Commission historically focuses on benefits specific to utility ratepayers, the Company notes the legislative findings that transportation electrification has the ability to improve air quality, reduce greenhouse gas emissions, improve the public health and safety, and create fuel cost savings for drivers, which can be a particular benefit for low and moderate income populations.⁶ Educational messaging will promote access for underserved populations as well as the use of technologies and practices that maximize electrical system efficiency.

⁵ Data provided by the Oregon Department of Environmental Quality, through June 2016.

⁶ Senate Bill 1547, Section 20 (2)

Electric system benefits: OAR 860-087-0030 (1) (f) (B)

Present plug-in electric vehicle adoption levels and the relative nascence of utility transportation electrification programs nationwide make it difficult to forecast long-term electric system benefits of electric transportation acceleration associated with this pilot program. Through this pilot program, customers will not only be provided with tools to inform decisions about transportation electrification, but will also be encouraged to manage vehicle charging in a manner than maximizes benefits to the electrical system. Educating customers on how their actions can benefit the electrical system, and evaluating the effectiveness of this messaging is a critical step in attempting to maximize electrical system benefits as electric transportation adoption continues to increase. For example educating customers to charge vehicles overnight could unlock long-term operational flexibility benefits, such as the ability to integrate wind generation.

A discussion of how a net benefit to ratepayers is attainable: OAR 860-087-0030 (1) (f) (C)

In this application, the Company proposes a measured approach to investment in transportation electrification, beginning with an initial pilot phase to test program design, market barriers, the ability to accelerate transportation electrification beyond what might happen in the absence of the program and the benefits associated with this acceleration. As discussed above, the majority of benefits to Pacific Power's customers will not be realized until after the end of the pilot period as vehicles and equipment continue to generate revenue and provide electrical system benefits over their useful lives. Program evaluation efforts will estimate the benefits that can be attributed to this program to determine whether a net benefit, relative to program costs, is likely to be achieved after the pilot period. The findings from this initial phase will be used to determine whether a second phase of the program is likely to generate a net benefit for customers.

A DESCRIPTION OF HOW THE ELECTRIC COMPANY WILL EVALUATE THE PROGRAM THAT INCLUDES, BUT IS NOT LIMITED TO: OAR 860-087-0030 (1) (g)

Timeline of program evaluation and proposed evaluation reporting schedule: OAR 860-087-0030 (1) (g) (A)

Pacific Power will issue a request for proposals for third-party program evaluation services in 2017\ and will work with the selected evaluation contractor to scope required evaluation efforts and develop an evaluation plan. Evaluation efforts will begin in earnest in 2018, leading up to the development of a program evaluation report to be filed with the Commission in 2019. The program evaluation report will address all reporting requirements specified in OAR 860-087-0040 (1).

Estimated cost of evaluation: OAR 860-087-0030 (1) (g) (B)

The Company has budgeted for program evaluation, assumed to be spread evenly between 2018 and 2019. This budget estimate is based on the Company's extensive experience contracting with third parties to evaluate energy efficiency programs, recognizing that the exact cost will not be known until contractor bids are received through the competitive bidding process.

How the evaluation will be conducted and whether a third-party evaluation is necessary: OAR 860-087-0030 (1) (g) (C)

The program evaluation will be conducted by a third-party contractor selected through a competitive bidding process. The Company has a long history of working with third-party

consultants to evaluate its demand-side management programs and will seek proposals from a qualified pool of consultants to perform evaluation activities for this program.

The Company may look to gather some evaluative data itself in instances where this would improve efficiency, such as feedback forms at community events or online surveys of tool users. In these instances, data will be provided to the third-party evaluator for independent evaluation and incorporation into broader program evaluation efforts.

How the evaluation will address identified barriers: OAR 860-087-0030 (1) (g) (D)

Evaluation efforts will assess the ability of this pilot program to:

- Increase awareness of electric transportation technology and its readiness, the economics of ownership, vehicle charging considerations, benefits of electric transportation, Pacific Power resources and additional resources available;
- Provide accessible, pertinent and consistent resources for customers about electric transportation;
- Integrate with messaging from other organizations working to accelerate transportation electrification in Oregon; and
- Accelerate transportation electrification in Pacific Power's Oregon service area.

A discussion of the method of data collection that is consistent with subsection (1)(b) of this rule and how the data will be used to evaluate the effectiveness of the program: OAR 860-087-0030 (1) (g) (E)

Evaluation will include customer surveys and analysis of engagement metrics associated with education resources and outreach campaigns. This program is designed as a pilot to allow the company to collect data required to develop informed metrics and establish specific metrics, projections and best practices for future goal-setting and program development. At this stage, program evaluation will focus on gathering information that can be used to understand customer needs and develop more specific targets and measures of success.

Surveys

Pacific Power will survey customers to assess customers' awareness of electric transportation, the Company's outreach and education efforts, barriers to adoption and opportunities for program modifications to better address these barriers. Event participants and users of online resources will be asked to complete additional surveys specific to the effectiveness of these tactics. Recipients of custom technical assistance will be required to participate in additional surveys to measure usefulness, process and impact in overcoming barriers to transportation electrification.

Analysis of engagement analytics

The ability of this pilot program to increase awareness and provide effective technical resources will be measured based on gross utilization and engagement metrics, along with utilization and engagement rates per dollar, including the following types of metrics:

- Online analytics
 - o Unique web page visits
 - o Utilization patterns of standard technical assistance resources
 - Download of educational content and standard technical assistance resources
 - o Social media engagement
- Email analytics

- o Open rate
- o Click through rates
- o Pass-along behavior
- Custom technical assistance experience
 - o Utilization
 - o Cost
 - o Project completion rates
- Customer inquiries, via customer contact center activity
 - o Number and location of events sponsored
 - o Number of attendees
 - o Number of Pacific Power customer interactions
 - o Total spending and spending per attendee/interaction
 - o Feedback from attendees and event partners on effectiveness and lessons learned

The evaluation will also utilize Oregon Department of Environmental Quality data on plug-in electric vehicle registrations to investigate whether adoption has accelerated above the baseline forecast provided in Appendix A. While increased adoption may not be directly tied to the pilot program, this will be a useful metric to assess the effectiveness of the coordinated efforts of organization across Oregon working to accelerate transportation electrification during the pilot period.

<u>A DESCRIPTION OF HOW THE PROGRAM ADDRESSES THE CONSIDERATIONS IN OREGON LAWS 2016, CHAPTER 028, SECTION 20(4)(A)-(F).EVALUATION: OAR 860-087-0030 (1) (h)</u>

Senate Bill (SB) 1547 identified six considerations for the Commission "[W]when considering a transportation electrification program and determining cost recovery for investments and other expenditures related to a program proposed by an electric company..." A discussion of how the pilot program addresses each of these considerations is provided below.

(a) Are within the service territory of the electric company

Custom technical assistance will be available to non-residential Pacific Power customers in Oregon and community partnership support will only be available for communities and events within Pacific Power's Oregon service area. Education and awareness activities will be developed for, and targeted toward, Pacific Power customers, however, online resources will be accessible to anyone who visits the Company's website, as requiring a customer login would likely create a barrier to efficient communication of information.

(b) Are prudent as determined by the commission;

The Commission's prudence review of utility investment focuses on "whether the company's actions, based on all that it knew or should have known at the time were reasonable and prudent in light of the circumstances which then existed." In determining prudence, the Commission does not rely on "hindsight judgments" or substitute "its best judgment for the judgments made by

⁷ In the Matter of PacifiCorp, dba Pacific Power Req. for a Gen. Rate Rev., Order No. 12-493, Docket UE 246 at 25 (Dec. 20, 2012).

the company's managers." SB 1547 requires the Company to file applications for programs to accelerate transportation electrification. Pacific Power's proposed Outreach and Education pilot program represents a prudent approach to meeting the legislative directives of SB 1547. This pilot program, along with the other pilot programs simultaneously submitted by the Company, will test key transportation electrification program design elements at a relatively low cost to customers. The Company intends to utilize competitive bidding processes for third-party services and its extensive experience effectively implementing outreach and education programs to keep costs low for customers.

(c) Are reasonably expected to be used and useful as determined by the commission

This program is designed to increase awareness and understanding across the broad spectrum of Pacific Power customers. Initial efforts are based on best practices from other customer outreach and education programs, such as energy efficiency; however, this is a relatively new and quickly evolving industry with marked differences from other Company outreach and education efforts. This pilot program is designed to test the usefulness of these efforts through actual utilization data and other program evaluation measures described in this application.

(d) Are reasonably expected to enable the electric company to support the electric company's electrical system

Through this pilot, the Company will attempt to gain deeper insight into customer transportation decisions, where vehicle charging occurs and charging behaviors. A key component of the pilot will be customer education on efficient use of the electrical system, including the benefits of charging vehicles during off-peak periods.

(e) Are reasonably expected to improve the electric company's electrical system efficiency and operational flexibility, including the ability of the electric company to integrate variable generating resources

A key component of the pilot will be customer education on efficient use of the electrical system, including how charging vehicles during certain periods can improve operational flexibility and the ability to integrate variable generating resources.

(f) Are reasonably expected to stimulate innovation, competition and customer choice in electric vehicle charging and related infrastructure and services.

A primary program objective is to provide objective information about electric transportation options, benefits, available funding sources, Pacific Power programs and other resources. All information, including technical assistance, will remain technology and brand neutral to encourage competition and customer choice. Technical assistance will include information about reliable emerging technologies and practices to ensure customers interested in more innovative solutions have relevant information to make informed decisions.

⁸ *Id*.

APPENDIX A – TRANSPORTATION ELECTRIFICATION STRATEGY



Appendix A – Transportation Electrification Strategy

Consistent with OAR 860-087-0030 (1) (d), this appendix contains: "[a] description of the electric company's long-term strategy to accelerate transportation electrification in its service territory in an effective and efficient manner and how the proposed program fits within the long-term strategy", including:

- (A) The current condition of the transportation electrification market in the electric company's service territory and the outlook for development of the market in the absence of the proposed program;
- (B) Near and long-term market barriers to the development of transportation electrification and how the electric company proposes specifically to address those barriers;¹
- (C) Near and long-term opportunities for improving the operation and reliability of the electric company's power system through transportation electrification and how the electric company proposes specifically to take advantage of those opportunities; and
- (D) Other factors pertinent to the electric company's plans for transportation electrification.

GUIDING PRINCIPLES

In March of 2016, the Oregon legislature passed Senate Bill (SB) 1547 which, among other things, states that "[t]ransportation electrification is necessary to reduce petroleum use, achieve optimum levels of energy efficiency and carbon reduction, meet federal and state air quality standards, meet this state's greenhouse gas emissions reduction goals described in ORS 468A.205 and improve the public health and safety;" and that "[w]idespread transportation electrification requires that electric companies increase access to the use of electricity as a transportation fuel;" 2

As a leading provider of safe, reliable and affordable energy and a trusted source of information for customers across Oregon, Pacific Power can play a critical role in helping its customers understand and adopt electric transportation options and supporting the state's environmental goals. In this nascent and rapidly evolving market, it is important to take a measured approach, remain flexible and focus on pilot initiatives designed to inform long-term strategy and investment. The pilot programs and associated transitional rate³ were developed through an extensive stakeholder process and represent the Company's initial efforts to address market barriers to widespread transportation electrification.

Given the rapidly evolving state of the transportation electrification market, PacifiCorp's long-term strategy is to remain flexible and responsive to market conditions. In doing so, the Company will rely on a set of guiding principles to inform current and future strategy and initiatives. These principles and specific examples of how they are applied are presented below:

¹ Also see the "Identification of market barriers, program implementation barriers and program strategies to overcome identified barriers: OAR 860-087-0030 (1) (a) (F)" section of the main body of this program application.

² Senate Bill 1547, Section 20(2)

³ Pacific Power is separately proposing a transitional rate for public DC fast charging, proposed Schedule 45. The transitional rate is a stand-alone tariff advice filing that is intended to complement Pacific Power's proposed transportation electrification pilot program proposals but is not a necessary component of the pilot program proposals.

Lead by example

Adopting and supporting electric transportation in its operations is important to drive market development and empower Pacific Power customers to do the same. To this end, the Company is currently engaged in several electric transportation initiatives:

- Pacific Power pledged to commit at least 5% of its annual vehicle replacement budgets to purchase plug-in electric vehicles through 2024.
- Pacific Power is a partner in the U.S. Department of Energy's Workplace Charging Challenge and are committed to providing vehicle charging options to employees.
- Pacific Power is committed to the White House's efforts to accelerate electric vehicle deployment along Department of Transportation Alternative Fuel Corridors.⁴

Understand Oregon customers' specific market barriers to adopting electric transportation

The Company performed extensive stakeholder outreach throughout 2016 to identify barriers to transportation electrification and determine which of these were best addressed by an electric company. The proposed pilot programs are designed to provide deeper insight into barriers specific to Pacific Power's Oregon customers and to test Pacific Power's ability to address these barriers through education, outreach, partnerships and deploying public infrastructure.

Use electric transportation to support a modern and efficient electrical system

If deployed correctly, electric transportation can increase electrical system efficiency and reduce costs for all Oregon customers. Through the initial proposed pilot programs and the deployment of an advanced metering infrastructure (AMI),⁵ the Company seeks to gain new insight into customers' energy consumption patterns, the impacts of charging infrastructure (particularly fast charging) on the grid, and the extent to which loads can be shifted through education and economic signals. The Company also intends to test the potential for integration of advanced technologies, such as energy storage and renewable generation, into public charging infrastructure. Data collected will inform future system planning and the long-term strategy for how to ensure electric transportation is improving the efficiency of the electrical system rather than hindering it.

Partner with customers to deploy vehicle charging solutions

Pacific Power's proposed Development and Demonstration pilot program is designed to encourage innovative, non-residential, plug-in electric charging solutions through competitive grant funding. The Company is strongly committed to partnering with its customers and communities to test customer-specific solutions, support underserved populations, and gain new insight into market barriers and charging patterns that will inform future system and program planning.

To reduce the cost of operation of public DC fast charging infrastructure, the Company will also propose through a stand-alone tariff advice filing a new transitional rate to stimulate public charging infrastructure development in its communities. The proposed rate will address traditional

 $^{^4\} https://www.whitehouse.gov/the-press-office/2016/11/03/obama-administration-announces-new-actions-accelerate-deployment$

⁵ On April 8, 2016, Pacific Power formally announced plans to install a network of 590,000 "smart meters" in Oregon through 2019. AMI will provide a platform for two-way communication between the customer meter and Pacific power, enabling near real-time data collection and demand response capabilities.

demand charge barriers while maintaining a price signal to encourage efficient use of the electric system.

Simplify the plug-in electric vehicle charging experience

Customers new to plug-in electric vehicles and/or charging infrastructure require comprehensive and objective information to make informed decisions about desired equipment features, siting, connection to electrical service and how to find and use public charging infrastructure. Through education campaigns, technical assistance and strategic partnerships, the Company seeks to simplify the experience for customers by serving as a "one-stop shop" for electric transportation information. This includes leveraging existing information and services and developing customized resources when necessary.

Support underserved communities

Electric transportation presents an affordable solution for low and moderate income customers, however, the industry is still trying to determine how best to address the barriers for this group of customer. Barriers include upfront vehicle cost and access to capital and charging infrastructure. In 2016, Pacific Power was pleased to partner with Hacienda CDC, Drive Oregon and the City of Portland to test plug-in electric car sharing for income-qualified customers.

Much of Oregon's public charging infrastructure is located in Portland or along interstate highways, leaving other areas of the state, including much of Pacific Power's service area without convenient access to public charging options. With private investment currently focused on large urban areas, Pacific Power has a unique opportunity to support charging infrastructure development in the less-urban areas of the state. Pacific Power is an active member of its communities throughout the state, and can act as a reliable and credible transportation electrification resource to customers. Some of these areas are also air quality maintenance areas, where low- or zero-emission electric transportation could provide the added environmental benefit of reducing emissions from traditional vehicles.

The Company looks forward to partnering with its customers through the initial pilot programs to test innovative solutions for these underserved communities.

Leverage funding and lessons learned from strategic partnerships to inform future planning

On December 22, 2016, the United States Department of Energy awarded \$3.9 million to PacifiCorp to support a project to accelerate the development and adoption of plug-in electric vehicles. PacifiCorp is the project lead, in collaboration with Idaho National Laboratory, the state of Utah, several universities, and regional organizations including Drive Oregon and the Rogue Valley Clean Cities Coalition. While project funds are primarily targeted at electrifying corridors in Utah, Idaho, and Wyoming, the project includes several aspects that present potential benefits to Pacific Power customers, including:

- Funding for the Rogue Valley Clean Cities Coalition and Drive Oregon to perform outreach and education in Pacific Power territory.
- Developing new tools for utility integration of charging equipment that may inform
 potential new policies and practices to reduce infrastructure cost and time associated with
 new charger installations.

• Investigating "smart mobility" through the integrating of electric bus service, electric taxis, e-bikes, car sharing and crowd sourced commuting service to eliminate the need for personal vehicles within urban areas.

The project presents an exciting opportunity for PacifiCorp to partner with a team of strategic partners and leading experts to accelerate transportation electrification and develop resources that can be used across the Company's six-state service area.

Phase in investments and keep an eye on the future

The Company is proposing modest three-year pilot programs to test key program concepts before making larger investments. Given the rapidly changing market, the Company believes this is critical to test the effectiveness of different means of addressing barriers while minimizing the risk of stranded investments to customers. When deploying Company-owned public charging infrastructure, Pacific Power will look for opportunities to test advanced technologies to minimize grid impacts and "future-proof" locations by ensuring the infrastructure can accommodate higher-powered chargers and new technologies as they become available.

In addition, the Company is monitoring opportunities to coordinate with other parties to leverage upcoming funding and partnership opportunities.

MARKET BASELINE ASSUMPTIONS: OAR 860-087-0030 (1) (A) (B)

Vehicle Registration

As of June 2016, there are roughly 11,000 plug-in electric vehicles registered and sited in the state of Oregon, 60 percent of which are 100 percent electric. Based on ZIP code-level data, it is estimated that a third of these vehicles (3,577) are located in Pacific Power territory (Table 1). By comparison, 43 percent of all registered vehicles in the state are sited in Pacific Power territory, indicating that plug-in electric vehicle adoption is lower in Pacific Power territory than for the state as a whole.

Table 1. Oregon Vehicle Registration Summary – June 2016

			Pacific
	Pacific	Oregon	Power % of
Vehicle Fuel	Power *	Statewide	Statewide
Electric	1,994	6,531	31%
Plug-In Hybrid	1,583	4,305	37%
Plug-in Electric Total	3,577	10,836	33%
Hybrid Gasoline	35,119	87,668	40%
Gasoline/Diesel	1,910,939	4,450,807	43%
Other	831	1,389	60%
Total	1,950,466	4,550,700	43%
Plug-in Vehicles per 10,000 Vehicles	18	24	77%

^{*} Estimated based on ZIP code-level data

⁶ Data provided by the Oregon Department of Environmental Quality.

Figure 1 shows rates of plug-in electric vehicle ownership by ZIP code across the state of Oregon, with the boundaries of Pacific Power's service territory overlaid. As shown, most of the "hot spots" in the state are outside the Company's territory.

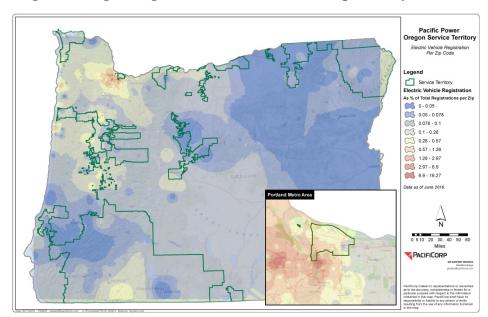


Figure 1. Oregon Plug-in Electric Vehicle Ownership Rates by ZIP Code

Figure 2 shows the cumulative plug-in electric vehicle registrations in Pacific Power's Oregon service territory from 2010 through June 2016 and forecasted adoption based on this historical trend. As discussed above, there are an estimated 3,600 plug-in electric vehicles in Pacific Power's Oregon service territory as of June 2016. If the adoption trend from 2010-2015 continues, it is estimated that there will be about 18,000 plug-in electric vehicles registered in Pacific Power territory by the end of 2025.

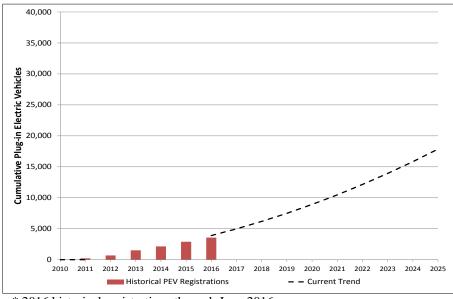


Figure 2. Historical and Forecasted Pacific Power Oregon Plug-in Electric Vehicle Registrations*

* 2016 historical registrations through June 2016

Through its program evaluation efforts Pacific Power will investigate the extent to which its pilot programs contributed to accelerated transportation electrification, either by encouraging plug-in electric vehicle adoption or increased electric miles travelled by existing vehicles.

Public DC Fast Charging Infrastructure

There are currently three competing fast charging standards:

- CHAdeMO: Primarily used by Japanese automakers, including the Nissan Leaf. Tesla vehicles can also use these stations with an adapter.
- SAE Combined Charging System (CCS): Primarily used by American and European automakers.
- Tesla Supercharger: Can only be used by Tesla vehicles.

This fragmented market limits driver access to a portion of the available public charging infrastructure and reduces driver confidence that a compatible charger will be available when needed. For example, stations along the West Coast Electric Highway only have CHAdeMO connections, BMW/Volkswagen's Express Charging Corridors use only CCS connections and Tesla's supercharger network is only compatible with Tesla vehicles.

Based on data from the United States Department of Energy's Alternative Fuel Data Center,⁷ there are currently 99 public fast charging locations in Oregon, one-third of which (33) are located in Pacific Power's service area. However, because of the competing charging standards discussed above, this number overstates the number of stations a given electric vehicle driver can use, as shown in Table 2. For example, a Nissan Leaf driver can only use 21 of the 33 stations and a driver of a vehicle with a CCS connection can only use 10 of the 33 stations.

⁷ Data pulled on November 11, 2016: http://www.afdc.energy.gov/locator/stations/

Table 2. Public DC Fast Charging Stations by Connection Type

Connection Type	Stations	Ports
CHAdeMO	18	19
CCS	7	7
Dual-Standard (CHAdeMO and CCS)	3	8
Tesla	5	36
Total	33	70

Table 2 also illustrates that many of the public DC fast charging stations in Pacific Power's Oregon service territory only have one port, which will reduce driver confidence that a port will be available when needed, particularly as plug-in electric vehicle ownership continues to increase.

It is unknown how many public DC fast charging stations would be deployed in Pacific Power's Oregon service area absent any new Pacific Power initiatives, however, the current state of the market suggests that private actors are not installing many dual-standard DC fast charging stations in Pacific Power communities. Through its proposed pilot programs, Pacific Power will seek to stimulate innovation, competition and customer choice by increasing the availability of public charging infrastructure in these communities to improve the viability of electric transportation adoption.

ONGOING PLANNING

The pilot programs represent Pacific Power's initial efforts to accelerate transportation electrification in its Oregon service area. The Company will monitor the progress of these initiatives and report annually on pilot status and outcomes. Pacific Power looks forward to continuing collaboration with its customers and stakeholders to investigate additional opportunities to accelerate transportation electrification in a manner consistent with its guiding principles.

APPENDIX B – STAKEHOLDER AND STATE PROGRAM COORDINATION



Appendix B – Stakeholder and State Program Coordination

STAKEHOLDER INVOLVEMENT IN PROGRAM DEVELOPMENT: OAR 860-087-0030 (1) (c) (A)

Pacific Power's initial proposed pilot programs were developed through an extensive stakeholder process. Throughout the program development process, Pacific Power staff had ongoing conversations about barriers and potential solutions with customers, state agencies, advocates, auto manufacturers, electric vehicle charging companies, and other organizations working to accelerate transportation electrification in Oregon.

In August and September of 2016, Pacific Power held Electric Transportation Public Input Workshops to solicit input on program concepts. Public inputs workshops were held in the following locations and dates:

- Portland: August 3, 2016 (over 30 attendees)
- Medford: August 18, 2016 (11 attendees)
- Bend: September 7, 2016 (8 attendees)

These public input workshops were an invaluable tool to gain insight into barriers for electric transportation in general and in Pacific Power's Oregon service territory specifically. Key themes included:

- Lack of awareness of electric transportation options and benefits;
- Need for a robust network of public charging infrastructure;
- High cost of plug-in electric vehicle options;
- Importance of off-peak charging;
- Need and desire for electric transportation in underserved communities, but barriers to adoption in these areas are not well understood; and
- Current electric rates with demand charges create a barrier to DC fast charging infrastructure development.

Based on feedback received, Pacific Power developed initial pilot programs and a new transitional rate and emailed a four-page overview of these initiatives to interested parties on October 31, 2016, requesting feedback on proposed initiatives. The document was emailed to roughly 150 individuals and the Company received feedback from only three parties, including Commission staff. Comments received focused indicated:

- The overview document did not provide sufficient detail to fully evaluate the merits of the proposed pilots and rates
- The Company should look to coordinate outreach and education efforts with Portland General Electric and other entities working on customer education around electric transportation.
- The on-peak period of the transitional rate should align with Pacific Power's peak demand periods.
- The public DC fast charging transitional rate is an innovative way of addressing demand charge barriers and can serve as a model for other utilities.

Utilities have a significant role to play in spurring electric vehicle adoption, such as providing
consumer education, however, utilities would not best serve customers by owning public DC
fast charging stations.

The Company appreciated the limited feedback it received on its overview document and considered stakeholder input in developing its pilot program applications. On December 1, 2016, Pacific Power presented a high-level overview of its proposed pilot programs and transitional rate at Drive Oregon's Energize Oregon Coalition Meeting.

EFFORTS TO COORDINATE WITH RELATED STATE PROGRAMS: OAR 860-087-0030 (1) (c) (B)

The proposed pilot programs and transitional rates are designed to support and complement other ongoing transportation electrification efforts in the state, including:

- Oregon's Zero Emission Vehicle Mandate
- Oregon's Clean Fuels Program (see below for additional information)
- State tax credits for residential and business vehicle charging equipment and alternative fuel fleet vehicles
- Portland General Electric's proposed transportation electrification programs
- Drive Oregon's efforts, including the development of the EV Showcase
- Local communities' climate and/or transportation action plans
- Potential involvement by the Northwest Energy Efficiency Alliance, the Energy Trust of Oregon, or other organizations
- Outreach and education efforts and infrastructure development that may stem from the Volkswagen Clean Air Act Partial Settlement

Oregon's Clean Fuels Program, administered by the Department of Environmental Quality ("DEQ"), requires a 10 percent reduction in the average carbon intensity of Oregon's transportation fuels by 2025 (relative to 2015 levels). Regulated parties are required to register with DEQ and must comply with the standard by balancing credits and deficits for 2016 and 2017 by the end of the 2017 calendar year and yearly by the end of each calendar year starting 2018. Deficits are generated when the carbon intensity of a specific fuel exceeds the clean fuel standard and credits are generated when the carbon intensity of a specific fuel is lower than the fuel standard. Providers of clean fuels may choose to participate in the program as "credit generators" and sell credits to regulated parties with deficits.

The program rules establish a hierarchy of entities that may opt-in to the program as credit generators. For residential electric vehicle charging, the electric utility has the first option to generate credits, followed by a broker (a third-party market participant), and then the owner of the electric-charging equipment. For residential charging, an electric utility must register by October 1st of the current year to generate credits for the following calendar year.

In the fall of 2016, Pacific Power worked with DEQ staff to assess the opportunity to generate residential credits in 2017. Prior to the October 1, 2016 deadline, no electric companies had registered as credit generators. DEQ's rules do not clarify the methodology or process for electric

companies to generate and verify credits associated with residential charging. For example, it is unknown how specific customers with electric vehicles will be identified and how their energy use (fuel consumption) will be measured or estimated. In addition, as of October 1, 2016, no transactions had been recorded under the Clean Fuels Program. At the time, the only public information available with respect to the value of any credits generated was associated with California's low carbon fuel standard credit market. Though a reasonable benchmark, the California market and program is significantly different from the Oregon market and program and therefore it is unclear whether California credit prices are a good indicator for Oregon's program.

In addition to the uncertainty around the magnitude and value of credits, there is a significant lack of clarity with respect to how the Company would use any revenue generated from the sale of credits. Though the Company is eligible to register to generate credits associated with residential electric vehicle charging, it is the individual customers who invested in the vehicles making such credit generation possible. It is unclear whether any revenue generated from credit sales should be credited back to those customers, all customers, or applied to other proposed programs. The Company understands that the Public Utility Commission of Oregon (Commission) has jurisdiction to determine how the revenue is spent; however, to date the Commission has not opined on this issue. The Company is interested in further dialogue with Commission staff and stakeholders on these issues to gain greater clarity and certainty with respect to the disposition of any credit revenue.

As a result of the above-described layers of uncertainty, PacifiCorp did not register as a credit generator for 2017. By choosing not to register as a credit generator for 2017, Pacific Power did not forgo the option to generate credits in the future. In addition, Pacific Power is engaged with DEQ and other stakeholders to develop rules and policy guidance to reduce uncertainty. DEQ initiated a rulemaking in early November 2016 to clarify and improve the rules and fully implement the Clean Fuels Program. The Clean Fuels Program 2017 Rulemaking Advisory Committee has been convened to provide stakeholders with an opportunity to comment on technical and policy issues, as well as the fiscal and economic impact of the proposed amendments when compared to the existing rule. Pacific Power is participating as a committee member and expects some procedural clarity in 2017 regarding how the residential credits will be generated and how the revenue from credits sales will be used. Committee meetings will occur through the spring of 2017. DEQ is scheduled to propose rule changes to the Environmental Quality Commission in November 2017.

Pacific Power intends to register to generate credits associated with public charging infrastructure proposed through the Public Charging Pilot and owned by the Company. Although, as noted above, there is not currently sufficient information to estimate the revenue potential associated with these credits, any revenue that is generated from these credits can be used to directly buy down the cost of the proposed pilot program.