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Portland, Oregon 97232

April 21, 2020

VIA ELECTRONIC FILING

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

Attn: Filing Center

RE: UM 1810 – PacifiCorp’s Transportation Electrification Pilot Update

In accordance with Order No. 18-075, PacifiCorp d/b/a Pacific Power encloses for filing in the above-referenced docket its transportation electrification pilot update.

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

By e-mail (preferred): datarequest@pacificorp.com

By regular mail: Data Request Response Center
PacifiCorp
825 NE Multnomah Street, Suite 2000
Portland, OR 97232

Please direct any informal inquiries to Cathie Allen, Manager, Regulatory Affairs, at (503) 813-5934.

Sincerely,

Michael Wilding
Director, Regulation

Enclosures

TRANSPORTATION ELECTRIFICATION PILOT UPDATE

April 21, 2020

This document provides a progress update on PacifiCorp's Transportation Electrification Pilot Programs.

Background

In accordance with Senate Bill 1547, PacifiCorp (PacifiCorp or Company) filed its initial transportation electrification application on December 27, 2016, proposing three pilot programs anticipated to accelerate transportation electrification in the Company's Oregon service territory. In February 2017, Public Utility Commission of Oregon (Commission) staff requested additional information to expedite the review process. In response, PacifiCorp filed a supplemental application on April 12, 2017. On May 31, 2017, PacifiCorp hosted a settlement conference where intervening parties expressed support for, concerns with, and suggestions for improvement of various aspects of PacifiCorp's proposed pilot programs. This resulted in a stipulation that was filed on August 11, 2017, that resolved all matters in the proceeding (Stipulation). All but one intervening party agreed to the terms of the Stipulation. The Commission modified, adopted, and approved the Stipulation on February 27, 2018.

The lengthy proceeding resulted in the Stipulation and order naming specific dates that did not align with the proposed three-year period of implementation. To align timing expectations, PacifiCorp filed a motion to amend Order No. 18-075 on February 25, 2019. On March 14, 2019, the Commission amended the order to modify the dates included in the Stipulation. The amended language also modified the Stipulation to require progress updates to the Commission by March 31, 2019, and March 31, 2020, with a final report on pilot activities due by June 30, 2021. On March 14, 2019, the Commission issued Order No. 20-096 providing a new due date of May 29, 2020 due to COVID-19 delays.

Additionally, as part of Senate Bill 1547 and articulated under docket AR 609 PacifiCorp filed the Company's Transportation Electrification Plan on February 3, 2020. The Transportation Electrification Plan has additional information on all transportation electrification activities undertaken by PacifiCorp in the Company's Oregon service area. The Transportation Electrification Plan is an active regulatory proceeding (docket UM 2056).

On March 8, 2020, Oregon Governor Kate Brown declared a state of emergency in response to the COVID-19 virus outbreak. Since that time, the COVID-19 virus has not only become a global health crisis, but a social and economic one as well, as social distancing is enforced and businesses closed to stop the spread of infection. It is unknown at this time how the COVID-19 pandemic may impact construction schedules and implementation of the programs summarized in this update. In the event programs are significantly impacted, the Company will notify Commission staff.

The three programs approved by the Commission and summarized in this update are:

- Public Charging Pilot
- Outreach and Education Pilot
- Demonstration and Development Pilot

Public Charging Pilot

Through the Public Charging Pilot, PacifiCorp is authorized to construct, own, and operate public electric vehicle charging stations at up to seven locations in its Oregon service territory. The Company plans to build five locations with the approved budget. This pilot aims to accelerate consumer adoption of transportation electrification by increasing customer awareness and understanding of transportation electrification alternatives, and supporting equitable access to charging infrastructure. Given the rural nature of PacifiCorp’s service territory—and the relatively long distance between public fast chargers (compared to urban areas)—increasing the availability of charging infrastructure is crucial to long-term market development.

The Company began looking for potential locations in March 2018, paying particular attention to areas currently underserved by existing charging infrastructure. An initial list of nine potential sites was shared in June 2018 with Commission staff based on the criteria of convenience and anticipated use, visibility, availability of necessary electrical service, future-proofing, and permitting. Communities were engaged through PacifiCorp’s Regional Business Managers to identify suitable locations to site charging stations. Potential sites were identified within seven communities. To ensure projects are completed without exceeding the approved budget, the number of locations was narrowed to five locations. The location and progress of each of the five sites is listed in **Table 1** below.

Table 1 Planned Construction Schedule

Location	Progress of Construction
Mill City	In Progress
Madras	Completed
Otis	Under Construction
Bend	Completed
Klamath Falls	In Progress

Notes:

Completed: The charging stations are open to the public and able to charge electric vehicles.

Under Construction: The site is actively being built.

In Progress: The site has been selected, property easements signed, and local permitting in process. Construction will begin soon.

Construction of the Public Charging Pilot sites began in 2019. The remaining project sites are anticipated to be completed by the end of 2020. To date, PacifiCorp has constructed and operates two utility-owned fast charging locations in Madras and Bend, Oregon, with four DC Fast Chargers and one dual-port Level 2 Charger at each location. The Bend location is now open and able to charge vehicles though the Company is waiting for concrete batch plants to open to complete paving at the site. The Company had planned to support an opening celebration along

with a community ride and drive in conjunction with the Bend charging stations. However, in response to state and federal guidance on suspending large events due to COVID- 19 concerns, the events have been postponed.

Construction has begun at the Otis location, with an anticipated opening in the second quarter of 2020. Additional stations are planned for Klamath Falls and Mill City, Oregon.

Through the fast charging stations the Company is collecting data on energy usage, number of charging sessions, revenue collected, unique drivers, and average session length. If drivers have opted in, we are also collecting driver zip codes and session details, including session start time, end time, time spent charging, time spent connected, kilowatt-hours dispensed, port used, fee paid, beginning state of charge, end state of charge.

Figures 1 through 3 below demonstrate social media posts promoting the Madras station opening and contain public reviews on the popular electric vehicle (EV) station locator app, PlugShare.

Figure 1 Social Medial for Madras Charging Station Event

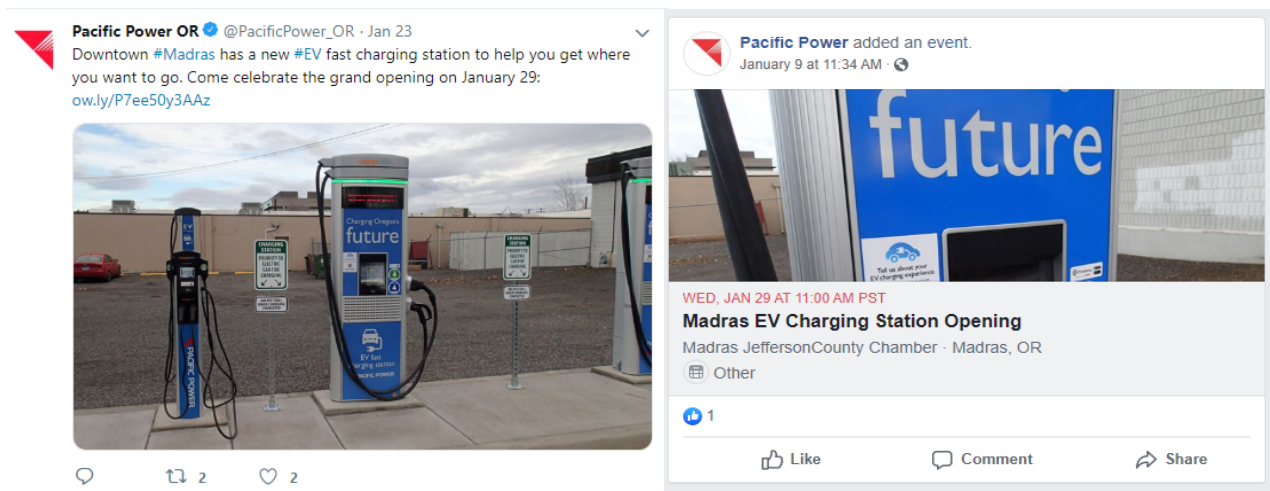


Figure 2 Madras PlugShare Checkins







	<p>✔ The Environmental Center Jan 29, 2020 Nissan LEAF 2016 CHAdEMO 28 Kilowatts "Came up for the ribbon cutting today and charged to make it back to Bend. 3 Bolts, 1 e-golf and our Leaf all came out for the event. Thanks Pacific Power and the Chamber for this great resource!"</p>
	<p>✔ Dam56 Jan 26, 2020 Niro EV "Thanks Madras! We will be back."</p>
	<p>✔ EV Plug Life Bolt /Leaf Jan 4, 2020 Chevrolet Bolt EV CCS/SAE 30 Kilowatts "AWESOME! Finally operational CCS fast charger in Central Oregon. Great stop on the way too and from Portland. Eating at black bear dinner only a block away."</p>

Figure 3 Bend PlugShare Checkins

	<p>✔ The Environmental Center Mar 11, 2020 Nissan LEAF 2017 CHAdEMO 41 Kilowatts "Did you know that you can pay with a contactless credit card! You don't need the app or the key fob if you have a contactless credit card! Charged this afternoon on both the DC fast charger in the level two charger and both are working great!"</p>
	<p>✔ Dam56 Mar 9, 2020 Niro EV J-1772</p>
	<p>✔ Markus Mar 1, 2020 Chevrolet Bolt EV CCS/SAE 39 Kilowatts</p>

Outreach and Education Pilot

The Outreach and Education Pilot primarily consists of four components: customer communications, self-service resources, community events, and technical assistance. Progress updates on each component are provided below.

Customer Communications

As required in docket UM 1810, PacifiCorp focused customer communications expenses, to the extent practical, on promoting and supporting the success of its Transportation Electrification Pilot Programs.¹ To date the majority of communications have focused on publicizing and soliciting applications for the demonstration and development grants, along with increasing awareness of technical assistance, encouraging customers to use self-service resources, and driving participation in customer events. The Company has also used the communications program to fund highly visible signage for PacifiCorp owned chargers as well as chargers installed through the Grant program. Examples of this signage are shown in **Figure 4** and **Figure 5**.

Figure 4 Signage for PacifiCorp Charging Stations



¹ *In the Matter of PacifiCorp d/b/a PacifiCorp, Application for Transportation Electrification Program, Docket No. UM 1810, PacifiCorp's Supplemental Application (April 12, 2017).*

Figure 5 Signage Guidance for Grant Funded Charging Stations



Sign options for Level 2 EV parking spaces

Primary EV charger sign

Design and purchase decisions are up to the grant recipient.

Size: Signs are typically 12x18 or 18x18.

Design options: Here are some samples:



Sign resources:

stopsignsandmore.com
myparkingsign.com
evchargesolutions.com
complanesigns.com

Secondary sign recognizing Pacific Power's assistance

- Smaller than the primary sign, approximately 12x6 or 12x8.
- Installed below the primary sign.
- You can either design your own sign and get Pacific Power's approval, or Pacific Power can provide the sign for you.



Questions? Please email plugin@pacificpower.net

Driven by communications, the pilot programs have received solid participation as reflected in the amount of grant applications received and inquiries for technical assistance. **Figures Figure 6 through Figure 9** below are examples of a PacifiCorp social media posts and communications promoting programs to customers.

Figure 6 Sample Communication to Residential Customers



connect

FEBRUARY 2020
PACIFIC POWER
OREGON

powering A BRIGHTER FUTURE

When it comes to your home and family, you want choices. We get that. Here at Pacific Power, we provide affordable, sustainable energy, along with flexible options that fit your lifestyle.





INFO ON THE GO
Get the details you want – anytime, anywhere – by signing up for text alerts about power outages, billing and more.




DRIVE AHEAD
Going EV is easier than ever. Use our calculator to estimate your electric vehicle savings and find charging stations near you.

Figure 7 Social Media Advertisement for Business Customers

 **Pacific Power**
Sponsored · 

Lead the way forward. Pacific Power offers businesses free assistance and grants for installing EV charging stations.



PACIFICPOWER.NET/EV
Installing EV charging stations at work? [Learn More](#)
More drivers are making the switch to plug-in electric cars...




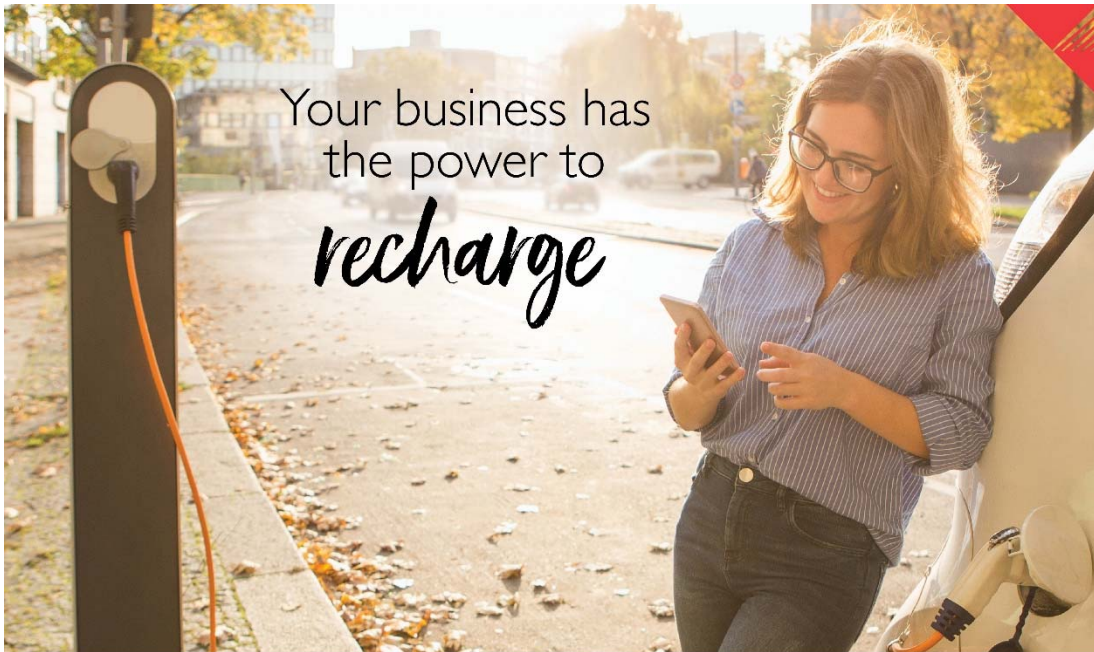
 Like  Comment  Share

Figure 8 Sample Communication to Business Customers



Join Oregon businesses that are reimagining the way ahead. Pacific Power offers organizations free technical assistance and grants for installing electric vehicle charging stations.



Benefits:

- Contribute to a healthier environment.
- Build your reputation as a sustainability leader.
- Attract and retain employees.
- Add to Oregon's electric car charger network.

We can help you get started

Grants can pay for up to 100% of the costs to install your electric vehicle chargers. Applications for the next grant cycle are due November 15, 2019.

Not sure where to start? Our free on-site technical assessment can help you evaluate options and costs.

Learn more and apply at pacificpower.net/ev.



© 2019 Pacific Power



Figure 9 PacifiCorp Communication Promoting a Community Event in Talent, Oregon

**FREE MAKERS + 2020
RIDE & DRIVE POP-UP**

SATURDAY, JANUARY 18TH - 10AM TO 2PM

AT TALENT MAKER CITY IN DOWNTOWN TALENT, OR

FREE SCREEN PRINT REUSABLE COTTON TOTE
BUILD AND RACE SOLAR MODEL CARS
TEST DRIVE AN ELECTRIC VEHICLE
FUN FOR ALL AGES!

THANK YOU TO OUR KEY SPONSORS

TALENT MAKER CITY ROGUE VALLEY PACIFIC POWER SONEVA.NET Electric Auto Association CITY OF TALENT

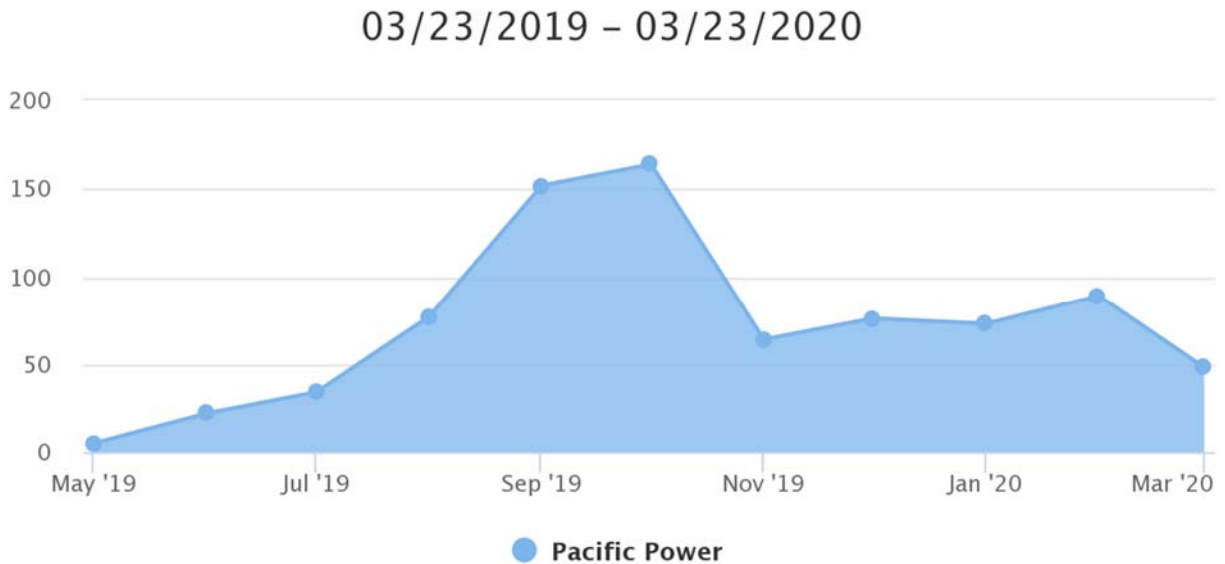
Self Service Resources

Through a competitive RFP process, the Company selected Clean Power Research’s WattPlan tool. WattPlan performs detailed electric vehicle and home load modeling, electric utility bill, vehicle total cost of ownership and environmental impact estimates. This tool assists customers interested in electric vehicles in better understanding total lifecycle costs through comprehensive vehicle options, utility bill impacts, and incentive calculations.

WattPlan went live on PacifiCorp’s website in May 2019. To date, WattPlan has produced cost comparison estimates for customers 804 times. The tool was marketed to residential customers through email and social media channels as part of the Company’s website relaunch in August

2019, as part of National Drive Electric Week during the month of September, and through paid social media advertisements in February 2020. **Figure 10** below shows the usage of WattPlan increased when actively promoted.

Figure 10 Monthly usage of WattPlan through March, 2020



The Company has also contracted with Chargeway to install another self-service tool, three Chargeway Beacons in dealerships within the Company’s service area. Though the Beacons are located in car dealerships, the end users are PacifiCorp residential customers who frequent the dealerships.

Chargeway is a system that uses colors to identify plug types and numbers for power levels. The higher the number, the faster a driver is able to charge at a charging station. This label system is communicated via colorful stickers on charging stations and in the Chargeway app. The Beacons make it easier for customers to differentiate the correct charging standard for their vehicle. The Chargeway app is free to download for all PacifiCorp customers and shows the simple color and number icons on the station finder map to identify all charging options available for every electric vehicle a user adds to their account. The beacon is a six foot interactive touch screen that shows charging locations and aides salespeople in communicating about electric fuel.

These Beacons were installed in the fourth quarter of 2019 at TC Chevy in Medford/Ashland, Team Kia in Bend and Ware Chevy in North Bend/Coos Bay. Locations were chosen in coordination with the Oregon Auto Dealers Association using metrics of geographic location, participation in the state rebate program, EV inventory and dealer interest. Data on the number of EVs sold pre- and post-Beacon installation will be gathered.

Community Events

PacifiCorp coordinated five electric transportation community events to date, which were primarily electric vehicle ride-and-drive events. Planning is underway for further ride-and-drive events throughout Oregon through 2020 along with additional event participation as budget allows. These events will most likely happen in the third quarter of 2020 when weather is most cooperative and events can be timed with state or national campaigns like national drive electric week.

The Company has implemented diverse types of event participation and sponsorships alongside the PacifiCorp's event manager, Forth. Some ride-and-drives have been organized as a part of larger community events not specifically focused on electric vehicles, while others were stand-alone events with the sole focus on electric transportation. Most event participation included a ride-and-drive element with either Forth, local dealerships, or local owners associations supplying the vehicles for test drives. Some events did not have a ride-and-drive element but electric vehicles were available to see and touch and information about EVs and utility programs was available from PacifiCorp or Forth staff. **Table 2** summarizes the Oregon events to date.

Table 2 PacifiCorp Community Events

Event Name	Location	Date	Ride and/or Drives	Number of Customer Interactions
Touch-a-truck	Independence	5/11/2019	18	82
Da Vinci Days	Corvallis	7/20/2019	24	85
National Drive Electric Week- Lincoln City	Lincoln City	9/14/2019	53	106
National Drive Electric Week- Coos Bay/ North Bend	North Bend	9/21/2019	N/A	67
Talent EV Pop-up	Talent	01/18/2020	11	62
Total	5	N/A	106	402

In 2020 there will be two additional ride-and-drive events in Oregon along with other “pop up” and educational events as the budget allows. These events will be planned in coordination with the Electric Vehicle Charging Station Grant and Public Charging Pilot project completion. The Company also plans to sponsor additional electric transportation events through Oregon Clean Fuel Program (CFP) programing. Additional information of the Company's CFP actions can be found under docket UM 1826.

Given the state and federal guidance on suspending large events due to COVID-19 the event planning is on hold at this time. The Company is unsure of how the COVID-19 pandemic may impact event schedules and program implementation.

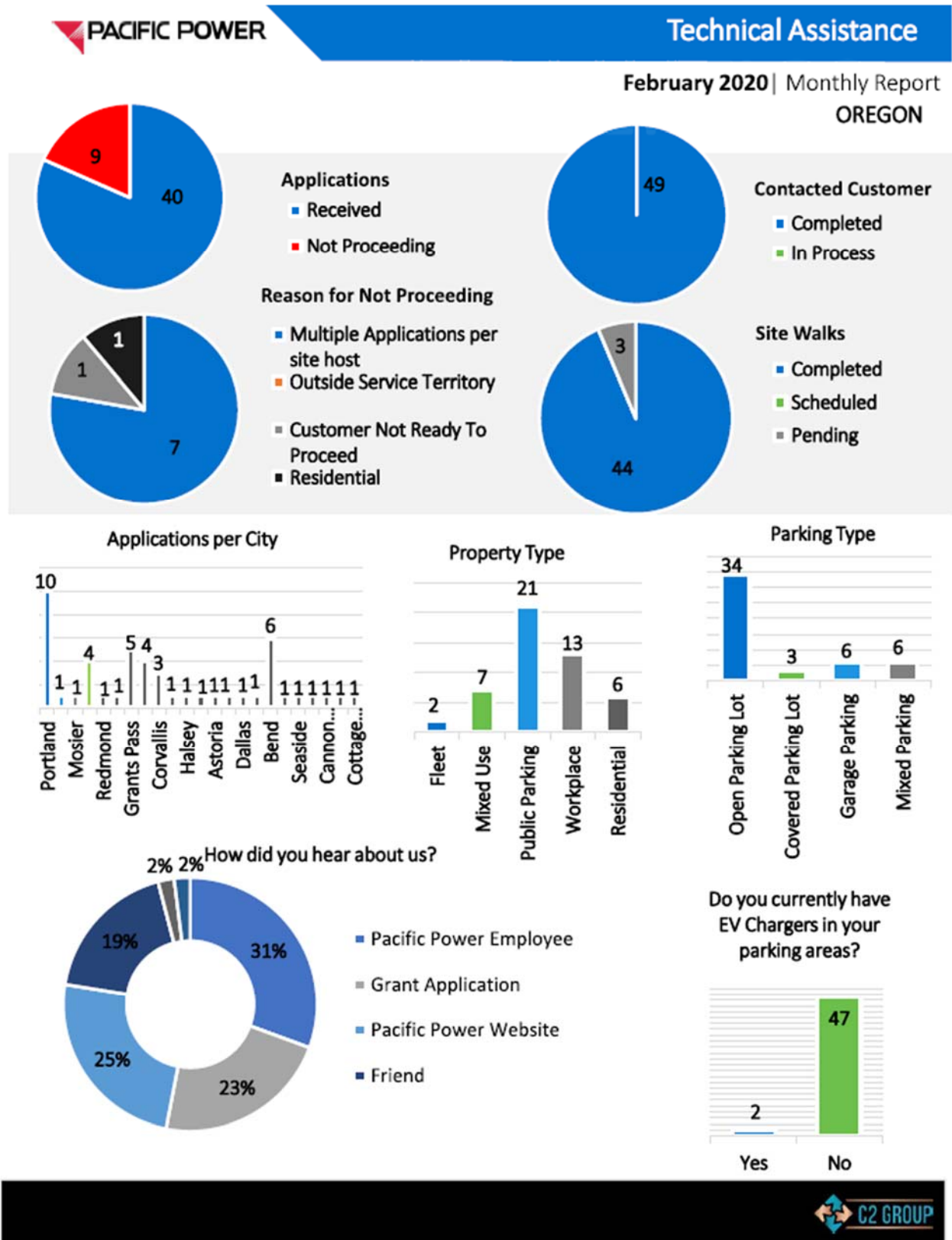
Technical Assistance

PacifiCorp provides on-site technical assistance to non-residential customers interested in installing charging infrastructure. The Company has contracted with C2 Group to provide this service at no cost to customers. To date, this program has conducted or received an application to conduct onsite technical assistance for 49 customers. Customers apply via an online application on the Company's website. A desktop review and phone conversation follows to understand the customer's EVSE needs, followed by an in-person site walk. Within a few weeks after the site walk, the customer receives their customized assessment and is given the option of a final 30-minute review session.

Budget remains for an estimated 39 assessments through the rest of 2020. **Figure 11** Technical Assistance February Monthly Report below provides a summary of technical assistance applications and reports through February 2020.

Technical assistance site visits have been temporarily paused due to safety concerns related to COVID-19. The Company is unsure of how the COVID-19 pandemic may impact the Technical Assistance program's implementation.

Figure 11 Technical Assistance February Monthly Report



Demonstration and Development Pilot

The Demonstration and Development Pilot provides grant funding to non-residential customers to help offset the upfront costs of installing electric vehicle charging infrastructure. To make the program more easily understood by customers, PacifiCorp branded the Demonstration and Development Pilot program as the Electric Vehicle Charging Station Grant Program. Nexant has provided the scoring and recommendations for funding as the third-party independent evaluator.

Table 3 Grants Awarded

Total Number of Applications	Awarded Applications	Projects Completed	Total Ports Installed
70	41	12	62

The first quarterly grant cycle opened to non-residential customers on October 15, 2018, with applications due November 15, 2018. As of the first quarter of 2020, the Company has received 70 applications to the grant. Five full grant cycles have been completed with \$1,513,488.13 awarded to 41 grant recipients. If a grant recipient decides to not complete a project, the funds awarded to them will be redistributed to assist other potential projects.

The final quarterly cycle opened on January 15, 2020, with applications due on February 15, 2020. Thirty-four applications are currently under review by the independent evaluator. The Company observed an uptick in the number of application received in the fourth quarter of 2019 with 32 applications. Other quarterly grant cycles averaged 10 applications per quarter. The grant application was refined each cycle based on applicant feedback.

Most grant recipients plan to install Level 2 charging stations representing an estimated total 163 charging ports, with three recipients planning to install DC Fast chargers. Grants have been awarded to diverse types of organizations across PacifiCorp’s service area (**Figure 12** Charging Locations Enabled Through PacifiCorp Pilot Programs) including cities, multiunit residential housing, small businesses, hotels, a hospital, community colleges, and nonprofits.

Figure 12 Charging Locations Enabled Through PacifiCorp Pilot Programs

