

October 2, 2018

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 Public Charging Pilot Program—Data Collection and Learning Objectives

PacifiCorp d/b/a Pacific Power provides the enclosed learning objectives for its Public Charging Pilot Program for informational purposes only. These learnings were developed collaboratively with Public Utility Commission of Oregon Staff and other stakeholders in this proceeding through a workshop held with parties on April 19, 2018, and a request for comments and feedback. These learnings reflect the comments and feedback received.

Please direct questions on this filing to Natasha Siores at (503) 813-6583.

Sincerely,

Etta Lockey

Vice President, Regulation

Public Charging Pilot Data Collection and Learning Objectives

PacifiCorp will collect and analyze the following data to the extent it is generated by the pilot program, and report what specific learnings it has gained from the pilot project:

- Station data (for all different types of chargers, i.e. Level 2 vs. DC Fast Chargers):
 - o Coincidence Factor of Charging Stations
 - o Utilization/driver usage patterns, including time of day and pricing information
 - o Load Profiles, including but not limited to on and off-peak charging
 - Load Factors
 - Duration of charge
 - o If available, voltage & power quality
 - o Energy usage per charge
- Who is using the charging stations:
 - o Whether the chargers are regularly utilized by non-Pacific Power retail customers
 - o Type of vehicles customers drive
 - o What factors led to differences in utilization and community exposure between pods, i.e., urban vs. rural.
 - o Whether there are distinct use cases with predictable load profiles;
- Charging patterns:
 - How often customers charge
 - o Insight about price sensitivities
 - o Insight about time-variant rates
- The impact of the charging infrastructure on:
 - o Enabling long-range travel
 - o Reducing range anxiety
 - o Providing reliable and accessible charging
 - o Increased awareness of electric transportation; and
 - o Customers' willingness to purchase an EV
- Whether the pricing model is easily understood by drivers
- Whether interoperability is a barrier, and if so, whether it could be removed as a barrier
- Cost effectiveness
 - o Charging infrastructure installation, operation, and maintenance costs
 - Revenue by charger type broken down into revenue streams including driver payments and Clean Fuels Program (CFP) credit revenue
 - Whether utility-owned public charging infrastructure could create a net benefit for customers
- Challenges, best practices, and lessons learned:
 - o Permitting, designing, and siting charging infrastructure
 - o Causes for differences in installation and upgrade costs at different locations.
 - Maintenance
 - Reliability, including but not limited to vandalism, unexpected events causing the charging stations to be down, and charging etiquette (e.g., length of charge per vehicle and active/idle time)

CERTIFICATE OF SERVICE

I certify that I served a true and correct copy of PacifiCorp's Public Charging Pilot Program—Data Collection and Learning Objectives on the parties listed below via electronic mail and/or or overnight delivery in compliance with OAR 860-001-0180.

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Dated this 2nd day of October, 2018.

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