

Docket No. UM 1810
Exhibit PAC/200
Witness: Robert M. Meredith

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

PACIFICORP

Direct Testimony of Robert M. Meredith

April 2017

TESTIMONY OF ROBERT M. MEREDITH

TABLE OF CONTENTS

QUALIFICATIONS1
PURPOSE AND SUMMARY OF TESTIMONY1
ELECTRIC VEHICLE CHARGING STATION ILLUSTRATIVE TARIFF.....2

ATTACHED EXHIBIT

EXHIBIT PAC/201 – Illustrative Tariff

1 **Q. Please state your name, business address, and present position with PacifiCorp**
2 **d/b/a Pacific Power (PacifiCorp or Company).**

3 A. My name is Robert M. Meredith. My business address is 825 NE Multnomah Street,
4 Suite 2000, Portland, Oregon 97232. My title is Manager, Pricing and Cost of
5 Service.

6 **QUALIFICATIONS**

7 **Q. Please describe your education and professional background.**

8 A. I graduated magna cum laude from Oregon State University in 2004 with a Bachelor
9 of Science degree in Business Administration and a minor in Economics. In addition
10 to my formal education, I have attended various industry-related seminars. I have
11 worked for the Company for twelve years in various roles of increasing responsibility
12 in the Customer Service, Regulation, and Integrated Resource Planning departments.
13 I have over six years of experience preparing cost of service and pricing related
14 analyses for all of the six states that PacifiCorp serves. I assumed my present position
15 in March 2016.

16 **Q. Have you testified in previous regulatory proceedings?**

17 A. Yes. I have previously filed testimony on behalf of the Company in regulatory
18 proceedings in California, Washington, Utah, and Idaho.

19 **PURPOSE AND SUMMARY OF TESTIMONY**

20 **Q. What is the purpose of your testimony in this proceeding?**

21 A. The purpose of my testimony is to present the Company's illustrative tariff for
22 Company-operated electric vehicle charging station service that supports the public
23 charging program discussed in Company witness Mr. Eli M. Morris' direct testimony.

1 **ELECTRIC VEHICLE CHARGING STATION ILLUSTRATIVE TARIFF**

2 **Q. Why is the Company filing an illustrative tariff for Company-operated electric**
3 **vehicle charging station service?**

4 A. As described in Mr. Morris' direct testimony, the Company will own and operate
5 electric vehicle charging stations as part of the Company's proposed public charging
6 program. To access the Company's electric vehicle charging stations, users will pay
7 the Company a fee for that service. The Company proposes to charge this fee in
8 accordance with a tariffed rate schedule. Considering that the Company is still many
9 months away from opening an electric vehicle charging station and given the rapidly
10 evolving nature of the public electric vehicle charging environment, the Company is
11 only providing an illustrative tariff at this time. The illustrative tariff describes the
12 nature of the service being provided as well as the manner in which the Company
13 proposes charging for its service without indicating actual prices. After receiving
14 approval for its public charging program and at a time closer to when it would
15 anticipate opening its first station, the Company will make an advice filing requesting
16 approval of a Company-operated electric vehicle charging service tariff.

17 **Q. Please describe the Company's illustrative tariff.**

18 A. The Company's illustrative tariff for Company-operated electric vehicle charging
19 station service, designated as Schedule 60, is provided as Exhibit PAC/201. The
20 illustrative tariff is designed to provide service to any individual who uses Company-
21 operated electric vehicle charging stations for the purpose of recharging the battery of
22 an electric vehicle. The illustrative tariff explains the Company's responsibility to
23 keep its existing charging station in good operating condition and to make any repairs

1 as soon as reasonably possible. Finally, the illustrative tariff sets forth the manner in
2 which the Company proposes to charge for this service.

3 **Q. How does the illustrative tariff propose to charge individuals for Company**
4 **operated electric vehicle charging station service?**

5 A. Under the illustrative tariff, individuals will be charged for each minute of electric
6 vehicle station charging service. Specifically, Exhibit PAC/201 sets forth four
7 placeholders for prices which the Company will charge for its service. Individuals
8 will be charged for minutes of service provided from a level 2 charger (under 19.2
9 kilowatts) or from a direct current (DC) fast charger (over 19.2 kilowatts) for either
10 the on-peak period or the off-peak period.

11 **Q. Why would individuals be charged per minute of usage instead of by kilowatt-**
12 **hour?**

13 A. To help the Company's electric vehicle charging stations be more fully utilized and to
14 ensure individuals make these stations available for others to use, it is important to
15 send a price signal that encourages users to vacate the location after the vehicle's
16 charging is complete. Charging on a per kilowatt-hour basis does not provide an
17 incentive to leave and make the station available for other drivers after charging has
18 completed. In addition, charging for usage on a per minute basis provides a
19 reasonable proxy for per kilowatt-hour rates, since energy consumption will likely
20 correspond to the time spent charging.

21 **Q. Why does the Company propose charging different prices for service provided**
22 **from level 2 and DC fast chargers?**

23 A. As described in Mr. Morris' direct testimony, the Company plans to include level 2

1 charging as a backup for its DC fast chargers. The Company proposes charging
2 lower prices for service from level 2 charging because they are less costly to install
3 and provide a slower charge for drivers.

4 **Q. Why does the Company propose charging different prices based upon time-of-**
5 **use period?**

6 A. Senate Bill 1547 requires the Company to file transportation electrification programs
7 that “(a)re reasonably expected to improve the electric company’s electrical system
8 efficiency and operational flexibility”. Charging different prices based upon time-of-
9 use period will encourage individuals to use the Company’s charging stations during
10 the off-peak period and discourage usage during the on-peak period. Deterring an
11 increase to the Company’s peak usage due to transportation electrification strongly
12 aligns with the goal of improving electrical system efficiency.

13 The time periods for the on- and off-peak periods included in the Company’s
14 illustrative tariff are the same as those used in the Company’s Schedule 210 –
15 Portfolio Time-of-Use Supply Service that is available for residential and small non-
16 residential customers. These hours correspond with shifting usage away from the
17 Company’s peak usage. Additionally, keeping the time-of-use periods consistent
18 with Schedule 210 ensures that the experience for individuals utilizing the
19 Company’s charging stations and residential customers participating in time-of-use is
20 consistent, particularly for electric vehicle owners who charge under Pacific Power
21 time-of-use rates at home.

1 **Q. How does the Company propose to develop prices for Company operated**
2 **electric vehicle charging station service?**

3 A. If the Public Utility Commission of Oregon approves the Company's public charging
4 program, the Company will develop the per-minute prices described above to be
5 generally reflective of prices that other providers charge for comparable service. The
6 goal is for the Company's price to reflect market prices for charging while also
7 sending appropriate price signals to encourage proper charging.

8 **Q. Will the Company's proposed electric vehicle charging rates be set to exactly**
9 **recover the costs of electric vehicle charging?**

10 A. Not necessarily. One of the considerations specified for transportation electrification
11 programs in Senate Bill 1547 is that they "(a)re reasonably expected to stimulate
12 innovation, competition, and customer choice in electric vehicle charging and related
13 infrastructure and services." Setting the Company's electric vehicle charging rates at
14 a level similar to the rates that other providers charge helps to ensure that the
15 Company's provision of electric vehicle charging service does not stifle competition
16 in this nascent industry. If electric vehicle charging rates were set at the level
17 required to recover the Company's costs, then the Company could have an unfair
18 advantage over other providers if its rates were lower. Conversely, if the price
19 needed to recover its costs was in excess of what other providers charge, Company
20 charging stations might be at a disadvantage.

21 **Q. How does the Company propose to reconcile revenues from electric vehicle**
22 **charging to the costs of electric vehicle charging?**

23 A. The Company proposes to distribute any excess revenues or collect any unrecovered

1 costs from customers through an electric-vehicle-related rate in Schedule 95 – Pilot
2 Program Cost Adjustment. This rate will also recover the costs of the pilot programs
3 as described in the Company’s supplemental application. After receiving approval
4 for its electric vehicle charging programs, the Company will file an advice letter to set
5 an appropriate adjustment rate. The rate will be reviewed and updated periodically to
6 reflect changes in program costs and to include reconciliation amounts for electric
7 vehicle charging stations.

8 **Q. Does this conclude your direct testimony?**

9 A. Yes.