

October 19, 2018

***VIA ELECTRONIC FILING***

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

Attn: Filing Center

**RE: UE 328/Advice 16-020—Compliance Filing—Annual Program Report**

**Purpose**

In compliance with Order No. 17-172, the purpose of this filing is to provide the first annual report on PacifiCorp d/b/a Pacific Power's Schedule 45 Public DC Fast Charger Optional Transitional Rate Delivery Service (Schedule 45), which became effective June 1, 2017, with the approval of Advice 16-020 by the Public Utility Commission of Oregon (Commission).<sup>1</sup> PacifiCorp filed Advice 16-020 on December 27, 2016, which was supplemented on April 14, 2017 (Supplemental Filing). In its Supplemental Filing, PacifiCorp committed to file both annual and triennial reports on the effects of Schedule 45 throughout the time it remains in effect.

**Background**

In response to Senate Bill 1547, which passed in March of 2016, PacifiCorp filed applications for new programs and rates to accelerate transportation electrification in Advice 16-020. In advance of filing these applications, the company held a series of public stakeholder workshops, during which various parties indicated that, at current utilization levels, demand charges are a significant impediment to maintaining and expanding a network of public electric vehicle direct current (DC) fast charging stations. As a result of these meetings, as well as PacifiCorp's own analysis, it became apparent that, while it may not often be economic for customers to install DC fast chargers at the frequency they are currently utilized, the availability of a dependable network of publicly available DC fast chargers that can quickly recharge electric vehicle batteries is critical to the acceleration of transportation electrification. PacifiCorp addressed these concerns in its initial filing in Advice 16-020, which proposed replacing demand charges with on-peak energy charges for separately-metered, publicly-available DC fast chargers. After discussions with Commission staff, PacifiCorp's Supplemental Filing included a proposal for both annual and triennial reporting on Schedule 45, a cap of 200 program participants, and an explicit glide-path for Schedule 45 customers back to Schedule 28 over a period of nine years. This proposal was ultimately approved by the Commission, and Schedule 45 became effective June 1, 2017.

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<sup>1</sup> *In the Matter of PacifiCorp dba Pacific Power, Advice 16-020 (ADV 485), Schedule 45 and 745 Public DC Fast Charger Delivery Service Optional Transitional Rate*, Docket No. UE 328, Order No. 17-172 (May 16, 2017).

### **Rate Design**

Customers on Schedule 45 pay all applicable rates under Schedule 28, plus a 10.738 cents per kilowatt-hour on-peak energy adder that is designed to collect the same amount of revenue as the Schedule 28 demand charges.<sup>2</sup> While the customer pays both the demand charges and the on-peak energy adder, the schedule includes complementary percentage discounts that prevent the customer from ever paying the full amount of either charge. These percentage discounts are scheduled to change each May 15<sup>th</sup> in a way that increases the demand charges and decreases the on-peak energy adder by 10 percent. When Schedule 45 initially became effective, the demand charges discount started at 90 percent, and decreased to 80 percent on May 15, 2018, while the on-peak energy adder discount started at 10 percent, and increased to 20 percent on the same date. Continuing this glide-path, rates will return to standard Schedule 28 rates after nine years.

### **Report Requirements**

The Supplemental Filing proposed both annual and triennial reports as detailed below:

- Information provided annually:
  - The monthly number of customers, including the number of DC fast chargers participating in the tariff. The monthly energy on the tariff.
  - An analysis that compares these customers' monthly bills with what they would have been on standard rates.
  - The location by ZIP Code of installed chargers plus known information on the size and capacity of chargers.
- Information provided triennially:
  - Lessons learned from the program, including any anecdotal feedback from customers or from plug-in electric vehicle (PEV) drivers who use the participating DC fast chargers. Information, if available, on the rates charged to drivers and if those rates vary by time period.
  - Recommendations for changes to the schedule, if needed. A request for continuance of offering, if needed.

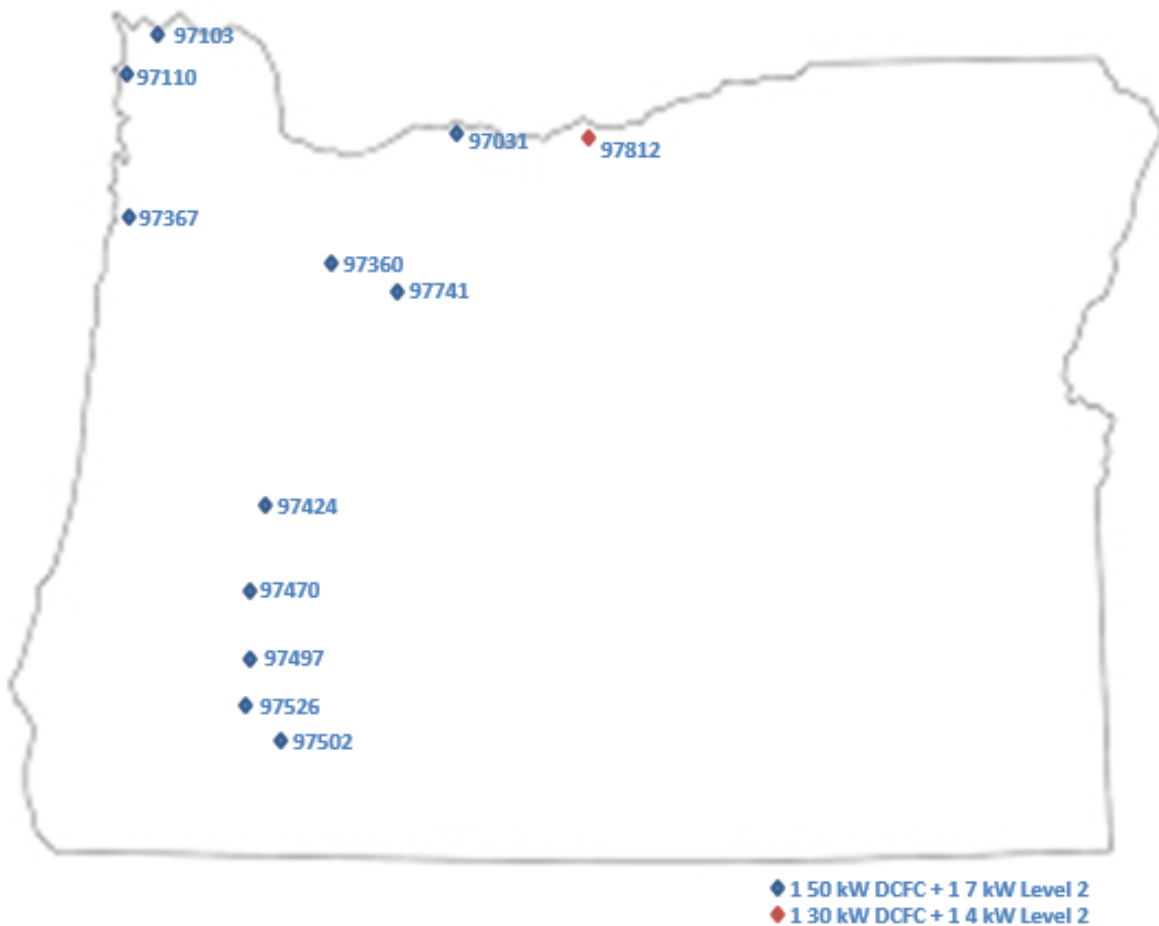
PacifiCorp's response to the annual reporting requirements detailed above follows.

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<sup>2</sup> To maintain an on-peak period consistent with what is currently offered to residential and small non-residential consumers, PacifiCorp uses the on-peak time period currently effective for Schedule 210, Portfolio Time-of-Use Supply Service. This is defined as 4-8 p.m. in summer; 6-10 a.m. and 5-8 p.m. in winter (except weekends and holidays).

### **Participation and Bill Comparisons**

While designing Schedule 45, PacifiCorp identified 14 existing sites that would meet its criteria—i.e., each site was under one megawatt and had a publicly available DC fast charger that was separately-metered. Upon Commission approval of the program, PacifiCorp notified these customers of the new rate offering and encouraged their participation. Of these 14 sites, 12 eventually switched to Schedule 45, and PacifiCorp has learned that the other two sites will likely be switching to Schedule 45 in the near future. The ZIP Codes of the 12 sites currently on Schedule 45 are shown in their approximate locations below, along with known information on the size and capacity of the chargers at the sites. Additionally, while preparing this report, PacifiCorp has learned that the 30 kilowatt (kW) DC fast charger in ZIP Code 97812 will soon be increasing its power to 50 kW, since Schedule 45 currently offsets most of any incremental demand charge that would be associated with this increase.



The table below details the total monthly Schedule 45 energy usage and demand, and the program savings by month for the twelve sites that have switched to Schedule 45.

Schedule 45 Participation, Usage and Savings Summary												
A	B	C	D	E	F	G	H	I	J	K	L	M
				=D/B		=F/B	=F/D*730			=I-J	=K/B	=K/I
Month-Year	Customers (monthly bills)	On-Peak kWh	Total kWh	Total kWh per bill	15-Minute Peak kW Demand	15-Minute Peak kW Demand per bill	Load Factor	Standard Rate Bill Totals	Schedule 45 Bill Totals	Total Customer Savings	Average Customer Savings	Percentage Savings
Jun-17	-	-	-	-	-	-	0.0%	\$0	\$0	\$0	\$0	0%
Jul-17	1	35	266	266	28	28	1.3%	\$84	\$62	\$21	\$21	26%
Aug-17	1	116	684	684	28	28	3.3%	\$171	\$132	\$39	\$39	23%
Sep-17	1	45	188	188	28	28	0.9%	\$117	\$87	\$30	\$30	26%
Oct-17	2	80	451	226	56	28	1.1%	\$306	\$224	\$82	\$41	27%
Nov-17	10	980	5,375	538	495	50	1.5%	\$3,607	\$1,536	\$2,071	\$207	57%
Dec-17	12	1,953	8,017	668	515	43	2.1%	\$4,673	\$2,130	\$2,543	\$212	54%
Jan-18	12	1,600	7,888	657	497	41	2.2%	\$4,527	\$2,052	\$2,475	\$206	55%
Feb-18	12	1,804	7,297	608	534	45	1.9%	\$4,675	\$2,125	\$2,550	\$212	55%
Mar-18	12	1,697	8,049	671	535	45	2.1%	\$4,742	\$2,176	\$2,566	\$214	54%
Apr-18	12	1,263	7,035	586	542	45	1.8%	\$4,708	\$1,982	\$2,725	\$227	58%
May-18	12	866	6,903	575	572	48	1.7%	\$4,763	\$1,992	\$2,771	\$231	58%
Jun-18	12	1,048	8,073	673	588	49	1.9%	\$4,946	\$2,362	\$2,584	\$215	52%
Jul-18	12	1,212	8,782	732	566	47	2.1%	\$5,023	\$2,467	\$2,556	\$213	51%
Aug-18	12	1,304	9,389	782	560	47	2.3%	\$5,072	\$2,501	\$2,571	\$214	51%
<b>Total</b>	<b>123</b>	<b>14,003</b>	<b>78,397</b>	<b>637</b>	<b>5,544</b>	<b>45</b>	<b>1.9%</b>	<b>\$47,414</b>	<b>\$21,830</b>	<b>\$25,584</b>	<b>\$208</b>	<b>54%</b>

### **Conclusion**

As the table above shows, participants had an average usage of 637 kilowatt-hours (kWh) and saved an average of \$208 per monthly bill, a reduction of 54 percent. The maximum monthly bill savings a participant experienced was \$304, a reduction of 64 percent, and the highest monthly usage by a participant was 1,820 kWh, while in some months participants had no usage and no bill savings. This compares with the billing comparison that PacifiCorp included with the Supplemental Filing that showed a two percent load factor participant with a monthly demand of 50 kW and 15 percent on-peak usage would save \$254 per monthly bill during the first year of the program and \$226 per monthly bill during the second year of the program.

The participation of twelve customers on Schedule 45 has been lower than hoped for by the company, and is far from the 200 participant maximum specified in the tariff. However, this could change quickly, as the rate of electric vehicle adoption is projected to continue to increase in the coming years. PacifiCorp will continue to promote Schedule 45 and make eligible customers aware of it as an alternative to their otherwise applicable rate schedule. Also, if PacifiCorp learns that participants have the ability to increase the power of their stations while still avoiding most of any associated incremental demand charge (such as occurred with the site in ZIP Code 97812 shown in the map above), the company will continue to inform customers about this.

As electric vehicle adoption increases, the Schedule 45 cumulative load factor will likely increase as well from greater charging station utilization. As this happens, total program savings per monthly bill should decrease as customers transition back to paying demand charges in place

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of the on-peak energy charge adder. However, due to Schedule 45's explicit glide-path, this will happen regardless of whether or not charging station utilization increases. PacifiCorp is not proposing any change to Schedule 45's approved glide-path at this time, but may consider changes in the future, as conditions warrant.

Please direct any questions about this filing to Natasha Siores, Manager, Regulatory Affairs, at 503-813-6583.

Sincerely,

A handwritten signature in black ink, appearing to read 'Etta Lockey', with a long, sweeping horizontal flourish extending to the right.

Etta Lockey  
Vice President, Regulation