Agenda Date:	October 11, 2018
Item Number:	A1
Docket:	UE-180757
Company:	Pacific Power & Light Company
Staff:	David Nightingale, Senior Regulatory Engineering Specialist Jason Ball, Deputy Assistant Director, Energy Economics & Reliability

Recommendation

Take no action allowing the new Schedule 45, in Docket UE-180757, to go into effect by operation of law.

Background

On September 6, 2018, Pacific Power & Light Company (Pacific Power or company) filed a new Schedule 45 with the Washington Utilities and Transportation Commission (commission), proposing to establish an optional Electric Vehicle Supply Equipment (EVSE) pilot program for public DC fast chargers.¹ Pacific Power is requesting a tariff effective date of October 15, 2018.

The current filing contains three inter-related pilot programs: Schedule 45, an optional "make-ready"² tariff for publically-available DC fast charging stations hosted by commercial customers; a demonstration and development program that provides competitive grants to eligible commercial customers at an estimated cost of \$1.1 million; and an outreach and education program to increase awareness and adoption of electric vehicles (EVs) at an estimated cost of \$500,000. This combined set of pilot programs is consistent with the commission's direction to use a portfolio approach to increase the development of EVSE infrastructure.³

The design of the new optional DC charging tariff, Schedule 45, allows up to 20 commercial customers to participate in this pilot program. Those customers would receive separately metered service if they install a publically-available DC fast charger, and have access to a special time-of-use transitional rate.

Proposed Calculation of the Optional Transitional Commercial EVSE Rate

The proposed "make-ready" tariff uses a transitional time-of-use rate adder of \$0.04414 per kilowatt-hour to reduce the barriers to early adoption of EVSE infrastructure. Rather than penalize EVSE infrastructure owners with demand rates unrelated to their load, the on-peak rate will reflect the usage of electricity at a specific time. This on-peak kilowatt-hour charge is designed to recover

¹ DC fast chargers provide the highest rate of EV charging using high voltage and high power and convert AC energy to DC energy which can be used directly to charge EV batteries.

² A "make-ready" program only proposes utility ownership of facilities up to the meter, and not beyond.

³ Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services, Docket UE-160799 (June 14, 2017) par. 74 ("policy statement").

the same amount of revenue as a kilowatt demand charge would if the appropriate information about load was available.

Traditional tariff charges using a demand rate are set with a known load curve. However, in the case of EVSE infrastructure, the load curve is unknown. Given the lack of billing data, it is difficult to establish a correct demand charge for these types of customers. Specifically, the rates for these customers under existing tariffs can not reflect their unique load parameters.

Pacific Power corrects this problem by changing the unit on which demand costs are billed. Thus, instead of kilowatt demand charges, Schedule 45 starts in the first two years with kilowatt-hour time-of-use rates that gradually transition to demand charges in years three (3) through twelve (12). The company proposes two winter peak times of 6 a.m. to noon and 5-9 p.m. on weekdays. These will apply from November through March. The remainder of the year will use the summer peak time from 1-8 p.m. on weekdays.

The effect of this rate change on Schedule 45 customers is a lower bill that more accurately reflects the cost of service to those customers. Given the nature of this filing as a pilot program, Pacific Power has also proposed to transition these customers slowly back towards a 100 percent demand rate. The table below shows some of the differences in customer bills over time.

	Average Customer Bills					
	Schedule 24	Schedule 45	Schedule 36	Schedule 45		
	Small General Service	Small General Service	Large General Service	Large General Service		
Year 1	\$267.70	\$144.37	\$1,297.64	\$467.30		
Year 2	\$267.70	\$144.37	\$1,297.64	\$467.30		
Year 3	\$267.70	\$156.70	\$1,297.64	\$550.33		
Year 5	\$267.70	\$181.37	\$1,297.64	\$716.40		
Year 10	\$267.70	\$243.03	\$1,297.64	\$1,131.57		
Year 12	\$267.70	\$267.70	\$1,297.64	\$1,297.64		

Staff Discussion of Transitional Rate

The DC fast charging infrastructure in Washington is emerging and Pacific Power estimates that there are fewer than 200 EVs in their service area. Therefore, the level of use, or load factor, of DC fast charging stations in Pacific Power's territory is expected to start very low, but increase with the level of EV sales. Traditional demand charges are usually aligned with load factors that, in aggregate, are consistent and predictable over time. In contrast, EV charging activity is currently inconsistent and unpredictable due to the rarity of EVs in the service territory.

The transitional rate is intended to encourage the establishment of publically-available DC fast chargers in keeping with state law and policy.⁴ Staff believes that this approach is a reasonable

⁴ RCW <u>80.28.360</u>, Electric Vehicle Supply Equipment; and commission's policy statement, par. 71.

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means to remove a financial barrier to providing electric service for an emerging technology. This transitional tariff approach has also been approved in Pacific Power's Oregon market.

Proposal's Relationship to Policy Statement on EVSE

This overall program proposal constitutes Pacific Power's initial response to the commission's policy statement. The policy statement requires a portfolio approach, which must include, at a minimum, service to EV charging equipment, a low-income carve-out, reporting, and an education and outreach program.⁵ The commission will consider whether proposals fairly serve customers, whether they prioritize load management benefits, whether the interoperability analysis supports a finding that there is no unreasonable preference, and whether the proposals were shared with stakeholders.⁶

Although the policy statement included how the commission may regulate utility-owned EVSE infrastructure, Pacific Power does not propose to own such infrastructure beyond the meter. Instead, Pacific Power will promote EVSE infrastructure with its customers by focusing on those who may have a natural propensity for hosting and owning EVSE stations. A key concept in the commission policy statement is that EVSE programs should provide a portfolio of actions to support the acceleration of EVSE infrastructure.⁷ The following bullet points summarize the portfolio of pilot programs described in Attachments C and D to the filing, in addition to Schedule 45.

- The Demonstration and Development Program (Attachment C) This program provides technical and financial assistance for local government agencies, non-profits, transit authorities, commercial businesses, schools and other commercial customers. Designed to last two years, the result of the program should be an increase in the development of level 2 and DC fast charging stations. The proposed program describes a portfolio of EVSE infrastructure initiatives which include an intentional focus on serving low-income and underserved customers. To align the program with the commission policy statement, 25 percent of the grant funding will be reserved for projects providing service to low-income customers.⁸ Customers will apply and be evaluated by a third-party evaluator and grant manager. Grantees will be required to provide data to evaluate the effectiveness of the program. The cost of this program is approximately \$1.1 million.
- The Outreach and Education Program (Attachment D) Over two years, this program will use paid advertising, bill inserts, handouts, digital ads, community events, and targeted emails to increase the level of interest in EVs in Pacific Power's Washington service territory. The company has developed a communications plan, identified key audiences, and a suite of self-service technical assistance strategies to implement this program. Both residential and commercial customers will be targeted by the program. The cost of this program is estimated at \$500,000.

⁵ Policy statement, par. 74, 75, 85, 92, 96.

⁶ Policy statement, par. 78, 86, 90, 91.

⁷ Policy statement, par. 74.

⁸ Tariff Attachment C, Page 3; policy statement, par. 85.

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The company will also provide periodic reports in keeping with the policy statement regarding the new Schedule 45 pilot tariff, including participation levels, customer savings, and usage information, as well as reporting on the results of the two supporting pilot programs just described.⁹ The company's supplemental memo of October 8, 2018 in this docket sets December 15 as the submittal deadline for their annual reporting.

The interoperability of the EV charging stations was addressed by calling for any Schedule 45 charging stations to have multiple DC fast charging standards and multiple car manufacturer interoperability. The company's supplemental memo of October 8, 2018 in this docket further describe their plans to promote interoperability.¹⁰

Comparison to Other Programs

Puget Sound Energy and Avista Corporation are already implementing EVSE pilots with a portfolio suite of programs. Going forward Pacific Power will use the results and findings from those programs in combination with experience and evaluations from their own pilot projects.¹¹ Pacific Power will be promoting residential EVs through their education and outreach programs. Given the low level of starting interest, this appears to be a reasonable initial step to promote residential EVs and EVSE in Pacific Power's Washington territory.

The cost of the supporting programs are proposed to be tracked and deferred in an accounting petition, Docket UE-180809. No action is needed regarding the prudence of these pilot programs at this time.

Conclusion

Take no action allowing the proposed new tariff, Schedule 87, in Docket UE-180757 to go into effect by operation of law.

⁹ Tariff cover letter, page 7; policy statement par. 92.

¹⁰ Policy statement par. 90.

¹¹ One area that Pacific Power is significantly different from the other two electric utilities is in the residential sector. Due to the relatively low level of interest in EVs in Pacific Power's territory, it will not be offering a residential EV charger grant or rebate program.