Agenda Date:	December 13, 2018
Item Number:	A3
Docket:	UE-180877
Company:	Puget Sound Energy
Staff:	Kyle Frankiewich, Regulatory Analyst

Recommendation

Conditional on PSE's affirmation of a preference towards products and services that demonstrate interoperability and comply with relevant hardware and software interoperability standards, and that offer universal payment options for public users, staff recommends that the commission take no action, allowing the new Schedules 551, 552, 553, 554, and 583 to go into effect by operation of law.

Background

On June 14, 2017, the Washington Utilities and Transportation Commission (commission) filed to Docket UE-160799 its Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services (policy statement), which provided clarification regarding the commission's jurisdiction and policy direction regarding the investor-owned electric utilities' role in the electrification of Washington's transportation system.

In the policy statement, the commission recommended the formation of a Joint Utility Transportation Electrification Stakeholder Group (stakeholder group). Puget Sound Energy (PSE) circulated an electric vehicle supply equipment (EVSE) proposal in June 2018, and presented its proposal to the stakeholder group on August 6, 2018.

On October 26, 2018, PSE filed five new schedules which would establish a portfolio of EVSE programs and services for its customers and for members of the public. PSE proposes an effective date of December 1, 2018.

- Schedule 551: Electric Vehicle Non-residential Charging Products and Services
- Schedule 552: Electric Vehicle Residential Charging Products and Services
- Schedule 553: Electric Vehicle Education and Outreach
- Schedule 554: Electric Vehicle Low Income Transportation Service
- Schedule 583: Electric Vehicle Charging Products and Services

All of the schedules are programmatic except for Schedule 551, which is mostly programmatic but also specifies the rates PSE will charge for publicly accessible EV charging services. The company's filing also includes an advice letter conveying PSE's business case for EVSE and offering related programmatic details.

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Discussion

EVSE policy statement and PSE's EVSE portfolio

The commission's policy statement contains sweeping recommendations and detailed guidance and recommendations, all of which build a framework supported by three conceptual pillars:

- Balanced portfolio design
- Costs commensurate to benefits
- Coordination with stakeholders and planning organizations

PSE tailored its program offerings based on the policy statement's guidance. Staff has included as an attachment to this memo a table summarizing the suite of programs comprising PSE's proposed EVSE portfolio. The company's advice letter followed the reasoning of the policy statement by assessing the status of PSE's service area along the EV adoption curve, by identifying barriers to increased adoption of EVs, and by designing pilot programs to both address these barriers and to develop the knowledge needed to serve this growing demand.

PSE's EVSE pilot programs target a wide variety of customer classes, consistent with the commission's direction to use a portfolio approach.¹ While it is too early to determine whether PSE's programs meet all requirements contained in the policy statement,² staff has found no requirement with which the company has not complied.

PSE's previous EVSE pilots

From 2014 to 2017, PSE ran an EV charger incentive program which provided rebates to 1,993 residential customers who purchased and installed a residential EV charger. This effort provided data on aggregate EV load impacts to PSE's distribution system, gave the company some visibility into customers' baseline charging patterns, and increased PSE's organizational knowledge of EVSE market and products. PSE's proposed suite of pilot programs advance these goals by expanding into previously-unexplored customer segments and testing the potential for peak shifting for residential charging.

Comparison to other investor-owned utilities' EVSE programs

The commission recently allowed Pacific Power & Light Company's (Pacific Power) new, optional transitional rate for customers offering public DC fast charging to go into effect.³ Pacific Power's EVSE proposal also included a grant program to offset EVSE costs for interested non-residential customers, and an education and outreach program.

¹ Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services, Docket UE-160799 (June 14, 2017) par. 74

² For example, the commission "expect[s] utilities offering DC Fast Charging as a regulated service to consult with WSDOT to ensure that proposed DC Fast Charging services are consistent with state transportation planning priorities." (Policy Statement, ¶ 69). PSE has not yet determined the location for the first public-facing DC fast chargers, so determining whether this expectation has been met would be premature.

³ Docket UE-180757.

Earlier this year, the commission allowed Avista Corporation (Avista) to extend its EVSE pilot program through June of 2019.⁴ Avista's program includes residential, commercial, and public DC fast charging components, as well as an exploration of demand response and an effort to provide electric transportation access to disadvantaged customer segments.

PSE's proposed EVSE program portfolio is the biggest of the three electric utilities regulated by the commission.

	Residential	idential Multi-family Residential Commercial and		Public Charging
PSE	550 Level 2	25 locations 75 Level 2 ports	50 locations 150 Level 2 ports	8 locations 32 DC fast chargers 16 Level 2 ports
Avista	240 Level 2	175 Leve	60 Level 2 ports 7 DC fast charging ports	
Pacific Power	n/a	n/a; grant eligible	n/a; grant eligible	n/a; transitional rate available and grant eligible

Table 2. EVSE Program Size by Utility

The level of incentives offered in PSE's proposed EVSE programs is comparable to Avista's program offerings. Pacific Power's incentives are currently limited to non-residential customers.

Table 3.	EVSE	Utility	Con	tribut	ion	by	Project
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	Single-family Residential			Multi-family Residential and Commercial			
	Charger	Installation costs	Premises wiring	Charger	Installation costs	Premises wiring	
PSE	100%	75%	75%	100%	100%	100%	
Avista	100%	100%	50% up to \$1000	100%	100%	50% up to \$2000/port	
Pacific Power	n/a	n/a	n/a	grant eligible	grant eligible	grant eligible	

Cost recovery

The first public draft of PSE's proposal included an EVSE rider, allowing PSE to recover the costs associated with its EVSE pilot programs with a small line item charge to all customers. After discussion with staff, PSE opted to remove this request. PSE also scaled back the size of most of its pilots, downsizing the tail end of the installation phases of each program. Avista is incurring costs for its EVSE pilot program without a specific request for cost recovery. Pacific Power has filed an accounting petition to track and defer EV pilot program costs for later ratemaking treatment.⁵ PSE has not yet filed its own accounting petition, though the option is available.

⁴ Docket UE-160082.

⁵ Docket UE-180809.

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Public DC fast charging rates

This topic was a contentious subject for Avista's pilot program. PSE proposes to charge the average rate of other charging companies in its service area, rather than a rate based on the cost of service. Staff supports this approach for the near future, as it aligns with and reasonably balances the dual priorities of the statute: increasing access to EVSE and promoting fair competition in the provision of EVSE. Also, a more traditional cost-of-service ratemaking model is unreachable without the information gained through this pilot.

Ancillary contracts and agreements

The proposed new schedules reference services agreements which must be agreed to by EVSE program participants in order to participate. Agreements referenced in tariff are filed as an attachment to a schedule, which prompts commission review of the terms and conditions. The company's original filing did not include these attachments, an issue identified late in staff's review process and necessitating an extension of the filing's originally-filed effective date.

PSE has drafted these attachments with all deliberate speed. As of the time of writing, PSE has not yet filed replacement pages to the docket attaching the finalized agreements. Though the short timeline will not not leave a large window for public review, staff has reviewed draft documents and believes that the terms and conditions are fair to participating and nonparticipating customers, and are in the public interest.

Interoperability

The ability of EV drivers to move seamlessly between charger networks and stations, regardless of who owns or operates the equipment, is critical in addressing the market barrier of charging availability and access. Accordingly, staff recommends that EVSE acquired or deployed through these programs – especially those EVSE investments intended for public use – must meet common interoperability and open standards requirements, such as the Open Charge Point Protocol (OCPP) standards. This recommendation applies to standards and protocols for both hardware and software.

Investments that meet this recommendation are more likely to offer maximum flexibility for PSE and for end users, and are more likely to promote competition in the provision of EV charging services by contributing to a foundational platform compatible with other existing and future hardware and software protocols, rather than contributing to a patchwork of proprietary systems. Investments that meet these standards are also more likely to avoid early obsolescence caused by any shifts in the market.

PSE recognizes that interoperability is important, and intends to "hold a workshop to discuss interoperability to assist PSE with developing interoperability specifications for the RFP" (request for proposals) for its public charging pilot program.⁶ Staff recommends that the commission review this plan with the company at the open meeting, and obtain an affirmative commitment from the company to prioritize this issue in its RFP ranking process.

⁶ Docket UE-180877, Attachment A Advice Letter 2018-44, EV Program Descriptions, page 18.

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Universal payment options

The issue of universal payment is similar to the issue of hardware and software interoperability. EV charging services that cannot be accessed with a customer's available payment options are the same as EV charging services that are not compatible with a customer's EV – they do not address any EV market barriers if they cannot be used. Staff therefore recommends that the commission obtain an affirmative commitment from the company that any RFPs issued for EVSE investments intended for public use prioritize the capability of accepting any major debit or credit card at the charging location, and without requiring the customer to become a member of a club or program.

Stakeholder and public comments

PSE's proposal was given a thorough vetting by the stakeholder group in August. Staff understood the consensus view to be generally supportive of PSE's portfolio. Staff has reached out to a sampling of members of the stakeholder group, and has again heard general support of PSE's proposal.

As of December 7, the commission has received seven comments. Public officials and municipal governments who filed supportive comments include a commissioner of the Port of Bellingham, the city administrator of the City of Buckley, the mayor of the City of Tacoma, and the Whatcom County Council. All expressed a desire for larger programs in the near future. Staff has heard from representatives of King County government that a number of elected officials in the county intend to file comments supportive of PSE's proposal. Ford Motor Company expressed support for expanded access to EVSE, especially at the workplace and along transportation corridors. The organizer of a group supporting sustainable energy filed comments describing his experience with Avista's workplace charger program and soliciting feedback on a draft proposal for the legislature.

FlexCharging voiced concerns with PSE's choice of smart chargers for the vast majority of its residential off-peak pilot participants, contending that vehicle telematics should be explored more thoroughly. FlexCharging contends that telematics is likely to attract more Tesla owners without necessitating more expensive Tesla-compatible EVSE, would capture data from charges at locations other than the smart charger, and could be more cost-effective in the long run. Staff anticipates comments from Public Counsel, Climate Solutions, Chargepoint and Green Lots, though these stakeholders have not filed comments as of the time of writing.

Conclusion

Staff believes that PSE has done an admirable job of building a comprehensive suite of programs which will lower barriers to the adoption of EVs while allowing the utility to learn more about the potential impact of EVs on its system. On the condition that PSE affirms the high priority of interoperability and universal payment optionality in its selection process when acquiring EVSE products and services, staff recommends that the commission take no action, allowing the proposed new schedules in Docket UE-180877 to go into effect by operation of law.

Docket UE-180877 December 13, 2018 Attachment 1

Attachment 1. PSE EVSE Program Summary

Program	Program Description	Program duration	Target customer enrollments	Estimated programmatic expenditures *	Estimated capital investments *
Public Charging	Fill gaps in EVSE accessibility across service area with company-owned and managed DC fast chargers accessible to the public for a fee based on average rates of other charging services.	installation: 2 years total: 5 years	8 locations 32 DC fast chargers 16 Level 2 ports	\$1,532	\$2,176
Workplace and Fleet Charging	Install Level 2 charging at participating commercial and workplace customers to increase accessibility and learn usage patterns	installation: 2 years total: 5 years	50 locations 150 Level 2 ports	\$1,121	\$983
Residential Charging and Off- Peak	Install Level 2 smart chargers (free chargers, customers pay 25 of install costs); test strategies for messaging and incentives to shift charging patterns	installation: 2 years total: 4 years	550 Level 2 chargers	\$1,294	\$2,184
Multi-Family Charging	Install Level 2 charging at participating multifamily customers to increase accessibility, learn usage patterns and identify additional services or challenges.	installation: 2 years total: 4 years	25 locations 75 Level 2 ports	\$1,070	\$658
Low-Income Programs	Flexible program design pursuing various opportunities to increase low-income access to transportation electrification: non-emergency medical transportation pilot; LI Weatherization EV pilot; LI Housing EV pilot	3 years	n/a	\$546	\$0
Education and Outreach	Customer awareness campaigns, events and community partnerships such as ride- and-drives, and tools and technical assistance	3 years	n/a	\$1,384	\$167
Total Portfolio				\$6,947	\$6,168

Total program durations may be longer based on installation dates and depreciable lives of EVSE. * Financial figures in \$1000s, cost estimates for 2019 and 2020. Most programs have budget estimates for five years, 2019-2023.