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VIA ELECTRONIC FILING

Steven V. King
Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive S.W.
P.O. Box 47250
Olympia, WA 98504-7250

RE: Docket UE-160799—Pacific Power & Light Company's Comments

In response to the Notice of Opportunity to File Written Comments issued by the Washington Utilities and Transportation Commission (Commission) on January 13, 2017 (Notice), Pacific Power & Light Company (Pacific Power or Company), a division of PacifiCorp, appreciates the opportunity to provide the following written comments regarding the Draft Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services (Draft Policy Statement) in Docket UE-160799. The Company commends Staff for the amount of work and detail in developing the Draft Policy Statement and we look forward to continuing to work with Staff and stakeholders in this docket.

On June 24, 2016, the Commission opened Docket UE-160799 to investigate policy related to utility investment in electric vehicle supply equipment (EVSE) under RCW 80.28.360. Pacific Power has participated throughout the proceeding and recommended the Commission encourage utilities to improve Electric Vehicle (EV) charging access by providing clear and standard processes for approval and recovery of EVSE programs. The Commission's January 3, 2017 Draft Policy Statement on electric vehicle charging services is timely. Pacific Power is developing transportation electrification programs in Oregon and California and the Commission's guidance on transportation electrification will assist Pacific Power in its consideration of transportation electrification programs in Washington.

Pacific Power also provides further comments on the Draft Policy Statement in addition to responding to the questions posted in the Notice.

Portfolio Approach to EV Charging Services:

1. What is the definition of "Electric Vehicle Supply Equipment," and how should the Commission consider ownership of EVSE as a factor to determine whether a utility serves as a "provider," or "manager" of EV charging services?

Response:

Pacific Power proposes a definition of Electric Vehicle Supply Equipment that includes, but is not limited to, the electrical conductors, service panels, conduits, and any other equipment external to the electric vehicle that provide a connection for an electric vehicle to a power source to provide electric vehicle charging.

While it would be useful to establish common terminology for types of utility involvement in transportation electrification, it may be premature to establish "provider" and "manager" of EV charging services as the two main classifications. As evident from the question above, there may not be bright lines between these two models (i.e., either model may include some utility ownership of EVSE). Pacific Power suggests avoiding including labels for utility program types in Commission policy until a more robust catalog of utility program offerings is available.

2. What criteria should the Commission use to determine whether a portfolio is "balanced"?

Response:

Pacific Power appreciates the Commission's efforts to model electric transportation policies on those successfully implemented to acquire cost-effective conservation resources, but believes it is premature to prescribe the breadth of utility involvement in transformation electrification. Decades of conservation program implementation have led to well-understood market barriers to customer adoption, intervention strategies to address these barriers, and standard practices for analyzing the cost-effectiveness of these resources. In contrast, the electric transportation market is still maturing. While current conservation portfolios can inform a long-term vision for utilities' involvement in a mature market, it is premature to expect utilities to offer this breadth of services in the near term.

At this stage, a "balanced" portfolio is one that addresses the most significant market barriers specific to a utility's customer base and service area and provides data and learnings that can be used to inform future utility involvement in transportation electrification while minimizing costs to customers. Rather than prescribing specific program types that must be included in a "balanced" portfolio, Pacific Power recommends an incremental approach to utility portfolio development, with individual programs considered on their own merits when proposed. This program-focused approach will provide flexibility to prioritize programs that best meet the near-term objectives described above while allowing utilities to adapt to market changes. This approach also reflects that the state of, and market barriers to, transportation electrification are unique to each utility's service area. For example, the appropriate role for a utility serving a major metropolitan area where other EVSE providers have significant interest and presence may be different than for a utility serving a more rural area without the same level of private investment.

Given the unique nature of each utility's service areas, the utility's need to provide sufficient data and analysis to support EVSE investment, and the relatively new maturation of EVSE technology and the EV market, Pacific Power recommends the Draft Policy and Interpretive Statement include language that allows flexibility for utilities to develop pilot projects not constrained by the full policy as written. The flexibility to enter into small scale EVSE pilot projects will provide utilities with experience that will help inform future investment and support cost recovery.

Additional comments on specific program and portfolio elements discussed in the Draft Policy and Interpretive Statement are provided below.

Provider vs. Manager of EV Charging Services

On page 33, the Draft Policy Statement states:

"While the Commission will allow for flexibility in the specific services offered, the Commission will expect utility programs to offer a balanced portfolio, with attractive offers available under both the "provider" and "manager" types of service, to ensure fair access to services and competition in the provision of EVSE "

While Pacific Power agrees programs should ensure fair access and competition in the provision of EVSE options for customers, the Company does not agree that utilities necessarily need to offer programs under both the "provider" and "manager" services to achieve these objectives. The proper role for a utility will be highly dependent on the state of transportation electrification in its service area and the barriers to increased adoption for its customers. In this emerging market, utilities should have the flexibility to propose programs that address barriers specific to their individual service areas, test the effectiveness of these market intervention strategies, and gather data to inform future system and program planning. Each proposed program should be considered on its own merits, including how it will ensure fair access and competition.

Load Management

On page 34, the Draft Policy Statement states:

"Absent a load management component, EV charging services can increase peak demand and drive the need for new peak capacity resources. It would therefore be difficult for a program without demand response or direct load management capabilities to meet the fair, just, and reasonable standard. In order to deliver benefits to customers, utilities must be able to manage EV charging load in a way that increases system utilization, avoids peak capacity costs, and ultimately results in savings to non-participating customers."

As plug-in electric vehicle adoption increases, impacts during peak periods will be a growing consideration. However, the Company is concerned that required demand response could create an additional barrier to customer adoption of electric transportation if customers lose confidence that charging will be available when needed. Moreover, additional research is required on typical Washington customer vehicle charging patterns to understand the share of charging that occurs during peak periods absent load control. Pacific Power looks forward to seeing results from Avista and Puget Sound Energy's pilot programs, which are investigating some of these issues. Until more is known about baseline charging patterns and the feasibility of non-intrusive demand response, Pacific Power suggests that program applications should address any peak load management components, but that peak load management not be a requirement for a program to be considered fair, just, and reasonable.

Additionally, the circumstances of an individual utility should be a consideration for a Commission when deciding whether demand response or direct load control for electric vehicle charging is necessary. Geographic density, EV adoption levels, and metering technology should all be considered when making this determination. For example, Pacific Power does not have advanced metering infrastructure, also known as AMI or "smart" meters, installed in its

Washington service area, which could increase the cost of demand response deployment and measurement.

Low Income

On page 35, the Draft Policy Statement states:

"Utility programs must include a carve-out that provides direct services to low-income customers."

While the Company looks forward to helping low-income customers realize the benefits of transportation electrification, it does not believe that it is appropriate to require a low-income carve-out in all programs. Some potential programs may naturally allow for equal access for low-income customers without a carve-out, whereas other programs may be targeted at sectors that do not allow for a low-income carve-out. Rather, the Company proposes modifying the above language to "Utility program applications should include a discussion of how low income customers can receive services through the program and whether there is a specific carve-out to increase access for low-income customers." Additional comments on low-income carve-outs are provided in the "Calculation of benefits" discussion below.

Interoperability:

3. What specific policies should the Commission adopt regarding interoperability of utility-owned charging infrastructure? We expect that both the EVSE hardware developed by the manufacturers and the software and communications components to continue to advance and develop rapidly over time. Accordingly, how should the Commission ensure that EV owners are not locked in to a certain type of technology (either hardware or software) as the market develops, and what role should the Commission have in assuring some type of backend interoperability between the EVSE at the hosting site and the operator of the overall EVSE systems?

Response:

As noted in the Draft Policy and Interpretive Statement, there are two distinct interoperability issues at hand: how drivers interact with EVSE and the interface between EVSE hardware and back-end systems. The former is addressed in the response to Question 4 below.

As with any investment, there will be some risk of obsolescence associated with utility-owned EVSE development, however, the current state of the EVSE market creates additional risk of stranded investments. Utilities already have well-established processes for evaluating tradeoffs of cost, risk, functionality, customer service, and other relevant factors when developing and procuring new resources and programs, which can be directly applied to minimize these risks. Pacific Power does not believe that it is necessary for the Commission to adopt policies regarding interoperability at this time, rather, utilities can describe plans to address interoperability and stranded asset risk in program applications.

4. What policy mechanisms or standards are available to promote system-wide interoperability for drivers, such that EV drivers can charge any EV model and pay for the charge without joining a multitude of charging networks? Does the Commission have a role in overseeing the development of these standards or protocols, or should it provide guidance on the characteristics of an open EVSE system or a more common interoperable platform?

Response:

Making the vehicle charging experience as simple as possible for drivers (ideally, as simple as filling up at a gas station) will be key to enabling widespread transportation electrification. However, this level of system-wide interoperability will require coordination between all vehicle charging service providers, including those offering services regulated by the Commission, public utilities not under the Commission's jurisdiction, automakers, and other market actors inside and outside of Washington. While the Commission's influence on system-wide interoperability may be limited by its jurisdiction, it can provide valuable policy guidance on preferences for characteristics that can minimize driver interoperability barriers for utility-owned or incented EVSE. This policy guidance will not only guide the design of IOU programs, but can also serve as a signal to other market actors on how best to integrate with utility-owned EVSE to improve the driver's experience. Pacific Power recommends the Commission hold a stakeholder workshop to discuss the characteristics of an open EVSE system and how utilizes and government agencies can access EVSE network data for system planning purposes.

Stakeholder Engagement:

5. The Commission requests feedback on its proposed policy allowing for a single joint stakeholder group to participate in review of utility EV charging service program design and review.

Response:

Stakeholder engagement is critical to effective program development and an expedient Commission review process, and the Company is supportive of a joint transportation electrification stakeholder group to provide the same function the Company's Demand-Side Management Advisory Group. That is, the group would provide input on key aspects of transportation electrification programs, but would not need to reach consensus before a utility proposes a program. The joint transportation electrification advisory group should include Commission staff, Public Council, WSDOT, and low-income and environmental advocates; however, the Company does not support inviting all commenters on this rulemaking in the advisory group, as it would be counter-productive for this group to become a forum for charging equipment and service providers to advocate for their particular business models. Rather, if advisory group members request input from industry, public utilities, or other market actors on specific topics, representatives could be invited to present at advisory group meetings, if needed.

On page 38, the Draft Policy Statement states:

"Utilities should share, at a minimum, the following with the stakeholder group 60 days prior to filing their proposed programs: electric vehicle charging service program portfolios, including capital investment plans, interoperability analysis, rebate offerings,

equipment rental/lease proposals, and on-bill repayment; rate design proposals; outreach and education plans; customer agreements; and requests for proposals or information. "

First, the Company does not believe that a 60-day review period is necessary and suggests adopting the 30-day period used for conservation filings. Second, while it makes sense for the advisory group's pre-filing review to include most of the noted program elements, Pacific Power believes that customer agreements and requests for proposals or information should be removed from this list, as they are unlikely to be fully developed before the regulatory review and approval process begins.

Additional Comments on the Draft Policy Statement

Part 1 - Electric Vehicle Charging as a Regulated Service:

The Company is supportive of the Commission's views on electric vehicle charging as a regulated service. The Commission's flexible approach allows for development of transportation electrification without sacrificing tenants of traditional utility regulation such as preventing cost shifting and prudence review of utility spending. Pacific Power is particularly pleased by the Commission's discussion to consider flexible pricing options for regulated electric vehicle charging services.

The Company raises one issue with the assessment of just, fair, reasonable and sufficient rates. On page 13, the Draft Policy Statement states:

"In the case of EV charging services, the Commission has allowed limited pilot programs to proceed without changes to rates. In the future, retail residential or commercial rates may not prove to be fair, just, reasonable, and sufficient for the cost of EV charging services. Absent changes to rates, non-participating customers could end up unduly subsidizing EV charging services, or EV owners may not be fairly compensated for the benefits they provide to the grid."

On page 14 the Draft Policy Statement also states:

"The purpose of the currently authorized EV pilot programs is to obtain data to inform future program and rate design. As part of the evaluation at the conclusion of the current pilot programs, utilities should provide data on equipment utilization, demand, load shapes, and the amount of overall fixed and variable costs recovered through user payments. Requests to recover the costs of pilot program investments must be accompanied with sufficient data and analysis to design a separate and specific rate for electric vehicle charging service."

These statements in the Draft Policy Statement seems to presuppose that customers who are provided with electric vehicle charging services should be subject to separate rate and class treatment. Pacific Power suggests that it is premature to make this conclusion. Before placing customers who receive electric vehicle charging services on a separate rate structure, a determination should be made that the cost-causing characteristics of these customers sufficiently warrant this treatment, and that this treatment is fair, just, reasonable, and in the public interest. As noted previously, allowing the flexibility for utilities to enter into small scale

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¹ WAC 480-109-110 (3)

pilot projects will help apprise the utility and the Commission on the appropriate rate treatment necessary to encourage customers to purchase an EV and provide a diversified and reliable charging network to meet customer need.

<u>Part 2 - Policies to Improve Access to and Promote Fair Competition in the Provision of Electric</u> Vehicle Charging Services

Calculation of Benefits

Since providing comments in this docket on August 16, 2017, the Company has given additional thought to how cost-effectiveness should be assessed for transportation electrification programs and believes that it is most appropriate to assess these programs based on their expected impacts on customer rates. The California Standard Practice Manual, originally published in 1983, and most recently updated in 2002, established a standard framework for assessing the cost-effectiveness of demand-side management (DSM) programs from a variety of perspectives.² Per the definitions in the Standard Practice Manual, utility EVSE programs would be classified as "load building," about which the Manual states:

"For load building programs, *only the RIM tests are expected to be applied* [emphasis added]. The Total Resource Cost and Program Administrator Cost tests are intended to identify cost-effectiveness relative to other resource options. It is inappropriate to consider increased load as an alternative to other supply options."

The quote above highlights that the question for load building programs is not whether they are less costly than alternative resource options (which the total resource cost test is used to determine for conservation in Washington), but rather, whether the benefits of the new load will be larger than the costs to encourage and serve that new load.

For the reasons above, Pacific Power supports the proposed framework for assessing benefits (i.e., benefits to the electric system plus benefits that can be monetized by the utility) of transportation electrification, but cautions that the range of potential adoption levels resulting from a program is likely to be large, given the lack of utility EVSE program history (in Washington and nationally) to inform these projections. In considering program costs and benefits, the Company notes the language in RCW 80.28.360 that "[i]n establishing rates for each electrical company regulated under this title, the Commission may allow an incentive rate of return on investment on capital expenditures for electric vehicle supply equipment that is deployed for the benefit of ratepayers, provided that the capital expenditures do not increase costs to ratepayers in excess of one-quarter of one percent [emphasis added]." The law indicates that a program's benefits to customers of a program need not exceed costs of the program, so long as net cost to customers is modest.

Additionally, when assessing program- and portfolio-level cost-effectiveness, utilities should be allowed to exclude direct carve-outs to low income customers, consistent with the treatment of low-income conservation.³

² http://www.calmac.org/events/spm_9_20_02.pdf

³ WAC 480-109-10 (10) (b)

Please direct inquiries to Ariel Son, Regulatory Affairs Manager, at (503) 813-5410.

Sincerely,

/s/

R. Bryce Dalley
Vice President, Regulation
Pacific Power and Light Company
825 NE Multnomah, Suite 2000
Portland, OR 97232
(503) 813-6389
Bryce.Dalley@pacificorp.com