

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

**PETITION TO INITIATE A PROCEEDING :
TO CONSIDER ISSUANCE OF A POLICY :
STATEMENT ON ELECTRIC VEHICLE : Docket No. P-2022-3030743
RATE DESIGN FOR ELECTRIC :
VEHICLE CHARGING :**

**Informal Comments of PECO Energy Company in the
EV Charging Rate Design Working Group**

March 1, 2023

On December 21, 2022, the Pennsylvania Public Utility Commission (the “Commission” or “PUC”) issued a Secretarial Letter in the above-captioned docket establishing an Electric Vehicle (“EV”) Charging Rate Design Working Group and inviting interested parties to provide written comments on the issues presented in its December 1, 2022 Order and in the Statements of Commissioners Ralph V. Yanora and Kathryn L. Zerfuss. PECO appreciates the opportunity to provide its comments on this important issue.

As a general matter, PECO submits that the meetings and comments provided to date reinforce PECO’s view that no specific rate design by itself can effectively support the efficient integration of all EV charging onto the grid while maintaining reliability, resiliency, and affordability. Issues will vary based on customer type, EV weight (light-duty vs. medium/heavy-duty), applicable use case for EV charging (at-home, en route fast charging, fleet, etc.), and the unique composition and customer needs within each utility’s service territory. Stakeholders generally agree that exploration of a broad range of rate designs, each tailored to specific market segments and customer use cases, is most appropriate in evaluating how rate design can effectively support increasing amounts of transportation electrification onto the grid while

maintaining reliability, resiliency, and affordability. Also, importantly, stakeholders generally agree on the need for a broader examination of equitable access to EV charging in communities facing barriers to adoption.

The consensus by parties to date appears to reinforce PECO's view that rate design and other load management tools are appropriate ways to incentivize efficient utilization of excess grid capacity during non-peak periods and, in doing so, maximize the potential to place downward pressure on distribution rates for all customers. PECO notes that tools other than rate design used to encourage transportation electrification in other states, including incentives and infrastructure cost-sharing (often referred to as "make ready" programs"), are beyond the scope of this proceeding, but emphasizes that these could also be considered as part of future utility program offerings.

PECO supports the development of a related Policy Statement by the Commission which addresses topics raised informally by this Working Group and offers the following recommendations:

1. The Policy Statement should describe Commission objectives regarding transportation electrification.

These objectives include identifying key goals and elements of EV rate design proposals that the Commission intends to focus on when reviewing specific utility proposals in support of those objectives. Having a better understanding of general policy outcomes sought by the PUC will be beneficial to utilities when designing future proposals, as well as to other stakeholders when reviewing those.

2. The Policy Statement should encourage flexibility in utility proposals for EV rate design and avoid mandating overly prescriptive filing requirements and timelines.

Each utility's service territory is demographically and economically unique. EV rate designs compatible with one utility's particulars may not be appropriate for other utilities. PECO submits, therefore, that the Commission should encourage EV rate design proposals tailored to the unique needs of each service territory and, as suggested by the Pennsylvania Office of Consumer Advocate¹, refrain from setting policies which assume that "one size fits all." There appears to be consensus within the Working Group that the EV charging market includes a variety of customers whose needs and ability to manage charging times differ. For example, the presentation by Synapse to the Working Group on January 25th appropriately identified that customers with a broad range of charging profiles will require different approaches to rate design and load management. Designing rates to address each of those market segments while ensuring alignment of rate designs with Commission policies is a time-consuming process. PECO therefore suggests that the Commission refrain from setting any artificially short timelines for filing of such rates and allow utilities to incorporate new EV charging rate designs into their own rate proceedings as appropriate.

Establishing minimum filing requirements for EV charging rates that exceed existing filing requirements for other rate designs would serve as a barrier to effective and timely EV charging rate design. PECO suggests that the Commission refrain from constraining utilities' design options by requiring specific rate structures and information over and above that which would be reasonably required for any other rate proposal. Rather, the Policy Statement should provide general guidance for EV charging rates. For example, PECO suggests that future EV rate design proposals reasonably balance cost-based ratemaking principles with various other factors.

¹ Pennsylvania Office of Consumer Advocate (OCA), Informal Comments Re: Petition to Initiate a Proceeding to Consider Issuance of a Policy Statement on Electric Utility Rate Design for Electric Vehicles (P-2022-3030743), February 2023, Page 1, <https://www.puc.pa.gov/media/2267/oca-high-level-priorities-for-ev-rate-design.pdf> (accessed February 21, 2023).

These could include, but may not be limited to, grid optimization, customer preferences, opportunities for data collection (often associated with pilots), and related public policy considerations, including any related opportunity for transitional approaches to support market development and advancement of the Commission's policy goals for transportation electrification as referenced above.

3. The Policy Statement should highlight EV rate design options which face existing legal or regulatory barriers to authorization for Pennsylvania.

Familiarity with Pennsylvania's EV landscape requires knowledge of what is and is not legally permissible under existing Pennsylvania state law and regulations. For example, if Pennsylvania utilities are permitted to own and/or operate charging stations at some point in the future, EV rate designs would necessarily have to include charging station ownership and maintenance as part of underlying costs. At present, however, the Commission may not have the legal authority to approve any rate design tied to utility ownership of charging stations based on existing state law. The Commission should provide direction on this and other EV rate design options currently facing legal or regulatory barriers to implementation in Pennsylvania that prevent the Commission from authorizing them.

4. The Policy Statement should clarify expectations regarding alignment between supply and distribution, including the legality of options relative to existing Pennsylvania law and regulations, as well as the roles of competitive retail Electric Generation Suppliers, PJM, and the Commission.

Aligning supply and distribution rates for EV charging, while desirable from a customer perspective for simplicity, may be challenging due to variances between system generation peaks and localized distribution peaks. Furthermore, Electric Generation Suppliers have no legal or regulatory obligation to align their own EV-specific rate plans with those of the default service provider or electric distribution company, meaning that alignment is not necessarily possible in

scenarios where customers elect to shop. The Commission should consider providing direction on this difference as well as outlining related policies, such as its position on future publication and comparison of EV charging rates on its official electric shopping website, PAPowerSwitch.com.

5. The Policy Statement should focus on removing potential barriers to data collection necessary for the evolution of EV rate designs.

EV rate designs have the potential to collect meaningful data that can support future distribution system planning, including notification of planned third party owned and/or operated EV charging station locations as well as future rate designs. Managed charging, in particular, can be a valuable tool in distribution capacity planning and operations, and PECO has already put forward programs intended, in part, to help better understand its customers' EV charging patterns, particularly those of C&I customers who have more specialized charging needs. However, securing charging data from third parties or directly from customers with EV charging can be logistically challenging as well as excessively costly. The Commission should investigate policies necessary to facilitate data collection efforts by utilities, particularly as those relate to pilots or transitional EV rate designs and should ensure that any related reporting requirements relying on said data collection are not financially or administratively burdensome for any party.

6. The Policy Statement should acknowledge “EV incentive programs” as potentially distinct from EV charging rates and enable utilities to explore the full range of potential opportunities without mandating or discouraging linkages between programs and rate designs.

EV incentive programs are typically non-tariff offerings and may take a variety of forms, such as managed charging programs that award or penalize event-based customer charging behavior or rebates that help offset upfront costs of EV charging infrastructure. Some EV incentive program designs may require enrollment in a specific EV charging rate, while others

may be neutral to the participating customer's choice of rates. As suggested above, PECO recommends that the Policy Statement enable utilities to explore options tailored to the unique needs of their service territories without prescribing or discouraging relationships between non-tariff incentive programs and rate designs.

7. The Policy Statement should endorse a broader examination of equitable access to EV Charging in communities facing barriers to adoption.

While not the primary focus of the Working Group, PECO believes that providing equitable access to charging infrastructure and the benefits of transportation electrification in communities that face barriers to EV adoption is an important element of public policy and suggests that this may be an appropriate topic for future Commission inquiry. Such considerations have potentially wide-ranging implications on customer affordability, cross-subsidization, and uncollectible expense that require greater focus and feedback. Further, the impacts extend beyond residential EV charging scenarios. For instance, competitively and technologically neutral EV rate designs can promote universal access to charging and prevent subsidies flowing to specific EV charging providers or technologies, unless the Commission determines that such action is necessary in the interest of EV market development. For example, large-scale public transit electrification can benefit the public through the elimination of ground level emissions. If the Commission determines that equitable access or other topics of interest related to transportation electrification merit additional consideration, PECO encourages continued flexibility in consideration of utility-proposed programs and use of informal working groups to identify issues, challenges, and opportunities as general policy matters.

8. The Policy Statement should connect EV charging rate design with the eventual results of the Commission's ongoing energy storage proceeding at Docket No. M-2020-3022877.

Lower energy costs outside of system and local peaks suggest that energy storage technologies may be a factor in any related EV charging rate design. As both EV charging and storage technologies continue to mature, some technologies may incorporate onboard energy storage that could play a substantial role in rate designs for managed charging. Energy storage has the potential to mitigate concerns regarding demand charges, as well as tangentially related rate designs for net metering. PECO therefore suggests that the results from the Commission's energy storage proceeding are relevant to EV rate design policy.

9. The Policy Statement should provide guidance on the appropriateness of temporary demand charge limitation strategies for public EV charging.

Equitable growth in EV adoption is dependent on the availability of public charging sites, particularly in areas where residents lack access to off-street parking. However, public charging sites developed in anticipation of future demand growth may initially experience low utilization and thus low electric load factors. In such cases, standard demand charges may serve as an economic barrier to prospective development of public charging sites. On the other hand, equity considerations demand that, in the long run, all types of utility customers, including EV charging owners, pay their fair share of the utility's fully distributed cost of service. Moreover, DCFC demand charges can play a constructive function in disincentivizing localized overbuilding of DCFC stations that would inhibit stations from reaching economically self-sustaining utilization levels.

PECO's Electric Vehicle Fast Charging (EV-FC) rider pilot is an example of a rate design intended to balance these two needs by providing a demand credit for the first 36 months after installation of a direct current fast charger. If the Commission adopts a policy goal of encouraging growth in EV adoption, the Policy Statement should provide guidance on rate designs intended to temporarily limit demand charges for recently energized EV charging sites

while the usage volumes that are necessary to make those sites economically self-sustaining investments grow over time. These policies may also vary for charging stations established to ensure equitable access, which may take longer to become economically self-sustaining. PECO suggests that such guidance should be broad enough to allow for utility consideration of a variety of rate designs, such as PECO's EV-FC rider and those identified by Electrify America.²

² Electrify America, Informal Comments Re: Petition to Initiate a Proceeding to Issue a Policy Statement on Electric Utility Rate Design for Electric Vehicle Charging P-2022-3030743, January 24, 2023, Page 7, Table 1, https://www.puc.pa.gov/media/2268/electrify-america-pa-wg-comments_01242023.pdf (accessed February 21, 2023).