



January 22, 2024

Secretary Rosemary Chiavetta
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA 17120

M-2023-3040755- jbs

Re: Docket No. P-2022-3030743 – Petition of ChargeVC-PA to Initiate a Proceeding to Consider Issuance of a Policy Statement on Electric Utility Rate Design for Electric Vehicle Charging

Dear Secretary Chiavetta:

Advanced Energy United (United) submits for filing the attached comments in response to the Proposed Policy Statement on Electric Utility Rate Design for Electric Vehicle Charging as published in the *Pennsylvania Bulletin* on December 23, 2023.

Respectfully submitted,

/s/ Shawn Kelly

Shawn Kelly

Director, Advanced Energy United

skelly@advancedenergyunited.org

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Petition to Initiate a Proceeding To Consider)
Issuance of a Policy Statement on Electric Utility) Docket No. P-2022-3030743
Rate Design for Electric Vehicle Charging)

January 22, 2024

**Comments on Proposed Policy Statement on Electric Utility Rate Design for Electric
Vehicle Charging**

Introduction

Advanced Energy United (“United”) commends the Commission for convening the Electric Vehicle Charging Rate Design Working Group (“Working Group”) and issuing a draft Policy Statement on Electric Utility Rate Design for Electric Vehicle Charging (Policy Statement). However, United believes the Commission’s Policy Statement can be strengthened to have a more meaningful impact on the EV market in Pennsylvania by providing Electric Distribution Companies (“EDCs”) with the necessary direction to develop EV charging rates that will help grow the EV market in the Commonwealth while meeting other important policy objectives. United also believes that there remains a critical need for the Commission to address transportation electrification frameworks via EDC plans, although that is outside the scope of this Policy Statement, which is focused on rate design for EV charging.

Our comments are organized into two main sections. The first section, Clarifications to Draft Policy Statement, provides recommended edits to the Policy Statement to provide more clarity and mitigate possible misinterpretations in the guidance given by the Commission. The second section, Enhancements to the Draft Policy Statement, addresses what United believes to be areas where the Policy Statement lacks the necessary direction for EDCs to develop effective EV charging rates. In both sections, we provide recommended edits to the Policy Statement. These are shown below as bolded and strikethrough text and can also be found in a redlined



version of the draft Policy Statement (see United Attachment 1 - Redlined EV Charging Rate Design Policy Statement).

Clarifications to Draft Policy Statement

§ 69.3551. Purpose and scope

United does not disagree with the purpose and scope as described in this section. We are however concerned the following sentence suggests the sole goal of EV rate design should be to increase capacity utilization: “Electric-vehicle charging will increase demand on existing infrastructure, and it is imperative that electric distribution companies are prepared to address this increased demand with distribution and default service generation rate structures that properly signal to electric-vehicle charging customers to incentivize increased capacity utilization of the distribution system.”

To ensure that it is not misinterpreted that capacity utilization is the sole goal of EV charging rate design, we suggest the sentence be modified to read:

Unmanaged ~~Electric-vehicle charging will increase demand on existing infrastructure, and it is imperative that electric distribution companies are prepared to address this increased demand with distribution and default service generation rate structures that~~ **are properly designed** ~~signal to~~ **help the Commonwealth succeed in its policy initiatives to promote the use of electric-vehicles, including, but not limited to,** ~~charging customers to incentivize increased capacity utilization of the distribution system.~~

We believe this edit will allow the Commission to review proposed EV charging rates in a broader context of meeting the Commonwealth’s policy objectives and avoid any unintended consequences of an unnecessarily narrow focus on capacity utilization. This and other goals of EV charging rate design are enumerated below in our comments on Section 69.3553.



§ 69.3552. Electric vehicle charging rate tariffs

United is concerned that as currently written, this section suggests that EV charging equipment should be owned by the EDCs, and EDCs should provide charging services. While there will costs associated with grid investments to meet EV charging needs that would be reflected in rates, we do not believe it was the Commission’s intent, particularly with a policy statement on rate design, to imply that the role of the utility extends into charging infrastructure ownership and the provision of charging services. If the Commission did indeed intend to indicate that EV charging equipment should be owned by EDCs and EDCs should provide charging services, then United strongly opposes that position. Those activities fall outside of the regulated monopoly franchise and are readily provided by the competitive marketplace. If the Commission is interested in exploring the appropriate role(s) for utilities beyond EV rate design issues, we would welcome that opportunity. However, this is a larger issue that should go through the proper regulatory or legislative process and not be decided in this Policy Statement.

Separately, this section addresses the desire to avoid “unreasonable cross-subsidization between customers.” United agrees that this is an important goal in general that is not unique to EV charging. That said, the term “unreasonable” is subjective so the Policy Statement should be clear that the benefits to all ratepayers of increased electricity sales from EV charging should be considered. Specifically, several states have created so-called EV “make-ready” programs¹, where utilities cover some or all costs associated with both utility-side and in some cases customer-side upgrades, up to, but not including, the charging equipment. The costs of those upgrades are spread across all customers, who benefit from the downward pressure on rates resulting from the added throughput of the EV charging load.

In addition, the issue of what is “unreasonable” with regards to cross subsidization is highly relevant to Working Group recommendations #19 and #20 that we discuss below. Those

¹ The EV Make-Ready in New York is one such example. A summary of the program can be found at <https://jointutilitiesofny.org/ev/make-ready>.



recommendations relate to the challenge posed by demand charges when utilization rates of fast charging stations are low. If a goal of the Commission is to address such barriers through rate design, this may include temporary reductions in demand charges. This would, all else equal, increase cross-subsidization in the short-term, but since this in furtherance of a public policy goal, could be deemed “reasonable”.

The edits below will clarify that the costs of EV charging that should be included in rates are the costs of providing electricity to charging infrastructure and not the cost of the chargers and any associated equipment and services. The edited text below also adds that benefits to all ratepayers should be considered when evaluating the cross-subsidization issue.

These distribution and default service generation electric-vehicle charging tariffed rates should reflect the actual costs of providing **electricity to charging infrastructure and services, including the cost of electricity, maintenance and administrative expenses,** in a manner that avoids unreasonable cross-subsidization between customers **while also considering the beneficial impact of added electricity sales from EV charging to all ratepayers.**

§ 69.3553. Electric vehicle charging rate design

As stated above, United believes that capacity utilization of the distribution system is one goal for EV charging rate design, but not the only goal, and perhaps not the most important goal. This section states, “The Commission recommends that electric distribution companies develop electric-vehicle distribution rates with cost-of-service principles that incentivize increased network capacity utilization of the distribution system.” We believe the following wording would be better suited to be clear that EV rates should be designed to achieve more than just capacity utilization as a policy goal:

The Commission recommends that electric distribution companies develop electric-vehicle distribution rates with cost-of-service principles **and are designed to help the Commonwealth achieve its policy goals for electric vehicles and the electric grid in**



the most cost-effective way possible that incentivize increased network capacity utilization of the distribution system. **This includes rates that will minimize peak load growth and result in the greatest possible increases in distribution network capacity utilization.**

United believes that focusing on any singular goal may have unintended consequences, and focusing specifically on capacity utilization instead of peak load growth, could be detrimental. If the only goal is to increase network capacity utilization, EV charging rates could be designed to encourage load growth overall in a manner that marginally improves capacity utilization but that also results in relatively large peak demand growth. Peak demand growth can be the main driver of investment (and therefore cost) in the distribution network as it relates to the overall capacity of the system. Therefore, the goal should be to improve overall capacity utilization by minimizing peak load growth due to EV charging load. This will result in better outcomes than if the sole focus is on a qualitative goal of “increasing” capacity utilization.

Additionally, United seeks clarification on the following sentence: “Electric distribution companies should also take into consideration rates for direct current fast chargers, including demand charges, to manage electric grid stress during peak hours.” It is unclear if this is a directive to include demand charges in direct current fast chargers (“DCFC”) or to take into consideration the appropriateness of demand charges for the DCFC use case. As described below in regard to Working Group recommendations 19 and 20, traditional demand charges presently pose significant barriers to the deployment of public DCFC stations in Pennsylvania. As such, United believes consideration should be given to alternatives for demand charges for DCFC. To achieve this outcome, the Policy Statement could read:

Electric distribution companies should also take into consideration rates for direct current fast chargers, including **whether or not** demand charges **are appropriate**, to manage electric grid stress during peak hours.



§ 69.3554. Electric vehicle charging rate equity

United supports rates that consider fairness and equity and therefore has no objections or suggested edits to this section.

Enhancements to the Policy Statement

Working Group recommendation 1: *EV rates should be Electric Distribution Company (EDC) specific, should allow for regional flexibility, and avoid cross-subsidization.*

Working Group recommendation 9: *EDCs should be encouraged to explore the use of credits and price signals to incentivize ratepayers to alter behavior in a way to benefit from their usage pattern in relation to EV charging, to simplify the EV ratepayer's experience, and to provide benefit to the grid.*

The Policy Statement addresses time-of-use rates and demand charges, but does not specifically include the consideration of bill credits. As stated in Working Group recommendation #9, “Experience in many states has demonstrated clearly that electricity consumers respond well to price signals and alter behavior in ways beneficial to them as well as the overall grid.” Bill credits are an effective way to send price signals and United recommends a modification to the Policy Statement that ensures that time-of-use rates and demand charges are not the only forms of pricing incentives considered by the EDCs.

The Policy Statement has the following language in Section 69.3553: “To promote efficient use of electric-vehicle charging infrastructure and to manage electric grid demand, public utilities should consider variable rates for electric-vehicle customers based on the time of day and the level of demand on the electric grid.” We recommended modifying the language to read:

To promote efficient use of electric-vehicle charging infrastructure and to manage electric grid demand, public utilities should consider **various options to send price signals to electric vehicle charging customers, including but not limited to** variable



rates for electric-vehicle customers based on the time of day and the level of demand on the electric grid **and bill credits**.

Working Group recommendation 18: A policy statement should include a plan for electric distribution company reporting, filed with the Commission, and made public at least annually, on customer enrollment and utilization of EV charging-specific rates. Final reports for pilot programs should include the EDC's recommendations, including the disposition of the pilot program.

The Policy Statement does not include any discussion on EDC reporting requirements. The lack of reporting requirements will hamper efforts of the Commission to evaluate the effectiveness and appropriateness of EV charging rates and also does not allow interested stakeholders to provide feedback to the Commission so they can hold EDCs accountable for actual results.

United recommends the following section be added to the Policy Statement:

§ 69.3555. Electric vehicle charging reporting requirements.

The Commission directs electric distribution companies to file with the Commission, and made public at least annually, reporting on customer enrollment and utilization of EV charging-specific rates. Final reports for programs should include the EDC's recommendations, including the disposition of the pilot program. The Commission also encourages electric distribution companies to include an evaluation of EV charging load management programs and software in annual reports. This evaluation should discuss charger-integrated and third-party software solutions that can automate and manage load according to utility rate plans, carbon emissions, electricity price, and other means for addressing charging behavior. Electric distribution companies should also discuss customer engagement efforts, including investment in customer-facing applications or other initiatives to increase enrollment in EV charging programs.



Working Group recommendation 19: Several stakeholders agree that a Commission policy statement on EV rate design should recommend that the utilities file proposed tariffs that provide alternatives to demand charges for public DCFC stations, with one stakeholder (ATE) asserting a demand charge alternative should be provided on a temporary basis.

Working Group recommendation 20: The Commission should explicitly address rate design alternatives to demand rates in a policy statement on EV charging rate design

In support of Working Group recommendations 19 and 20, it was explained that “traditional demand charges presently pose significant barriers to the deployment of public DCFC stations in Pennsylvania.” For public fast-charging stations with low utilization rates, one charging session during peak hours will set the peak demand but not have the corresponding energy consumption to bring the overall cost per kWh to the charging station owner down to a level where they are able to offer reasonable prices to their customers. It is for this reason that several states with supportive EV policies have addressed this barrier and why the Working Group made these recommendations.

As currently written, the Policy Statement addresses demand charges for EV charging only in the context of using demand charges to manage peak loads: “Electric distribution companies should also take into consideration rates for direct current fast chargers, including demand charges, to manage electric grid stress during peak hours.” While this is an overall objective of demand charges, this directive falls short of the important consideration of near-term barriers to EV market development and the role that alternatives to demand charges can play. Considerations should be given to what mechanisms exist to manage grid stress from the relatively inflexible demand stemming from public fast charging and then balancing those options against the public value of having those charge points operational. United recommends the following language to ensure utilities consider the appropriateness of DCFC demand charges:



Electric distribution companies should also take into consideration rates for direct current fast chargers, including **whether or not** demand charges **are appropriate**, to manage electric grid stress during peak hours **while balancing the need to have affordable and operational public charging available**.

Working Group recommendation 3: *The Commission's Policy Statement should include a request that all Pennsylvania electric distribution companies file proposed EV-specific rates by December 31, 2023.*

While this deadline has passed, we do agree that it is imperative to proceed with EV charging rates with a sense of urgency. The recommendation went further to explain this sense of urgency:

Time is of the essence to get in place utility EV charging rates across Pennsylvania, given the expected high load growth from EV adoption and the utility capital costs that will be required to build out the grid to accommodate that load growth, but that can be avoided if off-peak EV charging is properly encouraged. As such, the Commission's Policy Statement should include a request that all Pennsylvania EDCs file proposed EV-specific rates by December 31, 2023, either as part of a base rate case filing or as a separate tariff filing.

As such, United recommends the Commission require a deadline date of 90 days from the final adoption of the Policy Statement as the date for EDCs to file EV-specific rates. Parties should then have 60 days from the EDC filing to file written comments on the proposed EV-specific rates.



Conclusion

United appreciates the opportunity to provide our comments on the Commission's draft Policy Statement. We recommend the Commission incorporate all of our suggested edits to the Policy Statement and we look forward to working on this important issue more in the future.



United Attachment 1 – Redlined EV Charging Rate Design Policy Statement

Annex A

TITLE 52. PUBLIC UTILITIES

PART I. PUBLIC UTILITY COMMISSION

Subpart C. FIXED SERVICE UTILITIES

CHAPTER 69. GENERAL ORDERS, POLICY STATEMENTS AND GUIDELINES ON FIXED UTILITIES

(Editor's Note: Sections 69.3551–69.3554 are proposed to be added and are printed in regular type to enhance readability.)

ELECTRIC UTILITY RATE DESIGN FOR ELECTRIC VEHICLE CHARGING

§ 69.3551. Purpose and scope.

Due to Federal and State policy initiatives to promote the proliferation of electric vehicles, as defined in 75 Pa.C.S. § 102 (relating to definitions), the Commission is encouraging development of rate structures for electric-vehicle charging customers. ~~Unmanaged E~~electric-vehicle charging will increase demand on existing infrastructure, and it is imperative that electric distribution companies are prepared to address this increased demand with distribution and default service generation rate structures that ~~are~~ properly ~~designed~~ ~~signal~~ to ~~help the State succeed in its policy initiatives to promote the use of~~ electric-vehicles, including, ~~but not limited to, charging customers to incentivize~~ increased capacity utilization of the distribution system. The Commission's policy on electric-vehicle charging also encompasses fairness and equity principles that electric distribution companies are to consider in developing electric-vehicle charging rates.

§ 69.3552. Electric vehicle charging rate tariffs.

The Commission encourages electric distribution companies to develop tariffs with distribution and default service generation rates for the purpose of implementing rates specifically for electric-vehicle charging customers. These distribution and default service generation electric-vehicle charging tariffed rates should reflect the actual costs of providing ~~electricity charging infrastructure and services, including the cost of electricity, maintenance~~



~~and administrative expenses~~, in a manner that avoids unreasonable cross-subsidization between customers while also considering the beneficial impact of added electricity sales from EV charging to all ratepayers.

§ 69.3553. Electric vehicle charging rate design.

(a) To promote efficient use of electric-vehicle charging infrastructure and to manage electric grid demand, public utilities should consider various options to send price signals to electric vehicle charging customers, including but not limited to variable rates for electric-vehicle customers based on the time of day and the level of demand on the electric grid and bill credits. This means that electric-vehicle charging rates should be higher during peak demand hours and lower during off-peak hours. The Commission recommends that electric distribution companies develop electric-vehicle distribution rates with cost-of-service principles and are designed to help the Commonwealth achieve its policy goals for electric vehicles and the electric grid in the most cost-effective way possible that incentivize increased network capacity utilization of the distribution system. This includes rates that will minimize peak load growth and result in the greatest possible increases in distribution network capacity utilization. Electric distribution companies should also take into consideration rates for direct current fast chargers, including whether or not demand charges are appropriate, to manage electric grid stress during peak hours while balancing the need to have affordable and operational public charging available. The Commission also recommends that electric distribution companies develop electric-vehicle charging default service generation rates that, at a minimum, properly reflect the cost of generation services during times of system stress. These default service generation rates may include use of time-of-use rates that use on- and off-peak periods which appropriately incentivize the movement of charging consumption to off-peak periods or periods of less system stress.

(b) The Commission recommends that electric-vehicle charging distribution and default service generation rates should be flexible and adaptable to changing circumstances and technologies. As such, electric-vehicle charging distribution and default service generation rates should be periodically reviewed and adjusted, as necessary, to ensure that they remain fair, cost-effective and efficient.

§ 69.3554. Electric vehicle charging rate equity.

The Commission recommends that electric-vehicle charging distribution and default service generation rates be designed to promote fairness and equity. As such, the distribution and default service generation electric-vehicle charging rates should not discriminate against certain types of electric vehicles or drivers and should not create undue financial burdens for



low-income customers or disadvantaged communities. The Commission recommends that electric distribution companies consider impacts on low-income customers due to the design of their distribution and default service generation electric-vehicle charging rates. Electric distribution companies may need to consider customer-specific and electric distribution company region-specific rates to best serve the needs of their communities. It is important that electric distribution companies prioritize customer education to encourage efficient and effective use of electric-vehicle charging infrastructure and proper knowledge of available distribution and default service generation rates.

§ 69.3555. Electric vehicle charging reporting requirements.

The Commission recommends that electric distribution companies should filed with the Commission, and made public at least annually, reporting on customer enrollment and utilization of EV charging-specific rates. Final reports for programs should include the EDC's recommendations, including the disposition of the pilot program. The Commission also encourages electric distribution companies to include an evaluation of EV charging load management programs and software in annual reports. This evaluation should discuss charger-integrated and third-party software solutions that can automate and manage load according to utility rate plans, carbon emissions, electricity price, and other means for addressing charging behavior. Electric distribution companies should also discuss customer engagement efforts, including investment in customer-facing applications or other initiatives to increase enrollment in EV charging programs.

[Pa.B. Doc. No. 23-1761. Filed for public inspection December 22, 2023, 9:00 a.m.]

¹ AEE's Letter in Support of ChargEVC-PA, filed on February 25, 2022, was recognized as AEE's comments in this matter.

² CAUSE-PA's Petition to Intervene, filed on February 24, 2022, contained comments to ChargEVC-PA's petition. As CAUSE-PA did not file comments subsequent to the Commission's February 25, 2022 Secretarial Letter, the Commission recognized CAUSE-PA's Petition to Intervene as its comments in that matter.

³ P.L. 117-58, November 15, 2021, 135 Stat. 429.

