May 23, 2022

Via Electronic Filing

Hon. Michelle L. Phillips
Secretary
New York Public Service Commission
3 Empire State Plaza
Albany, NY 12223-1350

Re: Case 22-E-0236: Electrify America Comments on Proceeding to Establish Alternatives to Traditional Demand-Based Rate Structures for Commercial Electric Vehicle Charging

Electrify America appreciates the opportunity to comment on the Proceeding to Establish Alternatives to Traditional Demand-Based Rate Structures for Commercial Electric Vehicle Charging ("Proceeding"). Electrify America, the largest open Direct Current Fast Charging ("DCFC") network in the U.S., is investing $2 billion over 10 years in Zero Emission Vehicle infrastructure, education and access. The investment will enable millions of Americans to discover the benefits of electric driving and support the build-out of a nationwide network of ultra-fast community and highway chargers that are convenient and reliable. Electrify America expects to have more than 1,800 total charging stations with over 10,000 chargers in the United States and Canada by 2026. Electrify America operates 80 ultra-fast (150 kW-350 kW) chargers across 20 DCFC stations in New York.

Overview

Demand charges have significant financial impacts on DCFC station operations. Because these stations are relied upon by electric vehicle ("EV") drivers who may not be able to charge at home, the ongoing presence of demand charges has significant equity implications for transportation electrification. Recent New York State and Federal legislative action provide the Commission with the tools and direction for the meaningful operational cost relief that is crucial for reaching state climate goals. In asking the public eleven questions as the Commission commences a proceeding to examine alternatives to demand-based rate designs,

both best practices and examples to avoid are clear and actionable. In accordance with Public Service Law Section 66-s, the Commission must adopt alternatives to demand-based rate designs, specifically rates that result in a meaningful reduction in the effective cost of electricity for EV charging.

The Impact of Demand Charges in Current Rate Designs

Demand charges are a critical barrier to the widespread electrification of the transportation sector, the largest source of sectoral emissions in New York State. These charges, assessed on peak energy consumption during a billing period rather than quantity of electricity used, pose a special economic challenge for high-power, low-utilization uses such as DC fast charging. Research from the Great Plains Institute found that these charges can account for over 90% of electricity costs for DC fast charging, and "lead to operating costs that far exceed the revenue these chargers can receive from customer payments,"[1] a finding echoed in a 2021 U.S. Department of Energy ("DOE") report.[2] This finding has held true in New York, where many DCFC stations may operate at a loss due to demand charges that cannot be passed along to consumers. This situation discourages EV charging investment in the state and delays the build-out of new stations, particularly in rural areas and disadvantaged communities where near-term utilization may be lower.

Demand charges can also vary widely without adherence to cost causation principles. In Colorado, for example, the state's utility commission concluded in a report that demand charges result in the annual cost to operate a DCFC station varying by a factor of 35 across different utility service territories in that state alone.[3] Increased charging capacity of new EV

[1] McFarlane, D., et al, "Overcoming Barriers to Expanding Fast Charging Infrastructure in the Midcontinent Region," Great Plains Institute, available at https://www.betterenergy.org/wp-content/uploads/2019/08/GPI_DCFC-Analysis.pdf (July 2019).
[2] U.S. Department of Energy, "An EV Future: Navigating the Transition," available at https://8b9a2972-f6bd-463f-ab0e-7b2ba71ee2f1.filesusr.com/ugd/1c0235_965967cdf2bf4b94924c05637398fda3.pdf (October 2021).
[3] Colorado PUC Electric Vehicle Working Group Report, Colorado Public Utilities Commission, available at https://evcharging.enelx.com/images/azura-pages/utilities/2019-01_CoPUC_Electric_Vehicle_Report.pdf (January 2019).

models is exacerbating demand exposure at DCFC stations, especially at ultra-fast charging stations. In the past six model years, the average charging speed of new EV models has increased four-fold, from 50kW to 200kW, and the trend is accelerating.[4] Finally, demand charges result in significant cost disparities between home and public charging, as residential rates are not subject to demand charges. For public ultra-fast DCFC stations, battery storage systems can be useful under certain circumstances in mitigating the worst impacts of demand charges, but they are not sufficient to provide the types of managed charging solutions envisioned for the Level 2 and fleet sectors due to the limited capacity of battery storage relative to the overall demand of ultra-fast charging sites, especially as real estate constraints may limit the size of such systems or preclude their placement altogether.

Key Equity Considerations

DC fast charging is crucial to the successful transition to clean transportation in New York State, and it is particularly important for drivers traveling long distances and those who do not have consistent access to charging at home. On long trips, DC fast charging allows drivers to recharge their vehicle over timeframes on the order of minutes, rather than the order of several hours, enabling convenient long-distance travel. For those who do not have access to consistent charging or parking at home, such as residents of apartments, townhouses, and other multi-unit dwellings ("MUDs"), public DC fast charging often serves as the primary means of recharging.

Recent research from UCLA's Luskin Center shows that 43% of MUD residents rely on DC fast charging as their primary means of charging, nearly three times the percentage of non-MUD

[4] Atlas Public Policy analysis of data from U.S. Environmental Protection Agency and various industry sources.

residents.[5] While more than 80% of all charging sessions happen at home,[6] in urban areas there is greater difficulty charging because urban households are more than twice as likely as suburban households to be located in MUDs.[7] To that point, a recent study by DOE's National Renewable Energy Lab indicates that only "33% of the current light duty vehicle stock in the United States is parked close to electrical access."[8] In many instances, these drivers may rely on public stations where they can charge quickly and affordably. Demand charges are the largest differentiating factor between effective electricity rates billed by the utility to residential and to commercial EV customer accounts. This inequity imposes greater costs on New Yorkers who depend on public charging stations, such as those who reside in MUDs, than on those who can charge at home. These costs must be reformed to enable sustainable private sector investment in stations serving MUD residents.

Legislative Considerations

In December 2021, the New York State enacted S3929/A3876,[9] and amended in March 2022 with S7836/A8797,[10] a law to address utility tariffs and demand charge costs associated with DC fast charging, now known as Public Service Law Section 66-s. To promote the goals of electrifying New York State's transportation sector, this law directs the Public Service Commission to "commence a proceeding to establish a commercial tariff utilizing

[5] DeShazo and Di Filippo, "Evaluating Multi-Unit Resident Charging Behavior at Direct Current Fast Chargers. UCLA Luskin Center for Innovation," pp. 3, 13, available at https://innovation.luskin.ucla.edu/wp-content/uploads/2021/03/Evaluating-Multi-Unit-Resident-Charging-Behavior-at-Direct-Charging-Behavior-at-Direct-Current-Fast-ChargersCurrent-Fast-Chargers.pdf (February 2021).
[6] Hurlbut D., et al., "Electric Vehicle Charging Implications for Utility Ratemaking in Colorado," National Renewable Energy Laboratory, available at https://www.nrel.gov/docs/fy19osti/73303.pdf, accessed on May 19, 2021.
[7] In fact, 37% of urban households and 16% of suburban households reside in MUDs. *See* Mortgage Bankers Association, "MBA Chart of Week: Distribution of Housing Types, Race and Ethnicity (Urban Areas and U.S.)," available at https://newslink.mba.org/mba-newslinks/2017/october/mba-newslink-monday-10-2-17/mba-chart-of-week-distribution-of-housing-types-race-and-ethnicity-urban-areas-and-u-s/ (Oct. 2, 2017). Furthermore, 86% of the 31.4 million MUDs in the US are rented, and these residents have the greatest difficulty charging at home. *See* Neal N., Goodman, L., and Young, C., "Housing Supply Chartbook," Urban Institute (January 2020).
[8] Ge, Y., Simeone, C., Duvall A., and Wood E., "There's No Place Like Home: Residential Parking, Electrical Access, and Implications for the Future of Electric Vehicle Charging Infrastructure," National Renewable Energy Laboratory, available at https://www.nrel.gov/docs/fy22osti/81065.pdf (October 2021).
[9] New York State Senate, "Senate Bill S3929," https://www.nysenate.gov/legislation/bills/2021/S3929 (2021).
[10] New York State Senate, "Senate Bill S7836," https://www.nysenate.gov/legislation/bills/2021/s7836 (2022).

alternatives to traditional demand-based rate structures, other operating cost relief mechanisms, or a combination thereof (collectively, 'solutions')." It also directs the Commission to evaluate the relative costs and benefits of proposed rate design alternatives. These tariffs must include, at a minimum:

- Technology-agnostic solutions so long as such solutions would not have the effect of discouraging innovation;
- Mechanisms to enable customers with fast electric vehicle charging for eligible light duty, heavy duty, and fleet electric as their largest source of energy demand to opt into solutions without unreasonable delay;
- Solutions for both existing and new customers;
- Mechanisms that would provide cost relief for customers during each combination gas and electric corporation monthly billing period; and
- Combination gas and electric corporation service territory-specific solutions.

Rate design reforms are critical to meeting these obligations, and we look forward to the Commission honoring these statutory requirements.

Additionally, in November 2021, President Biden signed into law amendments the Public Utility Regulatory Policies Act ("PURPA"), which established a specific directive to utility regulators across the country to consider rates that "promote greater electrification of the transportation sector."[11] These amendments direct utility regulators in every state to begin proceedings before November 2022 to consider measures including the establishment of new, EV-specific rates that:

1. Promote affordable and equitable EV charging options for residential, commercial, and public EV charging infrastructure;
2. Improve the customer experience and reduce charging times;

[11] These amendments are found in Section 40431 of "Infrastructure Investment and Jobs Act," also known as the Bipartisan Infrastructure Law. *See* Pub. L. No. 117-58, available at https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf (2021).

3. Accelerate private investment in charging infrastructure; and
4. Appropriately recover the marginal costs of delivering electricity for vehicle charging.

Under the law, utility regulators are directed to consider rates that promote electrification, and they also have the opportunity to enhance the impact of federal funds recently made available by the Infrastructure Investment and Jobs Act ("IIJA") in their state. Specifically, by complying with the PURPA amendments' directive to evaluate EV-specific rates, the Commission can help ensure that the New York's Department of Transportation charging infrastructure investments will be economically sustainable for the long term while advancing social equity goals and attracting private sector investment.

Electrify America notes that previous Commission initiatives have not meaningfully resolved such issues, with program utilization negligible and overhead costs for administration of programs exceeding any benefits received. This Proceeding is a welcome start to state and Federal legal compliance, and Electrify America looks forward to the subsequent enactment of specific rate reforms as the Commission fulfills legislative intent rather than other programs which do not address rate challenges.

Specific Questions Answered

To provide additional comments within the rubric presented by the Proceeding, Electrify America responds below to the specifically enumerated questions.

1. "Provide examples of commercial electric vehicle charging tariffs or operating cost relief programs (solutions) from jurisdictions outside of New York that should be considered or avoided, based on the experience in those jurisdictions, and explain why they are effective or ineffective."

The following table provides a summary of alternative rate designs, with key examples, that have enabled sustainable commercial EV charging operations. Rate design reforms, specifically, are the critical solution in enabling accelerated EV charging station buildout and sustainable EV charging station operation.

Table 1: Summary of Selected Alternative Rate Designs

Rate Design	Description
Fully Volumetric Rate	The revenue requirement for a rate class is recovered through volumetric charges. (e.g., Southern California Edison's TOU-8 tariff, DTE Energy's GS-3 tariff, and Rocky Mountain Power Utah's Schedule 6A tariff)
Low Load Factor Rate Variants	A variation on a rate schedule for low load factor customers (typically < 15%) where demand charges are reduced and usage charges are increased relative to the parent rate. (e.g., National Grid Massachusetts' proposed commercial EV rates)
Demand Limiters	A rate feature where demand charges are limited for low load factor accounts based on a minimum monthly hours of use or ratio. (e.g., Xcel Energy Minnesota's General Service A-14 tariff)
Unit Cost Limiters	A calculation method where charges are based on the published tariff, but not to exceed a pre-defined unit cost threshold. (e.g., Dayton Power & Light Tariff D19)
Reduced Demand Charges	Demand charges are reduced to only recover local customer specific facilities-related costs (e.g., transformers), while shared distribution and generation and transmission charges are recovered volumetrically.
Hours of Use Tiered Charges	A rate structure where usage is grouped into tiers based on the load factor. Low load factor accounts would have usage priced in higher cost tiers and omit a demand charge. (e.g., Georgia Power Rate PLM)

Broadly, rate designs that can result in high-cost volatility on a month-to-month basis should be avoided for DCFC loads. Examples of such rates are any that include mandatory Critical Peak Pricing ("CPP") or those that have coincident peak demand charges such as Central Maine Power's Rate B-DCFC. CPP programs are particularly challenging for DCFC station operators because EV drivers that are in transit cannot wait out a CPP event to charge. DCFC station operators are highly sensitive to the EV driver consumer experience and must avoid consumer perceptions of overcharging or price gouging so as to ensure a consistent, upward trajectory in EV adoption and transportation electrification. As a result, DCFC station operators typically absorb CPP charges instead of passing them on to EV drivers.

In addition to cost volatility, administrative complexity should also be avoided, especially programs that involve off-bill rebates which result in cost accounting challenges for electric ratepayers. An example of this type of program is the off-bill demand rebates of New Jersey's Public Service Electric & Gas ("PSEG"). For enrollment, PSEG's off-bill demand rebate requires participation in costly and onerous data reporting processes by the ratepayer, precluding the tariff's adoption by Electrify America. Enrollment in rate designs should not be contingent on providing data beyond that which can be collected from the utility meter. As a company that operates in over 200 utility territories utility-by-utility monthly reporting obligations are not sustainable for EV charging station operators like Electrify America and can result in additional operating costs that may discourage investment and ultimately result in additional costs that must needlessly be passed on to drivers when utility interval meter data would otherwise be sufficient.

Finally, New York State's extant policies must also be highlighted as an example of practices to avoid. Despite ambitious EV policies, New York has proven challenging for station development. Specifically, inconsistent and varied utility administration of the Per Plug Incentive ("PPI") program has limited utilization of that program to enhance investment in the state. PPI has been significantly undescribed as a result. On account of onerous participation requirements, lack of consistency between utilities over eligibility guidelines, additional conditions imposed on participants beyond those authorized in the Commission order, and long administrative delays, the program has not had the intended effect of addressing operational cost challenges associated with DC fast charging in New York State. According to the program website, only 77 plugs out of a possible 1,074 plugs, or 7% of the program target, were successfully enrolled in the program as of the last time the data was updated on April 1, 2022.[12] Electrify America is the vast majority of those 77 plugs. Additionally, repeated delays in processing interconnection of non-export storage at DCFC stations, including utility non-compliance with Standardized Interconnection Requirements and costly Coordinated

[12] Joint Utilities of New York, "DCFC Per-Plug Incentive Program," https://jointutilitiesofny.org/ev/dcfc_incentive_program, accessed May 19, 2022.

Electric System Interconnection Reviews, have challenged station economics, further limiting the capital available for increased station deployment. Non-rate based reforms are unlikely to achieve the Commission's goals as they do not solve the specific issues slowing EV charging station buildout.

2. "When evaluating the impact of potential solutions, what assumptions should be applied to appropriately represent the investment decision that charging station developers and/or site hosts must make? Key assumptions of interest include, but are not limited to, utilization of the charging stations over the investment horizon, capital costs, capital structure, and operation and maintenance costs (i.e., leasing costs of land, the fees or pricing consumers will pay for public charging, and the minimum financial threshold: Internal Rate of Return or Return on Investment to determine if the tariff or cost relief program is sufficient to spur investment)."

Electrify America considers a large number of factors when making investment decisions. These factors include, but are not limited to, a quantitative analyses of charging needs, the policy environment, and the utility environment, which include tariff structure and site energization processes. Tariff structure includes an assessment of rate design as well as potentially onerous requirements to take service on a rate, such as ratepayer-side data reporting obligations. As noted in Electrify America's most recent investment plan, "The utility environment at each location plays a major role in the overall success of the charging station. Rate structures, including demand charges, subscription fees, minimum bills, and energy costs all impact Electrify America's cost to deliver charging services to customers, and ultimately the long-term economic sustainability of our business. For utility areas with tariff structures that result in a delivered cost of energy for DCFC above the gasoline equivalent cost, Electrify America may be forced to shift investments to areas with more sustainable energy rates."[13] If the Commission were to attempt to predict and analyze these factors, its analysis would be

[13] Electrify America, "National ZEV Investment Plan: Cycle 3," p. 29, available at https://www.electrifyamerica.com/assets/pdf/cycle3_investment_plan_epa.1aa21b9b.pdf (June 2021).

either too generalized to provide effective insight or too specific to meaningfully reflect the diversity of EV charging use cases and operating models. It is also unclear that the Commission has the legal authority to consider such factors.

3. "How should the rate design principles articulated by the Commission in the REV Track Two Order be applied when evaluating the potential solutions in this proceeding? Are there additional rate design principles you believe should be applied and why?"

The REV Track Two Order identifies the following principles from the REV Framework Order as being germane to ratemaking. These principles include:

1. The unidirectional grid must evolve into a more diversified and resilient distributed model engaging customers and third parties.
2. Ensuring universal, reliable, resilient, and secure delivery service at just and reasonable prices remains a function of regulated utilities.
3. The overall efficiency of the system and consumer value and choice must be improved by achieving a more productive mix of utility and third-party investment.

The principle of ensuring delivery service at just and reasonable prices is a critical item for the Commission to examine from multiple angles. The first is the emergence of transportation electrification and the loads that are being introduced to the grid. Many of these loads, such as residential home charging and workplace Level 2 charging, can be accommodated by existing rates. High-capacity loads such as DC fast charging and fleet charging will require new rate designs to ensure that utility charges are aligned with marginal costs and enable the viability of EV station operator business models. New York has clearly articulated a state policy for transportation electrification in order to meet the goals laid out in the Climate Leadership and Community Protection Act ("CLCPA"), but the only way for the electric distribution system to displace gas stations as the energy delivery network for vehicles is to ensure that fueling charges are competitive with gasoline. New rate designs must not only accommodate the new

and unique loads from DC fast charging, but they must also ensure that other ratepayers benefit from the addition of these new loads to the system.

The issue of just and reasonable rates is fundamentally connected to the REV objective of attracting third-party investment. Private capital investment in EV charging infrastructure at scale will only be possible with rate designs that allow business models to be sustainable. A core tenant of REV is to "Animate Markets," and market animation in EV charging services requires the Commission to create distribution service rates for DC fast charging loads that remove the present barrier of punitive demand charges.

4. "What solution design elements should be considered to best maintain an incentive to manage electric demand? For example, should the structure of the potential solutions incentivize charging station owners to use time-varying pricing for drivers, to co-locate storage with electric vehicle charging stations, or to co-locate charging stations with complementary load profiles or anchor customers such as commercial fleets or ridesharing businesses?"

Transportation electrification policymaking is not a one-size-fits-all exercise. It is important to consider different segments within the EV charging landscape using objective criteria such as charging level, dwell time, and charging use case. These criteria can help determine the appropriate policy tools available to ensure optimal use of the grid and reliable, customer-centric charging that meets the needs of those who rely on public DCFC stations.

Electrify America is a strong supporter of technologies such as energy storage and renewables integration, having deployed over a hundred battery systems at sites around the country,[14] sites with integrated solar awnings, and having announced entering into a virtual power purchase agreement ("VPPA") for a 75 megawatt solar generation facility that is projected to produce

[14] Electrify America, "Electrify America Reaches 30 Megawatts in Installed Battery Energy Storage at 140 DC Fast Charging Stations Across the US and Initiates Virtual Power Plant (VPP) Services," https://media.electrifyamerica.com/en-us/releases/164, (December 2021).

enough annual renewable energy to offset all energy currently delivered on an annualized basis to drivers charging at Electrify America stations.[15] Managed charging can also be a useful and effective technology for longer dwell time and fleet applications, and should be considered as part of the solution for meeting EV charging needs in these use cases. However, public ultra-fast DCFC is a specific use case that presents unique power constraints. It is also a use case that is critically necessary to supporting highway corridor travel and rapid recharging for those who cannot charge at home. The U.S. government recently recognized the importance of ultra-fast charging, particularly for the highway use case, in setting 150 kW as the minimum charging speed for its $5B National Electric Vehicle Infrastructure Program investment in highway corridor charging, which may not be reduced below that level using technologies such as power sharing.[16]

Electrify America deploys battery storage systems under certain, specific circumstances to mitigate the worst impacts of demand charges in response to poor rate design. For public ultra-fast DCFC stations, they are not sufficient to provide the types of managed charging solutions envisioned for the Level 2 and fleet sectors due to the limited capacity of battery storage relative to the overall demand of ultra-fast charging sites, especially as real estate constraints may limit the size of such systems or preclude their placement altogether. Fewer charging stations are built in New York State, and more battery energy storage systems instead, as a result of current rate design. To solve this inefficient allocation of capital and increase third-party investment in DCFC stations, the Commission must address these rate design barriers. Similarly, integrated solar panels do not provide enough electricity to cover a substantial fraction of the power demand at the types of sites envisioned under upcoming Federal investments, which must support a minimum of 600 kW of simultaneous charging

[15] Electrify America, "Electrify America Announces EV Charging Network Backed by 100 Percent Renewable Energy and Power Purchase Agreement for 75 Megawatts in New Solar Generation," https://media.electrifyamerica.com/en-us/releases/184, (May 2022).
[16] U.S. Federal Highway Administration, "National Electric Vehicle Infrastructure Formula Program: Program Guidance," p. 26, https://www.fhwa.dot.gov/environment/alternative_fuel_corridors/nominations/90d_nevi_formula_program_guidance.pdf, (February 2022).

power per Federal program guidance. Assuming solar panel production of around 150 Watts per square meter, powering a site of this size would require approximately 4,000 square meters of solar panels,[17] equivalent to roughly an acre of land, which substantially exceeds the generation that can be integrated at a typical site.

5. "What solution design elements should be considered to encourage increased utilization of charging stations over time?"

Charging station utilization will increase as more drivers choose to adopt EVs, a trend that can only continue through increased charging station deployment. For third-parties to continue investment in charging stations, rates must be reformed to enable their sustainable operation. Specifically, demand charge-based rates must give way to rate designs that more accurately follow cost causation principles.

6. "What solution design elements should be considered to encourage good investment decisions for charging stations?"

Please see the rate design alternatives presented as a response to Question 1, which will help enable the sustainability of third-party investment in charging stations.

7. "Should the solution design address sites that may be necessary to establish a minimum network of public charging but are located in areas that are likely to experience lower utilization in the long-run? If so, how?"

Rate design alternatives should provide stable cost outcomes for EV charging loads with load factors ranging from 1% to 20%. Volumetric rate designs, designed to ensure that sites with load factors in the low to mid-single digits do not incur negative gross margins, will maximize third-party investment in DCFC stations. Rate designs should be structured in such a way so as to ensure that these types of stations are not perpetually lossmaking. The structures in the rates

[17] 600 kW = 0.150 Watts/sq meter * 4,000 sq. meters.

that achieve this objective are also important for new stations in higher-traffic locations that are building utilization. A successful rate design will ensure that very few stations experience negative gross margins on EV charging sales, which will de-risk capital investment in areas of the New York where EV adoption is lagging.

8. "Should a separate service class for commercial electric vehicle charging stations be established for tariff-based solutions? What are the benefits or drawbacks of this approach? Should separate service classes be established for different types of electric vehicle charging infrastructure and applications (e.g., L2 versus High Voltage Direct Current, fleet charging infrastructure)?"

A separate service class is not needed for EV charging stations at the present time. The Commission can look to the example of its Standby/Buyback service rate design proceeding. In Case 15-E-0751, the Commission ordered the revision of Standby rates to be revenue neutral to the otherwise applicable service class. A similar approach can be employed to create rate variants for EV charging applications where the EV specific rate is contained within a parent rate class. The rates should be constructed to be revenue neutral to the parent rate class at a load factor which is representative of a highly-utilized DCFC station, perhaps 15%.

The experience of the Standby rate proceeding demonstrates that the most administratively efficient route is to create a rate design that is a subclass of an existing parent rate. Creating subclasses within a parent rate requires accurate cost accounting of distribution grid components by Federal Energy Regulatory Commission Uniform System of Accounts ("FERC accounts") and voltage level. To create rate designs that mitigate the demand charge barrier to DC fast charging, utilities may need to capacity to devise rates with more granular cost allocations. National Grid, New York State Electric & Gas, and Rochester Gas and Electric are presently capable of producing these rate designs. Consolidated Edison, Orange and Rockland, and Central Hudson Gas & Electric currently use a functionalized revenue requirement to create their Allocated Cost of Service ("ACOS") studies used to apportion costs

to rates. The Commission's Order issued on March 16, 2022 requires these utilities to produce ACOS Studies on a FERC account basis when they file their next rate cases (Ordering Clause 5). The Commission may consider accelerating this requirement for the purposes of constructing rates for EV charging.

9. "What selection criteria should the Commission use to rank potential alternative tariffs?"

The Commission should ensure that any potential alternative tariff meets the following design criteria:

- Complies with the direction of Public Service Law Section 66-s by establishing alternatives to traditional demand-based rate structures. Rate reform specifically, rather than other solutions, is key to enabling accelerated EV charging station buildout and sustainable EV charging station operation and fulfilling all legal requirements.
- Fulfills with the PURPA amendment requirements by having considered EV-specific rates that promote affordable and equitable EV charging options, improve the customer experience and reduce charging times, accelerate third-party investment, and appropriately recover utility marginal costs.
- Provides stable cost outcomes for EV charging loads with load factors ranging from 1% to 20% and mitigates the risk of negative gross margins for EV charging stations with load factors in the low single digits. Stations with low single digit load factors may be new and building traffic or connector stations on rural highways.
- Aligns with actual marginal cost impacts and eliminates or significantly mitigates the impact of inappropriate demand charges.

10. "How should the Commission determine whether the alternative tariffs or cost relief programs are effective (e.g., possible metrics)?"

The Commission should look to the following metrics to gauge the success of the alternative tariffs:

- The number of customers opting into the alternative tariffs and year-over-year ("YoY") growth in new accounts for dedicated EV charging facilities.
    - YoY growth in customer accounts is a proxy for capital investment and the addition of new EV charging facilities.
- Total energy sales (kWh) on the alternative tariffs and continued YoY growth.
    - This figure is a proxy for displaced gasoline as well as EV driver miles, which are critical indicators regarding progress towards CLCPA's decarbonization goals.
- Compliance with Public Service Law Section 66-s, the PURPA amendments, and the CLCPA.
    - An on-bill option to fulfill requirements for rate alternatives to traditional demand-based rate designs.
    - More equitable costs between residential and commercial customers on a per kWh basis to avoid a technology bias and ensure equitable cost relief.
    - No burdensome compliance requirements to avoid increased operating costs and unreasonable delays.
    - Attraction of increased third-party investment to fulfill third-party investment objections.
    - Rate designs that spur EV charging station buildout and thus EV adoption, enabling the state to meet its decarbonization goals.

Reporting metrics should consist of data that can be collected from the utility meter, and EV charging service providers should not be obligated to produce bespoke reports as part of any metrics reporting framework. As a company that operates in over 200 utility territories, utility-by-utility monthly reporting obligations are not sustainable for EV charging station operators like Electrify America and can result in additional overhead costs that may discourage investment and ultimately result in additional costs that must needlessly be passed on to drivers when utility interval meter data would otherwise be sufficient.

11. "How should the Commission determine whether the alternative tariffs or cost relief programs are still necessary in the future?"

Alternative tariffs, such as those which move beyond the demand-based rates originally designed for non-DCFC load profiles, will better reflect cost causation principles through their reforms. As these revised tariffs can make both the utility and the ratepayer whole, there is no need to establish a threshold from which to move away from these principles. Importantly, Public Service Law Section 66-s does not call for temporary alternatives but rather permanent fixes to rate design challenges.

Conclusion

Providing meaningful operational cost relief and helping to mitigate the impacts of demand charges is crucial to transportation electrification, vital for equity goals, and necessary for the successful implementation of Public Service Law Section 66-s and the PURPA amendments. Rate reforms are the critical solution to enabling accelerated EV charging station buildout and sustainable EV charging station operation. New York's neighbors in Massachusetts and Connecticut, as well as dozens of other states, have implemented or are currently implementing EV-specific rate designs to mitigate the impacts of demand charges and facilitate additional DCFC station investment. For New York State to meet its clean air and climate goals, it must do the same.

Electrify America appreciates the opportunity to submit these comments. We would be happy to discuss this matter further and answer any questions the Commission may have.

Respectfully submitted,

/s/ *Tyler Stoff*
Tyler Stoff
Government Affairs & Public Policy Lead—Utility
Electrify America
2003 Edmund Halley Drive
2nd Floor, Suite 200
Reston, VA 20191
tyler.stoff@electrifyamerica.com
(571) 446-8938