RE: Case No. 18-E-0138, Joint Petition for Immediate and Long-Term Relief to Encourage Statewide Deployment of Direct Current Fast Charging Facilities for Electric Vehicles.

Thank you for considering the New York Power Authority’s (NYPA) comments on the Joint Petition for Immediate and Long-Term Relief to Encourage Statewide Deployment of Direct Current Fast Charging (DCFC) Facilities for Electric Vehicles (EV) (Petition). This Petition was joined to the Commission’s generic proceeding on electric vehicle supply equipment in docket 18-E-0138. Within this docket the Commission recently held a Technical Conference on issues regarding electric vehicle supply equipment and infrastructure on July 17th and 18th, including those presented within the Petition. These comments address points raised in the Petition and at the July 17th and 18th Technical Conference regarding near-term rate relief for DCFC.

The Petition requests that the Commission direct investor-owned utilities to immediately modify their Service Classification 2 (“SC-2”) or Small-General non demand-metered tariffs such that DCFC customers: i) qualify for this non-demand metered service classification; ii) are exempt from any kW or kWh limit that would jeopardize their entitlement to take service under that tariff; and iii) have a onetime opportunity to elect to take service under the applicable demand-metered service classification. This immediate relief would constitute a timely recognition of the essential role public DCFCs play in the near term to allay “range anxiety” and unequivocal support for the larger public policy goal of rapidly increasing ZEV adoption.

The Petition Rate Request is Not a Free-Ride for DCFC

The requested relief is not a free-ride for DCFC. The volumetric rate includes charges to recover shared-system costs that are part of the utilities capital expenditure programs. As the utilization rate increases for an eligible DCFC, the amount paid towards the shared system costs will increase.

Further, the Commission should take a holistic view of the contributions of EV drivers to system costs when considering the requested rate change. The Petition’s goal is to bring about market
transformation for EVs that will bring substantial grid benefits through additional home and
workplace charging, which together are projected to be the dominant share of EV load.¹

As shown Appendix B of the Petition, the additional revenue from EV charging in 2025 alone will
be substantially higher than all of the uncollected revenue from the switch to a non-demand rate
from 2018 to 2025 if the volumetric rate proposal were to be adopted. Thus, while it could be
true that in the early years there is a relatively modest cost shift, the excess revenue from EV
charging as whole will be greatly in excess of that amount as the EV market matures.

The Petition Rate Request Will Eliminate Unnecessary Rate Relief

The key feature of the volumetric rate request is that as utilization increases the contribution to
shared-system costs will increase. In evaluating the economics of DCFC, a utilization rate of
about 30% provides a positive net-present value for an operator under conventional demand
charges.² For most investor owned utilities at a utilization rate near or below 30% a switch from
the SC-2 non demand rate back to a conventional demand charge would result in a lower
electric bill for the DCFC operator.³ This natural cap on the incentive ensures that successful
high utilization DCFC will not receive an unnecessary benefit. The business economics of the
proposed rate change also allows low utilization chargers along travel corridors or seasonal
destinations to have a viable business case during the initial years of EV market development.⁴

The natural cap driven by utilization is consistent with Joint Utilities comment at the July 18th
and 19th EV Technical Conference that any departure from standard ratemaking to further public
policy should be eliminated as fast as it can be. In fact, the SC-2 rate proposal is inherently
structured to be able to do that for high utilization DCFC in a way that Con Edison’s BIR rate
cannot since it will only return to the full demand charge rate after 7 years and does not adjust
for the utilization rate of the charger.

¹ See e.g. Charging at Home, Department of Energy, Office of Energy Efficiency & Renewable Energy, available at
² This varies by utility service territory
³ This applies to 4 out of 6 of the investor owned utility service territories.
⁴ Indeed, this increasing contribution to system costs and natural cap on the benefit in essence achieves the public
policy goal established by the Long Island Power Authority’s (LIPA) proposal for DCFC rates in its service territory
(Utility 2.0 Long Range Plan, 2018 Annual Update, Matter 14-01299). There LIPA is considering to create a new off-
bill payment that reduces the price per kWh for a DCFC to an administratively determined set-point. This is meant
to assure DCFC investors that demand charges will not destroy their economic viability, while also limiting the
amount of benefit necessary to encourage DCFC adoption. While manageable in one utility service territory, that
construct is more difficult across all six investor owned utilities as there would need to be a transparent process for
setting and adjusting that set-point that investors could follow and understand and have confidence that
adjustments will follow the policy set out by any Commission directive.
The Number of DCFC Will be Limited

The prospect of countless DCFC concentrating in a region is an illusion. Unlike Net-Energy Metering (NEM) technologies, where the addition of a solar facility next to an existing solar installation does not change the economics of either facility, DCFC operators are competing for charging events and, even with the volumetric rate change, will have substantial capital and operating costs to recover. DCFC operators will therefore be extremely wary of over-populating a region with DCFC facilities. Further, the number of future DCFC in New York State will be intrinsically limited by the fact that electricity, unlike gasoline, can be dispensed at home or at the workplace. In Appendix B of the Petition it was estimated that the most likely number of DCFC to support achieving ZEV would be approximately 1500 DCFC plugs across the entire state.5

DCFC Load May Not Be Coincident With Peak and Does Not Accurately Recover Costs of DCFC

At the July 18th and 19th EV Technical Conference the Joint Utilities presented data from one supercharger customer in the Central Hudson customer service territory as a basis to allege that much of DCFC usage will coincide with the system peak.6 There is very little public data on DCFC utilization at this time. But Thruway’s data from four charging stations in the Central Hudson service territory, and the Connecticut data referenced in the Petition suggest that much of DCFC charging will be random and spread out through the day and would not necessarily coincide with peak. The 2017 utilization rates for Thruway’s DCFC in New York range from 0.23% to 0.34%, hence it is unlikely that a DCFC, let alone all the DCFC, would be operating at peak and contributing to the need for additional system investments. In most cases, a conventional demand charge would impose costs on the DCFC operator that are far in excess of the DCFC’s actual cost causation. The graph below depicts the average utilization rate for all four Thruway DCFC on weekdays in July and August similar to the time period used by Central Hudson. The scale was enlarged so that the utilization could be seen.

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5 Including in Long Island Power Authority service territory.
6 It is likely that free charging for Tesla customers at a restaurant could also be driving unique charging behavior at this DCFC customer.
The Commission should not allow a single point of data on a customer load profile, even assuming it is accurate, to influence its decision. Instead the Commission should adopt NYPA’s proposal for the near-term rate solution for DCFC and study the load from the more than 60 stations and 200 DCFC plugs in New York, and any other public DCFC data available, to develop a long-term rate reflective of the impact DCFC have to the electric system.

**Conventional Demand Charge Will Not Incent Changed Behavior for DCFC**

The demand charge is a blunt instrument that was designed to collect costs and incent behavior associated with sustained loads that are weather dependent. The current demand charge applies throughout all or most of the day and will not encourage DCFC operators to modify their behavior and reduce load during peak periods. The reasoning is that DCFC are designed to deliver a high speed charge whenever a charging customer plugs the DCFC into its vehicle. DCFC operators will not build a new DCFC designed to deliver that fast charge to meet customer expectations, only to throttle its power all day or from 8AM to 10PM when time-of-use demand charges may apply.\(^7\)

**The Commission Should Grant the Petition’s Requested Relief**

Eight speakers in addition to NYPA and the Rocky Mountain Institute at the July 18th and 19th EV Technical Conference spoke of the need to reform demand charges, particularly in the short-term, to alleviate the barrier to entry for DCFC and better align the rate structure with the costs that DCFC impose on the system. As noted at the Technical Conference New York State representatives participated with other representatives from stretching other states from Virginia to Maine to develop the Northeast Corridor Regional Strategy for Electric Vehicle Charging.

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\(^7\) See e.g. Consolidated Edison Company of New York, Inc. Service Class No. 9, Rate II General – Large Time-of-Day. (Demand Delivery Charges applicable Monday to Friday from 8AM to 10PM and 8AM to 6PM).
Infrastructure 2018-2021 published in May 2018. The report specifically calls on all of the northeast states to open proceeding to address DCFC demand charges, consider alternative rate designs, demand charge waivers or other options to ensure that any demand charges are appropriately designed to provide the most equitable, and least burdensome, price signal to EVSE hosts and end users, and do not serve as a de facto impediment to DCFC station installation. The Petition provides compelling reasons why the Commission should adopt such a strategy and grant the requested relief.

Respectfully submitted,

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8 The Northeast Corridor Regional Strategy for Electric Vehicle Charging Infrastructure was developed by the Northeast Corridor Steering Committee, which is comprised of representatives from states in the Northeast Corridor and facilitated by the Northeast States for Coordinated Air Use Management (NESCAUM).