VIA ELECTRONIC MAIL

Kathleen H. Burgess, Secretary Public Service Commission 3 Empire State Plaza Albany, New York 12223-1350 Email: <u>secretary@dps.ny.gov</u>

RE: Case No. 18-E-0138; Joint Petition for Immediate and Long-Term Rate Relief to Encourage Statewide Deployment of Direct Current Fast Charging Facilities for Electric Vehicles; Comments of the Sierra Club and Natural Resources Defense Council

Dear Secretary Burgess:

The Sierra Club and Natural Resources Defense Council ("NRDC") respectfully submit the following comments regarding the Joint Petition for Immediate and Long-Term Rate Relief to Encourage Statewide Deployment of Direct Current Fast Charging Facilities for Electric Vehicles ("DCFC Petition") submitted by the New York Power Authority, New York State Department of Environmental Conservation, New York State Department of Transportation, and New York State Thruway Authority ("Petitioners"). The Sierra Club and NRDC agree with Petitioners that near-term action by the Public Service Commission is required to mitigate the negative impact that existing demand charges have on the installation and operation of direct current fast chargers ("DCFC") and accelerate private investment in DCFC needed to achieve state policy goals. Sierra Club and NRDC also support Petitioners' request for an efficient generic proceeding to develop principles that would guide treatment of demand charges in the longer term.

On July 18th and 19th, the Department of Public Service hosted a technical conference in New York City regarding electric vehicle supply equipment and infrastructure. At that conference, numerous stakeholders affirmed the urgent need to accelerate deployment of electric vehicle ("EV") charging stations to enable growth of the EV market needed to meet New York's Zero Emission Vehicle ("ZEV") Memorandum of Understanding ("MOU") goal of approximately 800,000 ZEVs on the road in New York by 2025, and State Energy Plan commitment to reduce greenhouse gas emissions across the economy by 40 below 1990 levels by 2030. Increasing access to electricity as a more affordable, increasingly cleaner, more reliable, and more locally-generated alternative to petroleum fuels also supports the Reforming the Energy Vision ("REV") goals.¹

Deployment of DCFC specifically will play a critical role breaking down barriers to EV ownership for prospective vehicle purchasers both by helping to overcome range anxiety (through the establishment of a network of DCFC along major travel corridors) and also

¹ These goals include, but are not limited to: making energy more affordable for all New Yorkers, building a more resilient energy system, and supporting cleaner transportation. See <u>https://static1.squarespace.com/static/576aad8437c5810820465107/t/5aec725baa4a99171e5890d4/1525445212467/</u> <u>REV-fm-fs-1-v8.pdf</u>

facilitating EV ownership for urban residents and others who lack access to dedicated off-street parking or workplace charging. With only 29,000 EVs on the road throughout the entire State,² DCFC in both contexts is almost certain to experience low utilization rates until the proportion of EVs on the roads increases substantially. At the same time, these DCFC stations are essential now in order to give car buyers the range confidence and charging certainty needed to invest in EVs: consumer research shows the lack of "robust DC fast charging infrastructure is seriously inhibiting the value, utility and sales potential" of EVs.³ For DCFC in these critical contexts, the charging infrastructure simply must lead the vehicles.

Regrettably, current DCFC deployment is extremely limited in New York. The DOE's Alternative Fuels Data Center reveals there are only 47 non-Tesla DCFC locations with 81 plugs in New York with very low coverage in upstate areas.⁴ The Petitioners find that an additional 1,500 DCFC will be needed by 2025 to support New York's ZEV goals, though even this figure may be conservative.⁵ In short, without swift action to address barriers to DCFC deployment, New York will continue to face significant challenges in meeting its ZEV and climate goals.

As laid out in detail in the DCFC Petition, existing demand charges present a major barrier to the competitive deployment of DCFC at current levels of EV penetration.⁶ Indeed, as Rocky Mountain Institute's EVgo Fleet and Tariff Analysis for California amply illustrates, at low levels of EV penetration, demand charges swamp volumetric charges,⁷ precluding a viable business case for DCFC investments. Moreover, to the extent concerns about modifying or waiving demand charges are based on concerns about <u>when</u> drivers are choosing to utilize DCFC, existing demand charges fail to send a relevant price signal to encourage charging during off-peak periods. Current demand charges in New York are based not on coincident peak demand, but rather on maximum instantaneous demand, which can occur at any time. As set forth in the DCFC Petition, "[g]iven current low DCFC load factors, and that the overall DCFC load profile is comparatively intermittent and random compared to the usual drivers of customer demand, DCFC have coincident utilization rates lower than most other customers."⁸ Demand charges in their current form as applied to DCFC do little to mitigate impacts to peak load.

The DCFC Petition identifies a number of the strategies being piloted around the country to provide near-term relief from demand charges.⁹ In addition to the actions identified in the DCFC Petition, utilities in Maryland and National Grid in Rhode Island have also proposed near-

https://www.afdc.energy.gov/fuels/electricity_locations.html#/find/nearest?fuel=ELEC

² NYSERDA, New York's EV Progress and Direction, Dkt. No. 18-E-0138 (presented July 18, 2018), at Slide 2.

³ Norman Hajjar, New Survey Data: BEV Drivers and the Desire for DC Fast Charging, California Plug-in Electric Vehicle Collaborative, March 11, 2014.

⁴ Alternative Fuels Data Center, Department of Energy, available at:

⁵ The National Renewable Energy Laboratory's EVI-Pro Lite tool is a model that estimates the number of public and workplace charging stations needed to support a given number of light-duty EVs at the state and city level. Plugging in New York's estimated 800,000 vehicle ZEV goal yields 4,087 DCFCs needed across the state. For the purposes of these comments, we assumed EVI-Pro Lite's default shares of plug-in hybrid electric vehicles [PHEVs] and pure battery-electric vehicles [BEVs], 80 percent of EV drivers have access to charging at home, and "partial support" for PHEVs. Different inputs will yield different results.

⁶ DCFC Petition at 10-11.

⁷ Rocky Mountain Institute, EVgo Fleet and Tariff Analysis: Phase 1: California (2017).

⁸ DCFC Petition at 12.

⁹ DCFC Petition at 17.

term reductions in demand charges as part of broader EV-related proposals filed with public utility regulators.¹⁰ Consistent with these utility actions and proposals in other jurisdictions, Sierra Club and NRDC support the establishment of a near-term strategy to mitigate the impact of demand charges at DCFC in New York either by allowing DCFC owners and operators to elect a non-demand rate (such as the one proposed by Petitioners) or offering DCFC owners and operators a significant near-term reduction in applicable demand charges that would phase back in as utilization rates for DCFC increase.

Sierra Club and NRDC also support Petitioners' request for a generic proceeding to consider principles and strategies applicable to demand charges in the longer term. Such a proceeding would be an appropriate venue to consider more sophisticated rate structures, such as ones with demand charges tethered to coincident peak demand, to explore the considerations around collocation of storage with DCFC, and discuss what load shape is desirable and achievable for DCFC in different contexts recognizing the likely immediacy of charging needs for drivers utilizing DCFC along major travel corridors.

In short, near-term solutions to unlock investment in DCFC are urgently needed to support widespread transportation electrification and achieve fast-approaching state ZEV and climate policies. Thank you for your consideration, and we look forward to continued coordination with the Public Service Commission and other stakeholders on transportation electrification topics in this proceeding.

Thank you for your consideration.

Respectfully submitted,

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¹⁰ See Rhode Island Public Utilities Commission, Dkt. No. 4770/4780; Maryland Public Service Commission Case No. 9478.