



September 13, 2021

VIA ELECTRONIC FILING

Hon. Michelle Phillips Secretary to the Commission New York State Public Service Commission Empire State Plaza, Agency Building 3 Albany, New York 12223-1350

Re: Case 18-E-0138 – Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure.

Dear Secretary Phillips:

Advanced Energy Economy Institute and the Alliance for Clean Energy New York (ACE NY) submit for filing their joint comments in response to the utilities' managed charging program proposals, which were published in the State Register on July 14, 2021.¹ The managed charging program proposals from Central Hudson Gas & Electric (Cen Hud), Consolidated Edison Company of New York (Con Edison), and Orange & Rockland Utilities (O&R), were filed on December 4, 2020, and revised proposals from National Grid, New York State Electric & Gas Corporation (NYSEG) and Rochester Gas & Electric (RG&E) were filed on June 4, 2021. These proposals were filed in compliance with the New York Public Service Commission's ("Commission") July 16, 2020, Order Establishing Electric Vehicle (EV) Infrastructure Make-Ready Program and Other Programs.

Respectfully Submitted,

Dane Wagen

Daniel Waggoner

Director

Advanced Energy Economy

 $^{^{\}rm 1}$ New York State Register. July 14, 2021. Vol. XLIII. Issue 28.

Joint Comments on Utility Managed Charging Proposals (Case 18-E-0138)

Advanced Energy Economy Institute Alliance for Clean Energy New York

Introduction

Advanced Energy Economy Institute (AEE Institute) is submitting these Comments in response to the utilities' managed charging program proposals, which were published in the State Register on July 14, 2021.¹ In order to respond to the proposals, AEE Institute is working with Advanced Energy Economy² and the Alliance for Clean Energy New York³ (ACE NY) to craft the comments below. These organizations are referred to collectively in these comments as the "advanced energy companies," "we," or "our."

We were pleased to see the Commission's Make-Ready Infrastructure Order⁴ acknowledge the valuable role managed charging can play in relieving capacity constraints and reducing system costs. While we are generally supportive of the utilities' program proposals, we offer some recommendations below on how these programs can be expanded and improved to better address the breadth of the EV market.

We appreciate the ongoing efforts of the Commission and Staff to develop a suite of programs to support vehicle electrification, which is critical to reaching the state's transportation electrification goals and reducing vehicle emissions — New York's largest source of greenhouse gas (GHG) emissions. Our comments below provide recommendations that are generally applicable to all the utilities' managed charging proposals.

¹ New York State Register. July 14, 2021. Vol. XLIII. Issue 28.

² AEE is a national business association representing leading companies in the advanced energy industry. AEE supports a broad portfolio of technologies, products, and services that enhance U.S. competitiveness and economic growth through an efficient, high-performing energy system that is clean, secure, and affordable.

³ ACE NY's mission is to promote the use of clean, renewable electricity technologies and energy efficiency in New York State, in order to increase energy diversity and security, boost economic development, improve public health, and reduce air pollution.

⁴ Case No. 18-E-0138. Order Establishing a Utility-Supported EV Infrastructure Make-Ready Program. Filed July 16, 2020.

Expansion of Programs to Cover Additional Segments of EV Charging

The Commission's Make-Ready Infrastructure Order directs the utilities to "file proposals for active or managed charging programs for mass-market customers." Given the directive to focus these program proposals on "mass-market customers," it is reasonable that many of the proposed programs focus on residential EV charging. While this is a critical segment given that 80% of EV charging currently occurs at home, serving residential customers alone does not meet the directive for a true "mass market" managed charging program. In addition to residential customers, "mass market customers" also includes small commercial customers, which means that at a minimum, the proposed programs should be inclusive of some small commercial businesses.

Beyond providing more complete coverage of mass-market customers, we recommend that the utilities also include medium-, and heavy-duty commercial fleets and multi-unit dwellings. Specifically, the following segments should be more fully considered under the current program proposals:

a. Light-, Medium-, and Heavy-Duty Commercial Fleets: Given that fleets are large loads with predictable charging patterns, and that, in many instances, fleet vehicles sit idle for long periods of time, they are good candidates for load shifting.⁷ As noted by Enel X in their initial comments on the utilities' managed charging proposals, "managed charging can help steer fleet charging away from system peaks, avoid local peaks, and improve the overall economics of fleet electrification." Fleets charging patterns differ from residential charging, which should be considered when developing programs for this customer class. Managed charging programs designed for fleets should focus on the charger itself rather than customer behavior. Given the importance of fleet electrification to New York's ability to achieve the transportation emission reductions required by the Climate Leadership and Community Protection Act (CLCPA), which commits New York to a 40-percent reduction in GHG emissions from 1990 levels by 2030, and 85 percent by 2050, activities that improve the economics of fleet electrification should be pursued. Similarly, in the first round of comments on the managed charging program proposals, Greenlots, the Natural

⁵ Case No. 18-E-0138. Order Establishing a Utility-Supported EV Infrastructure Make-Ready Program. Filed July 16 2020.

⁶ U.S. Dept. of Energy, Charging at Home, https://www.energy.gov/eere/electricvehicles/charging-home.

⁷ Case No. 18-E-0138. Advanced Energy Economy Institute, Alliance for Clean Energy New York, Inc. *Comments on Staff EVSE&I Whitepaper*. Page 24. Filed on April 27, 2020.

⁸ Case No. 18-E-0138. Enel X North America, inc. Comments on NY Utilities Managed Charging Proposals. Page 10. Filed April 2, 2021.

⁹ It is worth noting that the state's own 2017 progress report on the 2015 State Energy Plan noted that, "[t]he state's climate goals cannot be achieved without a rapid transition to vehicles powered by electricity." N.Y. State Energy Planning Bd., The Energy to Lead: Biennial Report, p. 56.

Resources Defense Council, Sierra Club, Environmental Defense Fund, Siemens, and Veloce Energy, and Enel X called on the utilities to expand managed charging programs to fleets. ¹⁰ Serving as an example, Con Edison's existing SmartCharge New York Program was extended to include medium- and heavy-duty vehicles in 2018, and as of December 4, 2020, there were 25 transit buses and three eCanter trucks enrolled in that program. ¹¹ All other utilities should likewise look to expand managed charging programs or create new options tailored to light-, medium- and heavy-duty fleets.

- b. Workplace Charging: As we noted in our opening comments on the *Department of Public Service Staff Whitepaper Regarding Electric Vehicle Supply Equipment and Infrastructure*, workplace charging offers an "attractive use of ratepayer funds because their long dwell times allow for the type of flexibility that creates a good use case for managed charging." ¹² Because vehicles that charge at workplaces typically do so on a level 2 charger during the middle of the day, they are prime candidates for "providing opportunities to manage charging timing and charging speed to smooth load and help to integrate renewable energy." ¹³ All utilities should explore ways in which to expand managed charging opportunities to workplace charging.
- c. Multi-Unit Dwellings: New York has a large number of urban locations, most notably New York City, with a high percentage of residents living in Multi-Unit Dwellings (MUDs) in both rental and resident-owned units. Residents of MUDs often do not have access to their own charging stations at their place of residence, so they charge their vehicles elsewhere, such as at work, shopping centers, or other public charging locations. Because of this, it is beneficial that managed charging programs in urban areas focus on the behavior of individual drivers and vehicles rather than the charging station itself. Doing so ensures that the benefits of managed charging can be realized even when a vehicle is charging away from home. Con Edison currently offers this type of

 $^{^{10}}$ Case No. 18-E-0138. Enel X North American, Inc. at page 2, filed April 2, 2021 and

Natural Resources Defense Council, Sierra Club, Environmental Defense Fund, Siemens, and Veloce Energy at page 10, filed April 1, 2021, and Greenlots at page 2, filed April 1, 2021.

¹¹ Case No. 18-E-0138. Con Edison. EV Managed Charging Filing. Page 3. Filed December 4, 2020.

¹² Case No. 18-E-0138. Advanced Energy Economy Institute, Alliance for Clean Energy New York, Inc. Comments on Staff EVSE&I Whitepaper Comments. Page 13. Filed April 27, 2020.

¹³ Case No. 18-E-0138. Natural Resources Defense Council, Sierra Club, Environmental Defense Fund, Siemens, and Veloce Energy. *Joint Commenters Managed Charging Comments*. Page 10. Filed April 1, 2021.

program by allowing participating vehicle owners to use a FleetCarma connected car device. 14 Likewise, National Grid's program proposal supports vehicle-based telematics. 15 These current efforts can serve as a base for expanding this important use case for managed charging.

Flexibility in Program Design and Timely Assessment of Programs

As stated by multiple commentors in their initial comments on the utilities' proposals, New York is still in a relatively early stage of EV market adoption and utilities should use this time to explore various program designs. While all utilities should offer time-of-use rates, ¹⁶ this is not a silver bullet, nor the only solution available to accommodate the full range of EV types and consumer needs. New technologies that enable both a greater response to passive rate structures, such as EV-specific TOU rates, and a shift away from programs that rely on continuous behavior change and toward a more "set it and forget it" style approach will continue to emerge. Utilities should evaluate customer response to existing programs and be prepared to develop new options suited to their service territories and that take advantage of emerging technologies, such as vehicle-to-grid (V2G) capabilities that have the potential to turn EV fleets into bulk energy storage. What works best for the urban customers of Con Edison and National Grid may not work for the customers of NYSEG. As noted by Enel X, there likely will not be a "one-size-fits-all managed charging program," and the "PSC should consider the collective Utilities' managed charging proposals as a research opportunity with the intent to inform required modifications for subsequent and more permanent managed charging programs based on best practices."17

We also agree with the comments of other parties, including Greenlots and the Natural Resources Defense Council, Sierra Club, Environmental Defense Fund, Siemens, and Veloce Energy, who stated that the Commission should set clear timeframes for review and improvement on these programs. As Greenlots stated in their initial comments, "the Commission should clarify that these programs will be reviewed in conjunction with other infrastructure deployment programs at the midpoint review" and they "further recommend that the Commission identify additional points of review following the midpoint review."18

¹⁴ Con Edison. EV Managed Charging Filing. Page 2.

¹⁴ Case No. 18-E-0138. Staff Whitepaper Regarding Electric Vehicle Supply Equipment and Infrastructure Deployment. Filed January 13, 2020.

¹⁵ Case No. 18-E-0138. National Grid. NG Managed Charging Proposal. Page 10. Filed June 4, 2021.

¹⁶ Enel X North America, inc. Comments on NY Utilities Managed Charging Proposals. Page 2.

¹⁷ Enel X North America, inc. Comments on NY Utilities Managed Charging Proposals. Page 2.

¹⁸ Greenlots. Managed Charging Proposal Comments. Page 11.

Conclusion

We appreciate the Commission's recognition of the importance of managed charging programs and the utilities' willingness to continue exploring programs that will help accelerate EV deployment, increase the grid benefits of EV charging, and decrease the need for additional capital investment. As the EV market continues to grow in New York, the Commission and utilities would benefit from having a robust suite of programs in place that meet the diverse needs of different EV types and EV owners. The current proposals are a positive first step towards achieving these. We now urge the Commission to work with utilities and stakeholders alike to expand these offerings.