

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on September 12, 2018

COMMISSIONERS PRESENT:

John B. Rhodes, Chair
Gregg C. Sayre
Diane X. Burman, dissenting
James S. Alesi

CASE 16-E-0060 - Proceeding on Motion of the Commission as to
the Rates, Charges, Rules and Regulations of
Consolidated Edison Company of New York, Inc.
for Electric Service.

ORDER EXPANDING ELECTRIC VEHICLE CHARGING PROGRAM ELIGIBILITY

(Issued and Effective September 12, 2018)

BY THE COMMISSION:

INTRODUCTION

On March 1, 2018, Consolidated Edison Company of New York, Inc. (Con Edison or Company) filed a petition seeking to expand the eligibility for its existing SmartCharge New York off-peak electric vehicle (EV) charging program (SmartCharge NY Program or Program). In its petition, the Company proposes to expand Program eligibility from light-duty EVs, such as passenger vehicles, to also include medium- and heavy-duty EVs, such as trucks and buses. Con Edison does not propose to modify the Program budget and does not require any tariff modifications to implement its proposal.

This Order approves the Company's proposal to expand the SmartCharge NY Program to include medium- and heavy-duty EVs. This expansion of the existing program will allow Con

Edison to test and monitor customer response to incentives designed to encourage off-peak charging for a new subset of EVs, which are not currently eligible to participate and whose operational needs are significantly different than those EVs that can participate in the current Program. Further, expanding the SmartCharge NY Program should facilitate significant carbon reduction and local air pollution benefits as the predominantly diesel-fueled medium- and heavy-duty vehicles are replaced by low- and zero-emitting EVs. This Order effectuates the expansion of the Program as contemplated in the Company's current rate plan,¹ and does so without requiring additional program expenditures.

BACKGROUND

The SmartCharge NY Program, which was approved in the 2017 Rate Order, was developed to examine EV customers' responses to non-tariff rebates designed to encourage off-peak charging of light-duty passenger EVs as part of Con Edison's current rate plan. Under the current Program, Con Edison provides participating customers with a communicating diagnostics device that those customers plug into the on-board diagnostics port of their enrolled EV, which allows the Company to monitor the location and charging status of enrolled vehicles. Participation in the SmartCharge NY Program is currently limited to light-duty EVs.

Con Edison provides one-time incentives to Program participants for signing up, immediately participating, and encouraging Program growth. Specifically, participants receive a \$150 enrollment incentive, a \$25 incentive for installing the

¹ Case 16-E-0060, Consolidated Edison Company of New York, Inc. - Electric Rates, Order Approving Electric and Gas Rate Plans (issued January 25, 2017) (2017 Rate Order).

diagnostics device within one week of enrollment, and \$25 for referring other customers to the Program. Con Edison also provides several ongoing incentive payments to ensure that customers continue to both participate in the program once enrolled and to charge during off-peak hours. Participants receive \$5 per month for each month enrolled in the SmartCharge NY Program and a \$0.05 per kilowatt-hour (kWh) rebate on all EV charging during off-peak hours year-round. Participants also have the opportunity to earn an additional \$20 per month during the months of June through September if they do not charge enrolled EVs during weekday on-peak hours.

PETITION

In its petition, Con Edison notes that additional EV categories are being introduced into the Company's service territory, including electric Metropolitan Transportation Authority (MTA) buses and new medium-duty electric trucks. As a result, and consistent with the 2017 Rate Order, the Company seeks approval to expand its existing SmartCharge NY Program to include medium- and heavy-duty EVs. The Company intends to fund the expanded Program through existing funds allocated to the Program in the 2017 Rate Order, and does not anticipate exceeding that budget as a result of the expansion.

LEGAL AUTHORITY

Pursuant to Public Service Law (PSL) §§5, 65 and 66, the Commission has the legal authority to review, as well as modify, reject or approve utility filings. Therefore, the Commission has the legal authority to review and make determinations concerning the SmartCharge NY Program, as described in this Order.

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking was published in the State Register on May 30, 2018 [SAPA No. 16-E-0060SP6]. The time for submission of comments pursuant to the Notice expired on July 30, 2018. The comments received are addressed below.

COMMENTS

Comments were submitted by CALSTART on July 13, 2018, and by the City of New York (City), the MTA, and Greenlots on July 30, 2018. In addition, BYD America (BYD) submitted comments on July 31, 2018.² Each of the five parties was supportive of Con Edison's proposal to expand the SmartCharge NY Program to include medium- and heavy-duty EVs, as well as the Program's goals and performance to date. The parties identified a range of EV benefits that support many of New York State's and New York City's policy goals, including general environmental and public health benefits, the value and necessity of coordinated EV integration with the grid, and increased economic efficiency for vehicle owners in the form of fuel, maintenance, and rate savings. In addition, the City expressed satisfaction that the Company is not seeking incremental funding to expand the Program.

Both the City and CALSTART noted public health and environmental justice benefits specific to electrifying medium- and heavy-duty vehicles, especially with regard to the resulting reduction in particulate pollution emissions by these larger vehicle classes that are currently dominated by diesel

² Although BYD's comments were submitted after the public comment period was closed, they are considered herein as they further develop the record in this proceeding.

combustion. As noted by CALSTART, cab-over style trucks,³ local delivery trucks, terminal tractors,⁴ and other diesel-powered vehicles in New York City often operate as part of captive fleets on locally-defined routes in densely-populated urban neighborhoods already suffering from chronic air pollution, particularly those areas near ports, airports, and truck terminals. CALSTART states that conversion of this transportation sector to EVs will improve environmental conditions in these areas, and these actions should be facilitated through the Program expansion requested in Con Edison's petition.

The parties each note specific benefits of expanding the SmartCharge NY Program related to advancing the market for medium- and heavy-duty EVs. CALSTART and BYD state that the medium- and heavy-duty EV sector represents a critical opportunity for expedited adoption of zero-emissions transportation, particularly as municipal and commercial fleets are generally purchased in large lots and are designed for longer service lives than standard passenger vehicles. CALSTART and Greenlots note that, by conveying EV charging price signals to commercial and municipal fleet operators, an expanded SmartCharge NY program would effectively align efficient financial decision-making with social, environmental, and sustainability benefits beyond economic self-interest. MTA also supports the Program expansion and, for heavy-duty EVs, cites anticipated benefits for its own activities in large-scale transportation electrification and system modernization, as well

³ Cab-over style trucks are flat-faced trucks commonly used as tractor trailers and garbage collection vehicles.

⁴ Terminal tractors, also known as yard trucks, are used in ports and warehousing for moving cargo within a site.

as its plan to participate in the SmartCharge NY Program as part of its ten electric bus pilot program.

CALSTART, the City, and BYD point out specific logistical challenges associated with proliferation of medium- and heavy-duty EVs, particularly inflexible charging loads and schedules, costly demand charges, and the availability of adequate charging infrastructure. CALSTART identifies several potential burdens on the grid with respect to charging larger EVs and, specifically, the possibility of concentrated and simultaneous charging at single locations (e.g., transit bus depots), resulting in dramatic increases in local network peak demand that may require additional or upgraded infrastructure and increased demand charges. CALSTART further notes that the larger battery systems required by medium- and heavy-duty EVs draw on disproportionately greater levels of power compared to light-duty vehicles, further amplifying the effects of these vehicles on the electric power system. Although CALSTART, the City and BYD acknowledge these potential issues, they identify off-peak charging as a practical countermeasure, and consider the SmartCharge NY program and its expansion as an opportunity for Con Edison to anticipate EV demands on the grid, and to investigate and test coordinated mitigation strategies. In particular, CALSTART states that the expansion of the Program is a valuable opportunity to study enrollment rates, program participation, and monitor the efficacy of incentives to influence EV customer charging behavior, thereby allowing Con Edison to anticipate, analyze, and mitigate adverse system impacts.

Although Greenlots and the MTA express their support for the Company's petition, both parties propose further actions to incentivize use of medium- and heavy-duty EVs. Greenlots encourages the development of future charging programs that

could provide even greater grid benefits for EV owners, and customers as a whole, by functioning more dynamically in the manner of utility demand response programs. MTA requests that the Commission expand financial incentives to EVs beyond the Con Edison SmartCharge NY program, and urges Con Edison and other parties to develop an off-peak EV charging tariff which reduces delivery rates based on the value of system peak demand benefits, as well as the monetary value of the environmental benefits that EVs provide. MTA notes that Con Edison has recently developed a mathematical calculation of environmental benefits stemming from EV adoption,⁵ which it states should form the basis of the environmental monetary credit. MTA requests that the Commission direct Con Edison to propose such an off-peak EV charging tariff, and that the Company circulate such proposal to the MTA and other stakeholders for comment.

DISCUSSION

Con Edison's proposal to expand eligibility for its SmartCharge NY Program to medium- and heavy-duty EVs is adopted. Expanding eligibility of the Program will allow the Company to begin testing the efficacy of financial incentives to encourage medium- and heavy-duty EV owners to charge their vehicles during off-peak periods. As noted by numerous parties, the medium- and heavy-duty EV market experiences significant complications compared to light-duty EVs, including less flexibility on where and when EV charging can occur. Expanding the existing Program to include medium- and heavy-duty EV will provide insight into the existing complications and allow Con Edison an opportunity to develop ways to address and mitigate those issues. Further, uncontrolled electrification of the medium- and heavy-duty EV

⁵ Case 16-E-0060, supra, Con Edison Outcome-Based EAM Collaborative: Emissions Metric Report (filed April 30, 2018).

segment could pose a significant risk for the need to build new peak-related infrastructure if charging patterns are not carefully monitored and coordinated since each such vehicle generally has a larger battery and greater demand draw than those used in light-duty EVs.

As noted by the parties, expanding the SmartCharge NY Program will also provide significant environmental and public health benefits. Transportation generates the largest share by sector of greenhouse gas emissions (GHGs) in New York State, accounting for 33.4% of total emissions statewide,⁶ and a slightly lower percentage of 29.9% in New York City due to extensive usage of public transportation.⁷ In 2016, medium- and heavy-duty trucks and buses were responsible for 16.5% of all vehicle emissions in New York City.⁸ Although light-duty passenger vehicles account for a majority of fossil fuel consumption and emissions by the transportation sector, the medium- and heavy-duty road transportation sector accounts for a disparate share of total automobile pollution, particularly nitrogen oxides (NO_x) and particulate matter. NO_x, particulate matter, and other criteria air pollutants generated by the transportation sector disproportionately affect urban areas, particularly disadvantaged neighborhoods, due to their proximity to areas of heavy traffic, and are known to contribute to asthma and other health impacts. The proposed expansion of the

⁶ New York State Energy Research and Development Authority, New York State Greenhouse Gas Inventory: 1990-2015 Final Report (March 2018), available at: <https://www.nyserda.ny.gov/-/media/Files/EDPPP/Energy-Prices/Energy-Statistics/greenhouse-gas-inventory.pdf>.

⁷ The City of New York, Inventory of New York City Greenhouse Gas Emissions in 2015 (April 2017), available at: https://www.dec.ny.gov/docs/administration_pdf/nycghg.pdf.

⁸ Id. at 11.

SmartCharge NY Program to medium- and heavy-duty vehicles will contribute to New York State's GHG reduction goals, improve public health, and simultaneously mitigate impacts on the electric grid.

While the Commission is mindful of the ongoing Statewide proceeding to explore utility efforts to support EV charging,⁹ it is reasonable to move forward with the Company's petition at this time for the following reasons. First, the Commission directed Con Edison to consider expanding the SmartCharge NY Program to larger vehicle classes as part of 2017 Rate Order. In addition, the Company proposes to expand upon its existing Program to include medium- and heavy-duty EVs without requiring additional program funding. Finally, it is critical to begin testing the efficacy of off-peak charging programs for the full gamut of EVs at a time when EV penetration is comparatively low.

Although the Commission appreciates Greenlots and MTA's proposals to further develop the SmartCharge NY Program to be more dynamic, similar to a demand response program, and to develop an EV charging rate design to provide monetary credits based in part on the environmental benefits that EVs provide, respectively, the Commission declines to require Con Edison to pursue these options at this time in this proceeding. Instead, these proposals, which represent significant departures from the existing SmartCharge NY Program, are better suited for consideration as part of the EV Supply Proceeding.

⁹ Case 18-E-0138, Electric Vehicle Supply Equipment and Infrastructure, Order Instituting Proceeding (issued April 24, 2018) (EV Supply Proceeding).

The Commission orders:

1. Consolidated Edison Company of New York, Inc.'s petition to expand eligibility for its SmartCharge New York Program to include medium- and heavy-duty electric vehicles is approved.

2. This proceeding is continued.

By the Commission,

(SIGNED)

KATHLEEN H. BURGESS
Secretary