# STATE OF NEW YORK PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on April 20, 2023

#### COMMISSIONERS PRESENT:

Rory M. Christian, Chair Diane X. Burman James S. Alesi Tracey A. Edwards John B. Howard David J. Valesky John B. Maggiore

CASE 23-E-0070 - Proceeding on Motion of the Commission to Address Barriers to Medium- and Heavy-Duty Electric Vehicle Charging Infrastructure.

ORDER INSTITUTING PROCEEDING
AND SOLICITING COMMENTS

(Issued and Effective April 20, 2023)

BY THE COMMISSION:

#### INTRODUCTION

The Public Service Commission (Commission) has long recognized the importance of the electrification of the transportation sector in the attainment of New York State's climate goals. To advance these goals, the Commission has instituted several proceedings and implemented policies to incentivize the development of electric vehicle (EV) charging infrastructure and programs. Thus far, the focus of these proceedings has largely been on light-duty passenger EVs, such as sedans, pickup trucks, and Sport Utility Vehicles.

To ensure a holistic approach that supports the decarbonization goals codified in the Climate Leadership and Community Protection Act (CLCPA), the Commission is commencing

this proceeding to address the electrification needs of the State's medium— and heavy—duty (MHD) EV sector.¹ While the exact scope of this proceeding will be developed with the aid of interested stakeholders, EV infrastructure investments should prioritize disadvantaged communities, including Clean Air Act nonattainment areas, that bear a disproportionate burden of pollution from trucks and buses.² The proceeding will also develop proactive planning approaches to ensure the grid infrastructure is prepared to enable the growing EV charging needs across New York State.

To aid stakeholder input and focus this proceeding on the most salient topics and issues, a list of questions is included in the Appendix to this Order. Initial comments on these questions should be filed in Case 23-E-0070 by May 22, 2023, with any replies filed by June 5, 2023. Following the receipt of replies, Department of Public Service Staff (Staff) will submit a Whitepaper to be issued for public comment and considered by the Commission.

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The U.S. Environmental Protection Agency (EPA) classifies vehicles by weight with light-duty vehicles weighing under 8,500 pounds and heavy-duty vehicles weighing over 8,501 pounds. U.S. Department of Energy, Alternative Fuels Data Center, Vehicle Weight Classes & Categories, https://afdc.energy.gov/data/10380.

The CLCPA, codified, in part, in New York State Environmental Conservation Law (ECL) §75-0101, et seq., directs State agencies to dedicate funding to Disadvantaged Communities and directs the Climate Justice Working Group to establish criteria to define Disadvantaged Communities.

#### BACKGROUND

In the EV Instituting Order, 3 the Commission determined that New York's emerging EV market requires regulatory attention to remove inappropriate obstacles to their adoption and ensure critical electric vehicle supply equipment (EVSE) infrastructure is in place to support the State's Zero Emissions Vehicle (ZEV) targets and environmental and clean energy goals. 4 To date, light-duty vehicles have been the primary focus of the Commission's actions on vehicle electrification.

On July 16, 2020, the Commission issued the Make-Ready Order. <sup>5</sup> The Make-Ready Order unlocked significant investment to support light-duty vehicle electrification at scale, and authorized three programs aimed at advancing the MHD vehicle industry in New York, to be implemented by the Joint Utilities. <sup>6</sup> The MHD Fleet Make-Ready Pilot Program funds the utility-side make-ready costs for charging stations that serve MHD vehicles.

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

On October 24, 2013, Governor Cuomo entered into a Memorandum of Understanding with the Governors of California, Connecticut, Maryland, Massachusetts, Oregon, Rhode Island, and Vermont agreeing to coordinate and collaborate to support and ensure the effective and efficient implementation of ZEV regulations and programs. State Zero-Emission Vehicle Programs, Memorandum of Understanding available at: https://www.nescaum.org/documents/zev-mou-8-governors-signed-20131024.pdf

<sup>&</sup>lt;sup>5</sup> Case 18-E-0138, <u>supra</u>, Order Establishing Electric Vehicle Infrastructure Make-Ready Program And Other Programs (issued July 16, 2020) (Make-Ready Order).

The Joint Utilities consist of: Central Hudson Gas & Electric Corporation (Central Hudson); Consolidated Edison Company of New York, Inc. (Con Edison); New York State Electric & Gas Corporation (NYSEG); Niagara Mohawk Power Corporation d/b/a National Grid (National Grid); Orange and Rockland Utilities, Inc. (O&R); and Rochester Gas and Electric Corporation (RG&E).

The second program is the Fleet Assessment Service which provides fleet operators with site feasibility and rate analysis to support electrification efforts. Additionally, the Make-Ready Order directed the Joint Utilities to work with four upstate transit fleet operators, allocating a total of \$10 million in make-ready funding in support of the goal to electrify 25 percent of these fleets by 2025.

On March 1, 2023, Staff filed the "Electric Vehicle Make-Ready Program Midpoint Review and Recommendations Whitepaper" (Whitepaper), 9 which proposed interim programmatic changes to the authorized Make-Ready Program, including a \$30 million increase in funding for the MHD Make-Ready Pilot and streamlining the Fleet Assessment Service application process. Staff recommended these interim actions to improve certain program design elements identified during the Midpoint Review but suggested that any extensive modifications and MHD-related policy decisions should be considered separately.

### DISCUSSION

The Commission is initiating this proceeding to consider a comprehensive framework to identify and address what immediate and long-term actions will best support MHD EV market growth. This includes addressing barriers to the efficient and timely development of the charging infrastructure and considering revisions to utility planning process for proactive investment in EV infrastructure, particularly in high-priority locations. The need for this proceeding is highlighted by the

<sup>&</sup>lt;sup>7</sup> Make-Ready Order, p. 124.

<sup>8</sup> Make-Ready Order, p. 132.

<sup>&</sup>lt;sup>9</sup> Case 18-E-0138, <u>supra</u>, Department of Public Service Staff Electric Vehicle Make-Ready Program Midpoint Review And Recommendations Whitepaper (filed March 1, 2023).

CLCPA's ambitious goals to reduce economy-wide greenhouse gas (GHG) emissions by 40 percent from 1990 levels by 2030, and to achieve net zero GHG emissions by 2050.10

The transportation sector, which produced approximately 28 percent of New York's GHG emissions in 2019 and is the second largest emitting sector of the economy, is a key component of meeting the CLCPA's goals. 11 According to data provided by the New York State Department of Environmental Conservation, as of March 2023, there are 547,017 registered trucks and buses in New York State. These vehicles are of various sizes and use cases, thereby necessitating a broad spectrum of charging solutions.

#### Communities of Concern

The Commission expects that a primary focus of this proceeding will be on meeting the needs of Disadvantaged Communities and other areas that bear a disproportionate burden of pollution from trucks and buses. Emissions from trucks and buses contribute 52 percent of the nitrogen oxide and 45 percent of the fine particulate matter from all on-road vehicles, both of which irritate respiratory systems and worsen the effects of asthma. Supporting the electrification of MHD vehicles in sensitive regions, such as Disadvantaged Communities and Clean Air Act non-attainment areas, will directly addresses the environmental burdens placed on these communities.

<sup>10</sup> ECL \$75-0107.

Climate Action Council, Final Scoping Plan. Scoping plan, Full Report (issued December 2022), Chapter 4, Section 4.1 Summary of Sectoral Emissions, p. 49. Available at: https://climate.ny.gov/-/media/project/climate/files/NYS-Climate-Action-Council-Final-Scoping-Plan-2022.pdf

Union of Concerned Scientists, Exposure to Diesel Particulate Pollution in New York State, https://www.ucsusa.org/resources/diesel-pollution-ny#readonline-content.

The Clean Air Act non-attainment areas are locations that do not meet the EPA's minimum national standards for air quality, and where states are required to implement air quality measures to mitigate hazards. 13 New York State has 11 counties that are considered non-attainment areas: Bronx, Chautauqua, Kings, Nassau, New York, Queens, Richmond, Rockland, St. Lawrence, Suffolk, and Westchester. 14

The Commission anticipates that significant increases in the availability of zero-emission public transportation services and infrastructure will be needed to adequately address the non-attainment counties and to enable the 40 to 75 percent of zero-emission MHD vehicle sales by 2035 required by the Advanced Clean Trucks regulation. Developing a comprehensive framework for a cost-effective make-ready program for the MHD vehicle sector can accelerate investment in the charging infrastructure needed to achieve the ambitious GHG reduction goals required by the CLCPA.

#### Proactive EV Infrastructure Planning and Investment

Proactive planning for the grid infrastructure needed to serve future electrification load must anticipate the location and magnitude of future demand. A successful proactive planning process will identify high priority infrastructure upgrades before issues stemming from capacity needs arise. The

<sup>13</sup> Clean Air Act: A Summary of the Act and Its Major Requirements Updated September 13, 2022. A copy of this report can be found at the following website: https://crsreports.congress.gov/product/pdf/RL/RL30853#:~:text

https://crsreports.congress.gov/product/pdf/RL/RL30853#:~:text = The%20act%20establishes%20federal%20standards, major%20sources %20of%20air%20pollution

United States Environmental Protection Agency, Current Nonattainment Counties for All Criteria Pollutants (data current as of February 28, 2023), https://www3.epa.gov/airquality/greenbook/ancl.html#NY.

<sup>&</sup>lt;sup>15</sup> 6 NYCRR \$218-4.1.

Commission previously directed the Joint Utilities to develop proactive planning processes to anticipate the need for local transmission and distribution system upgrades to enable the renewable interconnections required to achieve the State's renewable energy goals. 16

As is the case for the successful deployment of renewable generation, proactive planning will be critical to achieving the broader adoption of EVs across light-, medium- and heavy-duty classes, particularly for electric trucks and buses with higher-capacity batteries for propulsion and chargers that can exceed a megawatt in capacity. Therefore, it is critical to ensure that New York's grid infrastructure will be capable of serving the future loads created by the MHD vehicles as these businesses embark on vehicle electrification. Ascertaining the location of hotspots for EV charging, including the clustering of existing depots and high traffic destinations, such as highway rest areas, as well as any appropriate futureproofing mechanisms, can help identify well placed location hubs.

## Stakeholder Process

To ensure we adequately identify potential barriers to EV charging infrastructure and develop effective solutions, the Commission looks to the active engagement of all interested parties. As the utilities will serve a central role, the Commission expects that Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation (d/b/a National Grid), Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation will

<sup>16</sup> Case 20-E-0197, Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, Order on Local Transmission and Distribution Planning Process and Phase 2 Project Proposals (issued September 9, 2021).

fully participate in all aspects this proceeding. We also encourage the active participation of the Long Island Power Authority, New York Power Authority, New York State Energy Research and Development Authority, New York State Department of Transportation, New York State Thruway Authority, New York State Department of Environmental Conservation, other interested State agencies, and stakeholders.

We note that several stakeholders have already called for the Commission to address the MHD sector at a broader scale than the existing MHD programs. This proceeding will serve as a forum to consider the input of these stakeholders and we look forward to their participation.

#### CONCLUSION

The Commission finds that a proceeding is needed to focus on MHD EV considerations to further the electrification of the transportation sector. This proceeding will examine potential barriers to MHD EV charging infrastructure in New York State and seek to develop proactive planning approaches to ensure the grid infrastructure is prepared to enable the growing EV charging needs across New York State. These efforts will serve as an important step towards building out the infrastructure needed to meet the States' clean energy and climate goals and will further the public interest.

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On May 11, 2022, CALSTART, Environmental Defense Fund, National Resources Defense Council, Sierra Club, South Bronx Unite, and WE ACT for Environmental Justice filed a joint petition in Case 18-E-0138, highlighting the need for a statewide MHD make-ready program and a comprehensive stakeholder process.

### The Commission orders:

- 1. A proceeding is instituted to examine potential barriers to medium- and heavy-duty electric vehicle charging infrastructure and address proactive utility planning needs in New York State.
- 2. Interested stakeholders shall file initial comments on the questions posed in the Appendix to this Order by May 22, 2023. Comments in response to the initial comments shall be filed by June 5, 2023. All comments shall be filed in Case 23-E-0070.
- 3. Department of Public Service Staff shall prepare a Whitepaper addressing the comments received in response to Ordering Clause No. 2, which shall be subject to public notice and comment and contain recommendations for the Commission's consideration.
- 4. In the Secretary's sole discretion, the deadlines set forth in this Order may be extended. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least three days prior to the affected deadline.
  - 5. This proceeding is continued.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS Secretary

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Questions soliciting stakeholder comment on medium- and heavyduty electrification efforts as well as proactive planning.

Medium- and Heavy-Duty Vehicles:

- 1. What are the specific challenges to developing charging infrastructure for medium- and heavy-duty (MHD) vehicles?
  - a. How do these challenges differ between electric utility service territories?
- 2. How do charging needs differ for school buses, transit buses, delivery trucks, garbage trucks, box trucks, stake trucks, transport refrigeration units, and other specialized equipment?
  - a. What other types of MHD vehicles, if any, should be considered in this proceeding?
- 3. What segments of MHD vehicles are likely to have broad electric model availability in the near-term and which segments are likely to electrify on a longer timeline?
- 4. What locations or types of locations should be considered as potential hubs for MHD vehicle charging?
  - a. What criteria should be considered when selecting locations for potential hubs upstate and downstate?
- 5. What considerations should Staff take regarding incentivizing infrastructure siting and MHD charging to mitigate impacts in Disadvantaged Communities overburdened by truck and bus traffic and pollution?
- 6. What considerations are important for stakeholder engagement concerning MHD electrification? Describe effective strategies to engage that can meet the needs of fleets with 6 vehicles or less.
- 7. Identify barriers that exist in the current MHD Make-Ready Pilot Program that could be modified in a successor to the pilot.
  - a. Provide comments on how to address the barriers to building publicly accessible charging that serves MHD vehicles (e.g., highway truck stops).
  - b. Provide comments on how to address the barriers to building private or limited access charging that

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serves MHD vehicles (e.g., depots, warehouses, and distribution centers).

8. Through the Make-Ready program, utilities offer fleet assessment services to help prepare for the transition to electric vehicles. What additional technical assistance is needed to support the transition to mass MHD electrification?

Proactive EV Infrastructure Planning and Investment:

- 9. Discuss how proactive EV infrastructure planning differs for light-duty and MHD vehicle market segments?
- 10. How should proactive planning consider concurrent policy goals to reduce personal vehicle usage and increase the use of shared modes (including public transit)?
- 11. Discuss how battery energy storage systems and other distributed energy resources can be implemented in both short-term and long-term planning for electric vehicle charging needs across vehicle classes.
  - a. Is vehicle-grid integration technology at a sufficient level of maturity to impact short-term planning considerations? If so, describe how; if not describe why not.
- 12. How can managed charging programs reduce upfront infrastructure needs?
- 13. What strategies can reduce the risk of future-proofed sites from becoming stranded assets if a fleet or other baseload user changes their operations or moves to a different site?
  - a. In the Northeast, climate change is expected to increase the frequency and intensity of storms, especially extreme precipitation and extreme heat, and lead to more frequent high tide flooding. 18 Should the impact of current and future climate vulnerabilities be addressed in the infrastructure planning process (e.g., sites that are in or are projected to be in the floodplain)? If so, how?

<sup>18</sup> Fourth National Climate Assessment, Chapter 18: Northeast, https://nca2018.globalchange.gov/chapter/18/

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14. What types of site locations and use cases should be prioritized for proactive future-proofing, and why?

- 15. What considerations should be taken into account when addressing future-proofing sites in disadvantaged communities?
- 16. Are there alternative financing models for bringing new electric service to sites with additional capacity for future-proofing? Please describe.