

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

Proceeding on Motion of the Commission)
to Address Barriers to Medium- and)
Heavy-Duty Electric Vehicle Charging)
Infrastructure.)

Case 23-E-0070

**JOINT UTILITIES' REPLY COMMENTS ON THE PUBLIC SERVICE
COMMISSION'S ORDER INSTITUTING PROCEEDING AND SOLICITING
COMMENTS**

I. Introduction

The Joint Utilities¹ submit this reply to statements and recommendations made by several industry stakeholders in their initial comments to the New York Public Service Commission's (Commission) April 20, 2023 Order² (Order) to address barriers to the development of medium- and heavy-duty (MHD) electric vehicle (EV) charging infrastructure. These reply comments primarily address the market segmentation for medium- and heavy-duty vehicle (MHDV) incentive programs, the prioritization of hubs for proactive investments, proactive planning frameworks, and interconnection processes. Other topics of clarification include definitions of key terms, resiliency, energy storage, financing models, vehicle-to-grid (V2G), technical standards, and rates. The Joint Utilities emphasize that financial support for all EV market segments is key to achieving the New York State's (the State's) ambitious clean energy goals and is important to avoid prioritizing one segment over another. Based on comments made by

¹ The Joint Utilities are Central Hudson Gas & Electric Corporation (Central Hudson), Consolidated Edison Company of New York, Inc. (Con Edison), New York State Electric and Gas Corporation (NYSEG), Niagara Mohawk Power Corporation d/b/a National Grid (National Grid), Orange and Rockland Utilities, Inc. (O&R), and Rochester Gas & Electric Corporation (RG&E).

² Case 23-E-0070, *Proceeding on Motion of the Commission to Address Barriers to Medium- and Heavy-Duty Electric Vehicle Charging Infrastructure*, issued April 20, 2023 (MHDV Proceeding).

industry experts, there is a broad agreement on the need for the State’s utilities to proactively plan and build out the grid to support the clean transportation transition.

II. Topics of Clarification

1. All MHDV segments should be included in incentive programs.

Several commenters discuss their varying preferred prioritization options for incentives for MHDV electrification. For example, some commenters propose that public service fleets, *e.g.*, public transit and school buses, should be prioritized,³ whereas others propose prioritizing “small and independent fleets as well as government, school, and public fleets, and depot charging.”⁴ Other stakeholders, such as CALSTART, state that “high-traffic freight corridors and major freight-generating facilities” should be addressed first,⁵ while others, such as the City of New York (City)⁶ and Convergent,⁷ advocate prioritizing publicly accessible sites.

The diversity of opinions among commenters reinforces the need to offer broad incentive support across MHDV segments. Given the nascent state of the market, focusing on one particular segment to the exclusion of others would not support the overall EV market growth the State needs to meet its policy goals. Indeed, Environmental Defense Fund (EDF)⁸ and ABB⁹

³ *MHDV Proceeding*, Comments of NYPA (filed June 6, 2023), (NYPA Comments), p. 5, Comments of Powerflex (filed June 6, 2023), (Powerflex Comments), p. 6, Comments of World Resources Institute Electric School Bus Initiative, (filed June 6, 2023), (WRI Comments), pp. 2-3.

⁴ *MHDV Proceeding*, Comments of Earthjustice and Sierra Club (filed June 6, 2023) (EJ/SC Comments), pp. 5-7.

⁵ *MHDV Proceeding*, Comments of CALSTART (filed June 6, 2023), (CALSTART Comments), p. 6.

⁶ *MHDV Proceeding*, Comments of the City of New York (filed June 5, 2023), (NYC Comments), p. 18.

⁷ *MHDV Proceeding*, Comments of Convergent (filed June 5, 2023), (Convergent Comments), p. 1.

⁸ *MHDV Proceeding*, Comments of Environmental Defense Fund (EDF comments), “Given the unique opportunities and challenges within each service territory, EDF suggests the Commission avoid an overly prescriptive approach,” (filed June 5, 2023) p. 12.

⁹ *MHDV Proceeding*, Comments of ABB (ABB Comments), “The MHD market is not at a stage where it makes sense to provide incentives to one type of customer, vehicle type, or EVSE infrastructure business model over another; all customers need support at this very early adoption stage and their business models and technology choices will often vary,” (filed June 5, 2023) p. 10.

echo the need to avoid being overly prescriptive and they advocate a flexible approach to offering incentives to develop the MHDV market.

Finally, RMI notes, “the fundamental economics of electric trucks are strong.”¹⁰ They cite the stability of battery costs and incentives for vehicles and infrastructure in the Inflation Reduction Act (IRA).¹¹ While IRA tax incentives help address high vehicle costs, vehicle costs are only one aspect of the business case, and federal infrastructure incentives are not broadly applicable. Economics for MHDV electrification are often still challenging throughout the State, and there are other soft costs including permitting and knowledge gaps among fleets. Therefore, additional infrastructure incentives, and broader eligibility beyond what exists in the MHDV Pilot today,¹² will be critical to driving progress across the entire MHDV market.

2. Load constrained areas should be a priority for proactive grid investments.

Several commenters suggest prioritizing certain criteria for hub locations and proactive grid planning. For example, the City¹³ and the Alliance for Transportation Electrification (ATE)¹⁴ recommend prioritizing based on geography, that is, Industrial Business Zones (IBZs) in New York City.¹⁵ Separately, ATE advocates prioritizing sites “where electrical service to the

¹⁰ *MHDV Proceeding*, Comments of RMI (filed June 6, 2023), (RMI Comments), p. 2.

¹¹ Congress.gov. "Text - H.R.5376 - 117th Congress (2021-2022): Inflation Reduction Act of 2022." August 16, 2022. <https://www.congress.gov/bill/117th-congress/house-bill/5376/text/rh>.

¹² To qualify for the Medium- and Heavy-Duty EV Make-Ready Pilot, fleets must be approved for participation in either the New York Truck Voucher Incentive Program or the New York City Clean Trucks Program, and must be an eligible vehicle from the list established by NYSERDA:

https://portal.nyserda.ny.gov/CORE_Solicitation_Document_Page?documentId=a0lt000001anqn&_gl=1*akruak*ga*MTk4ODcxMDQ2OS4xNjQ3MjY1OTcx*_ga_DRYJB34TXH*MTY4NzQ0NzIyMi40OC4xLjE2ODc0NDczQDAuNjAuMC4w

¹³ *MHDV Proceeding*, City Comments, pp. 5-7.

¹⁴ *MHDV Proceeding*, Comments of Alliance for Transportation Electrification (filed June 6, 2023), (ATE Comments), p. 2.

¹⁵ IBZs are defined by the New York City Economic Development Corporation, available at <https://edc.nyc.gov/industry/industrial-and-manufacturing>.

chargers can be provided economically,”¹⁶ and CALSTART¹⁷ offers that sites with available power should be prioritized.

The Joint Utilities caution against prioritizing hubs and proactive grid planning based solely on geographic characteristics. Preliminary analysis by Con Edison shows a significant share of commercial charging is concentrated around IBZs, which therefore will be important areas to prepare the grid for EV load. However, prioritizing these areas alone may miss other critical areas, including those that may support significant public light-duty EV charging. This is especially important when identifying “Areas of Need” through proactive planning.¹⁸ Indeed, Zerega Avenue, discussed in the Con Edison-specific filing as an area in need of near-term investment, is not one of the top five most trafficked IBZs. Second, while finding sites with low or no interconnection upgrades is critical for making early progress, the Commission should not adopt a strict criterion, as it would leave behind many key sites that will be critical to a robust MHD EV charging network.

Instead, immediate proactive grid investments should prioritize areas with load constraints and where there is high confidence of future demand, and therefore significant potential benefits. These investments will enable sufficient grid capacity for charging. As indicated in the Joint Utilities’ initial comments, such Areas of Need should be identified where grid constraints are likely to cause a significant barrier to EV charging deployment. The Joint Utilities do not believe these Areas of Need should be restricted to a specific vehicle use case or customer type, as communities across the State will require access to charging.

¹⁶ *MHDV Proceeding*, ATE Comments, p. 4.

¹⁷ *MHDV Proceeding*, CALSTART Comments, p. 6.

¹⁸ *MHDV Proceeding*, Joint Utilities’ Comments on the Public Service Commission’s Order Instituting Proceeding and Soliciting Comments (filed June 5, 2023), (Joint Utilities’ Initial Comments), p. 11.

3. There is a need for a proactive planning framework in addition to traditional planning and rate case processes.

Many commenters, including Volvo,¹⁹ EDF,²⁰ and DTNA,²¹ stress the need for grid investments to meet the expected transportation electrification load ahead of time, consistent with the Joint Utilities' proposal.²² While ChargePoint²³ and Gage Zero²⁴ share these views, they recommend addressing these investments within general rate cases. The Joint Utilities' initial comments²⁵ explained why relying strictly on rate case processes for these investments may not be an effective and timely way to meet expected demand and help the State achieve its ambitious goals. Establishing a separate proactive planning process would be appropriate because of the difference in speed, scale, and scope of concentrated EV charging load growth.²⁶

4. There are many ways to continue promoting an efficient interconnection process.

Several commenters recommend a standardized and/or streamlined interconnection process.²⁷ The interconnection process is critical in building out MHD EV charging, and thus, to supporting fleets' ability to transition to EVs. The Joint Utilities are committed to continuously improving

¹⁹ *MHDV Proceeding*, Comments of Volvo (filed June 6, 2023), (Volvo Comments), p. 2.

²⁰ *MHDV Proceeding*, EDF Comments (filed June 6, 2023), p. 23.

²¹ *MHDV Proceeding*, Comments of Daimler Truck North America (filed June 6, 2023), (DTNA Comments), p. 2.

²² *MHDV Proceeding*, Joint Utilities' Initial Comments, p. 11.

²³ *MHDV Proceeding*, Comments of ChargePoint (filed June 6, 2023), (ChargePoint Comments), p. 4.

²⁴ *MHDV Proceeding*, Comments of Gage Zero (filed June 6, 2023), (Gage Zero Comments), p. 3.

²⁵ *MHDV Proceeding*, Joint Utilities' Initial Comments, p. 4.

²⁶ For an example of a similar approach to advancing capital projects outside the rate case process, see Case 20-E-0197, *Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act*, (issued May 14, 2020). See the Commission's Order on Phase 1 Local Transmission and Distribution Project Proposals (February 11, 2021), where the Commission stated that "relying strictly on rate case cycles to provide for cost recovery of the proposed Phase 1 projects may delay the achievement of CLCPA goals" (p. 14).

²⁷ *MHDV Proceeding*, Comments of Alliance for Clean Energy New York and Advanced Energy Union (filed June 6, 2023), (ACE/AEU Comments), p. 5; EDF Comments, p. 29; Comments of MTA (filed June 6, 2023), (MTA Comments), p. 3; Comments of Walmart (filed June 6, 2023), (Walmart Comments), p. 5; Comments of ABB (filed June 6, 2023), (ABB Comments), p. 3; DTNA Comments, pp. 3-4.

the interconnection process and incorporating stakeholder input; however, an overly prescriptive interconnection process will not lead to ideal customer outcomes for several reasons.

First, the Joint Utilities continue to identify opportunities to improve the speed and efficiency of interconnection. Process improvements include ongoing coordination between the Joint Utilities to share best practices (such as how to improve efficiency of internal processes from design through construction, scheduling coordination, and dedication of resources to EV interconnections); open lines of communication with market participants (such as coordination among customers, developers, municipal or other permitting authorities, and utilities); and regular meetings with station developers. Further, the utilities proactively reach out to fleet customers to understand their future electricity needs before the customer has formally requested the service.

Second, there are more effective mechanisms for improving the interconnection experience and timelines. Regulatory tools, such as performance metrics (similar to the current statewide light-duty Make-Ready Program (MRP) Earnings Adjustment Mechanisms (EAMs) which incorporate aggressive timelines for achieving plug targets), can drive transparency, enterprise focus and momentum. A one size fits all solution may not recognize the diversity of projects and processes across the State.

Another reason to avoid mandating overly prescriptive interconnection processes is that milestones with firm deadlines limit agility and may ultimately delay projects. Conversely, flexibility allows utilities and customers to develop mutually beneficial solutions in real time. The Joint Utilities currently provide more flexibility to customers in managing their interconnection cases when compared to projects that are governed by standard processes. For

example, for interconnecting generation, the Standardized Interconnection Requirements²⁸ are rigid and generally require that projects be cancelled if changed, delayed or modified. This is not an existing requirement for EV projects and such a rigid framework should not be adopted. A prescriptive, overly standardized process would limit the ability of utilities and customers to continue to improve the process, which is critical given the nascence of the market with evolving customer and market demands.

5. Other Topics for Clarification

a. Key Terms

Commenters interpret the meaning of certain terms from the Order differently. For clarity, the Joint Utilities propose the following distinct definitions for future-proofing and proactive planning:

- **Future-proofing** refers to sizing the buildout of infrastructure to support future loads that are larger than those expected when the infrastructure initially becomes operational in order to support both near- and long-term capacity requirements and to mitigate the potential for more costly work in the future.²⁹ Future-proofing can be done for customer side infrastructure (*e.g.*, conduit, customer-owned cables, and step-up transformers) and utility infrastructure (*e.g.*, substation or distribution transformers, and service cables).

²⁸ New York State Public Service Commission, “New York State Standardized Interconnection Requirements and Application Process For New Distributed Generators and/or Energy Storage Systems 5 MW or Less Connection in Parallel with Utility Distribution Systems.” May 1, 2022. <https://dps.ny.gov/system/files/documents/2022/11/may-2022-sir-final-dmm.pdf>

²⁹ Case 18-E-10138, *Proceeding on the Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure (EV Proceeding)*, Staff Whitepaper Regarding Electric Vehicle Supply Equipment and Infrastructure), issued January 13, 2020 (Make-Ready Whitepaper), p. 18.

- **Proactive planning** refers to an approach for planning and building grid infrastructure today to support expected load growth in the future and is a departure from a just-in-time approach to grid buildout. Some proactive grid investments may be future-proofed to accommodate growing EV load.

b. Resiliency

Several commenters³⁰ speak to the importance of considering climate change impacts in infrastructure design and buildout.³¹ The Joint Utilities recognize the need to design and build infrastructure with the expected effects of climate change in mind. Although the utilities are in various stages of developing climate change vulnerability studies³² and climate change resiliency plans,³³ it is important to note that for customer-sited infrastructure, municipalities and permitting authorities are better positioned than utilities to provide guidance on this issue.

The City's comments acknowledge the possibility of additional costs for charging station developers and/or MHDV fleet operators to comply with guidelines or standards for resilient infrastructure.³⁴ The Joint Utilities agree that incentive budgets should incorporate these costs.

c. Energy Storage

Most commenters note that energy storage can provide value in certain situations to support large transportation electrification loads. NineDot Energy advocates for using energy storage in all installations.³⁵ All technologies should be considered when planning to serve MHD EV load,

³⁰ *MHDV Proceeding*, EDF Comments, p. 36; Comments of the City of New York (filed June 5, 2023) (NYC Comments), pp. 13-15; EJ/SC Comments, p. 10.

³¹ *MHDV Proceeding*, NYC Comments, p. 13.

³² Case 22-E-0222, Proceeding on the Motion of the Commission Concerning Electric Utility Climate Vulnerability Studies and Plans, issued June 16, 2022 (Climate Vulnerability Studies Proceeding).

³³ "Climate Change Resilience and Adaptation: Summary of 2020 Activities," Con Edison (published January 2021).

³⁴ *MHDV Proceeding*, NYC Comments, p. 15.

³⁵ *MHDV Proceeding*, NineDot Comments, "All EVSE installations should consider the co-installation of an electric energy storage system (ESS) and all ESS solutions should co-install EVSEs," p. 7.

and indeed, the Joint Utilities recently filed plans to incentivize load management technologies, including energy storage, to support EV charging load.³⁶ However, as described in the Joint Utilities' initial comments, energy storage is one of many tools in the toolbox and utilities are well-positioned to evaluate and deploy storage as part of necessary infrastructure upgrades (*e.g.*, to provide initial service capacity while longer lead-time infrastructure upgrades are being completed, or to provide resilience at sites).³⁷

d. Financing Models

In response to question 16 from the Order,³⁸ EDF proposed on-bill financing to address high infrastructure costs.³⁹ However, the Commission should consider that the more significant financial barrier for fleets to electrify is the gap in total cost of ownership of electric compared to internal combustion engine MHDVs. Make-ready incentives for infrastructure to complement existing vehicle incentives, not loans through on-bill financing, will be the most effective method for the utilities to help address this financial barrier. In practice, the usefulness of on-bill financing would be limited. Small fleets with difficulty accessing capital tend to lease their vehicles, and larger fleets (such as national fleets and transit fleets) have other ways to raise upfront capital outside of taking a loan from electric utilities. Furthermore, there is frequently a disconnect between the utility account holder (*e.g.*, a landlord) and the party paying to install the charging infrastructure (*e.g.*, a fleet leasing the land), which can make on-bill financing ineffective. Given these limitations and the complexity and cost of implementing on-bill

³⁶ Case 22-E-0236, *Proceeding to Establish Alternatives to Traditional Demand-Based Rate Structures for Commercial Electric Vehicle Charging (EV Rates Proceeding)*, Joint Utilities' Electric Vehicle Load Management Technology Incentive Program (filed May 19, 2023).

³⁷ *MHDV Proceeding*, Joint Utilities' Initial Comments, pp. 12, 30-32.

³⁸ Order, p. 12.

³⁹ *MHDV Proceeding*, EDF Comments, p. 39.

financing, financial barriers would be much better addressed through infrastructure incentives that will be used broadly.

e. V2G

Some commenters, such as NineDot, VGIC and NY-BEST, advocate for incorporating vehicle-to-grid technology (V2G) incentives in a MHDV program,⁴⁰ and others, such as EDF and Highland Electric, state that V2G and vehicle-to-building should be considered in utility planning processes.⁴¹ However, the City notes – and PowerFlex and Tesla similarly state – that “V2G technology is not at a sufficient level of maturity to impact short-term planning considerations.”⁴² The Joint Utilities reiterate their initial comments that short-term planning consideration of vehicle-grid integration (VGI) technology must consider the varying states of maturity of VGI technologies, with V2G technology experience limited to pilots to date.⁴³ Therefore, the Joint Utilities agree with the City that V2G technologies should not be considered in grid planning for the near-term, and the focus should be on incentivizing electrification and proactively upgrading the grid.⁴⁴

f. Technical Standards

Some commenters advocate for implementing technical standards, such as Open Charge Point Protocol (OCPP), to mitigate potential risks of future-proofed sites becoming under-utilized.⁴⁵ The Joint Utilities reiterate the position from their comments in response to the light-

⁴⁰ *MHDV Proceeding*, NineDot Comments, p. 7; Comments of VGIC and NY-BEST (filed June 5, 2023), p. 6.

⁴¹ *MHDV Proceeding*, EDF Comments, pp. 30-31; Highland Comments, p. 15.

⁴² *MHDV Proceeding*, NYC Comments, p. 11; PowerFlex Comments, p. 7; Tesla Comments, p. 4.

⁴³ *MHDV Proceeding*, Joint Utilities’ Initial Comments, p. 32.

⁴⁴ *MHDV Proceeding*, NYC Comments, “Similarly, vehicle-to-grid integration technology is not at a sufficient level of maturity to impact short-term planning considerations. The City therefore recommends that the Commission instead focus efforts on incentivizing fleet operators to electrify and to proactively identify areas of the utility grid that will need upgrading to allow for MHD electrification,” p. 11.

⁴⁵ *MHDV Proceeding*, EDF Comments, pp. 34-35; PowerFlex Comments, p. 8.

duty MRP Midpoint Review Whitepaper;⁴⁶ while standards are important once the market matures, the Joint Utilities encourage flexibility given the nascent stage of the EV charging market and ongoing evolution of technologies and standards.

g. Electricity Rates for Electric Vehicles

Some commenters advocate for modifications to utility rate structures for MHD EV customers. For example, Tesla requested consideration of new utility rates specifically for this sector.⁴⁷ The Joint Utilities note that the proceeding in Case 22-E-0236 focuses specifically on electricity rates for EVs, including MHD EVs.⁴⁸ It is premature to consider new EV rates given the new rates and programs authorized in that proceeding in January 2023⁴⁹ have not yet become effective, and thus learnings from implementation are still to be gathered.

III. Conclusion

The Joint Utilities appreciate the opportunity to provide reply comments in this proceeding and urge the Commission to consider the points of clarification presented here when developing a MHDV make-ready program and a proactive planning process. The Joint Utilities recommend the Commission's proceeding (1) provide incentives broadly to the MHDV market rather than prioritizing one segment over another, and (2) consider the broad industry agreement on the need

⁴⁶ *EV Proceeding*, Joint Utilities' Comments on The Department of Public Service Staff Electric Vehicle Make-Ready Program Midpoint Review and Recommendations Whitepaper (filed May 15, 2023).

⁴⁷ *MHDV Proceeding*, Tesla Comments, "MHD charging also warrants an examination of utility rates across different utility service territories. In certain utility territories, existing DC fast charging utility rates could provide a solution but in all cases utility rates will be worth re-examining within the MHD context," p. 1.

⁴⁸ Case 22-E-0236, *Proceeding to Establish Alternatives to Traditional Demand-Based Rate Structures for Commercial Electric Vehicle Charging (EV Rates Proceeding)*.

⁴⁹ *EV Rates Proceeding*, Order Establishing Framework for Alternatives to Traditional Demand-Based Rate Structures, ordered the Joint Utilities to implement a Demand Charge Rebate (DCR), Commercial Managed Charging Programs, and the EV Phase-In Rate to replace the DCR in the near term, pp. 2-3.

for the State to proactively plan and build out the grid to support the clean transportation transition.

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Respectfully submitted,

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