Submitted *via* Electronic Mail

January 24, 2023

Carmen D. Diaz
Acting Secretary of the Board
44 South Clinton Ave., 1st Floor
Trenton, New Jersey 08625-0350

RE: Medium and Heavy-Duty Electric Vehicle Charging Ecosystem, Docket No. QO21060946

Dear Acting Secretary Diaz:

The undersigned groups are pleased to submit comments in the above referenced matter.

Sincerely,

Eric Miller
NJ Energy Policy Director
Natural Resources Defense Council

Anjuli Ramos
Director
NJ Sierra Club

Ed Potosnak
Executive Director
New Jersey League of Conservation Voters

Doug O'Malley
Director
Environment New Jersey

Richard Lawton
Executive Director
New Jersey Sustainable Business Council

Tom Gilbert
Co-Executive Director
New Jersey Conservation Foundation

I. INTRODUCTION

The Natural Resources Defense Council, Sierra Club, New Jersey League of Conservation Voters, New Jersey Sustainable Business Council, New Jersey Conservation Foundation, and Environment New Jersey (hereinafter, "Environmental Commenters") appreciate the opportunity to provide additional input on the Board of Public Utilities ("BPU, or Board") New Jersey Electric Vehicles Infrastructure Ecosystem 2022 Medium and Heavy-Duty Straw Proposal (hereinafter, "Updated Proposal"). As the Environmental Commenters stated previously, the Updated Proposal is an critical component to support the developing Electric Vehicle ("EV") marketplace in the state of New Jersey, especially because the transportation sector is the largest source of climate- and public health-harming emissions in the state.

Emissions from the transportation sector account for more than 40% of GHG emissions in New Jersey. Therefore, the state must take a comprehensive and coordinated multi-agency approach to electrify the transportation sector as rapidly as possible. As the Updated Proposal identifies, New Jersey has a statutory goal of 330,000 EVs registered in the state by the end of 2025, with a goal of 10% of new bus purchases being zero emission by 2024, increasing to 50% after 2026.[1] Additionally, New Jersey signed the NESCUAM MOU, committing to accelerate the market for MHD EVs, including large pickup trucks and vans, delivery trucks, box trucks, school and transit buses, and long-haul delivery trucks. The NESCAUM MOU sets a goal of 30% zero-emission vehicles sales by 2030.

Given New Jersey's numerous goals and commitments, it must act swiftly to issue a Final Straw Proposal that works with other state initiatives and federal funding opportunities to rapidly electrify the transportation sector. Achieving that goal will require a Final Straw Proposal that addresses multiple vehicle types, fleet configurations, charging needs, and geographic locations across the entire state. To best achieve those goals, the Environmental Commenters urge Board Staff to adopt the following recommendations and do so on a timeline that would ensure Electric Distribution Company ("EDC") plans are filed with the Board before the Fall of 2023.

II. COMMENTS

The Environmental Commenters appreciate the changes made by Board Staff between the Initial and Updated Straw Proposal. Many of the updates reflect strengthening recommendations made by the Environmental Commenters in our response to the first Straw Proposal—changes that will substantially improve the quality of EDC filings received by the Board, and ultimately establish significantly better MHDV Ecosystem Programs than it otherwise would have had the Initial Proposal not been updated. Despite many of these positive updates, the Environmental Commenters have several additional

[1] P.L. 209, c. 362

recommendations that either further refine changes adopted in the Updated Proposal, or recommendations on program design elements that were not changed between the Initial and Updated Proposal.

a. The Board Should Permit Regulated EDCs to Play a Larger Role in MHDV Electrification Based on Flexibility, Innovation, and Achievement of the Core Goals of the EV Ecosystem Programs

The Environmental Commenters agree with the Board Staff that EDCs play several indispensable roles in the EV Ecosystem, but urge Board Staff to encourage and permit EDC filings that go beyond the Minimum Filing Requirements ("MFRs") and the "shared responsibility model" described in the Updated Proposal.[2] As stated in our prior comments, MFRs are just that—the *minimum* filing requirements for a EDC plan to be accepted for review by the Board, not a ceiling on what an EDC may propose. The Updated Proposal enumerates the following utility roles under its shared responsibility model:

- Performing any upgrades on the utility-side of the meter necessary to accommodate charging station infrastructure and anticipated load increases
- Wiring various locations upon request from EVSE Infrastructure Companies or other approved entities
- Providing technical assistance to public and private fleets
- Developing hosting maps.

We agree that these roles are all within the purview of regulated EDCs and should be a *minimum* requirement of any EDC filing with the Board. However, we urge the Board to indicate clearly in the Final Proposal that EDCs have the flexibility to propose innovative programs that go beyond the narrow roles prescribed above so long as those plans materially advance the core objective of the EV Ecosystem order.

Allowing program proposals that go beyond the MFRs will have numerous benefits. First, it will allow the EDCs to utilize knowledge of their own service territories to identify potential gaps in program implementation and propose solutions to address those gaps. Next, it may allow EDCs to address vehicle types that are underserved by other programs, or fleet configurations that require special attention. Finally, it will allow utilities to apply lessons learned from the Light Duty Ecosystem program, as well as other utility-run programs.

[2] Updated Proposal, at 13-14.

b. The Inclusion of Private Fleet Charging is an Improvement Over the Initial Straw, but the is Definition of "Overburdened Municipalities" is Limiting

The inclusion of Private Fleet Charging in Overburdened Municipalities is a significant improvement from the initial Straw Proposal. MHDV emissions disproportionally impact the public health of New Jersey's Overburdened Communities, contributing to more than $4.6 billion in public health and climate costs in 2015. Despite the Environmental Commenter's support of the overarching goal of addressing private fleets in Overburdened Municipalities, we have several recommendations we strongly believe would strengthen the proposal and remove potential areas of conflict or ambiguity.

The Updated Proposal provides three programmatic requirements for "Private Fleet Charging Depots:"

(1) located or primarily operate in Overburdened Municipalities;

(2) are displacing existing fleet vehicles, rather than bringing new vehicles into Overburdened Municipalities, and;

(3) agree to participate in a managed charging program that directs most charging to off-peak periods.

The Environmental Commenters are concerned that the definition of "Overburdened Municipality" may be overly narrow and preclude many potential private fleet projects from receiving support underneath this program. The Board proposes adopting the definition of "Overburdened Municipality," which is significantly narrower than the definition of "Overburdened Community." Although it would be the preference of the Environmental Commenters to use the more expansive definition of Overburdened Community, we understand that there may be concerns about enlarging the potential size of the Private Fleet Charging portion of the program.

As an alternative to choosing between either Overburdened Communities or Overburdened Municipalities, the Environmental Commenters recommend a "middle road" that retains the Overburdened Municipalities definition proposed by the Board, but creates a pathway for EDCs to file programs that would service specific projects located outside of an Overburdened Municipality, but nonetheless, provide significant benefits to those communities or otherwise further the core goals of the EV Ecosystem in New Jersey. Such an approach would address potential programmatic gaps and is an example of the type of EDC plan flexibility that the Environmental Commenters are seeking under Section a. above.

c. The Updated Proposal's VMT Requirement is Vague and Difficult to Implement

As part of the private fleet charging program, Board staff proposes to model the program on NJEDA's ZIP program, that requires qualifying private fleets to have 50% of the VMT over the course of a three-year compliance period take place in an Overburdened Municipality. While Commenters support efforts

to encourage the development of EVSE and fleet electrification for vehicles that are not only located in overburdened communities but also spend time driving in such communities, we are concerned that the proposed VMT requirement's vagueness and difficulty in implementation may perversely discourage EDC investment, for several reasons.

First, it is not clear from the proposal how the 50% VMT would be calculated, either in terms of the VMT of the fleet (i.e., would the "fleet" be considered just the EVs operated by the private entity, or the broader fleet of vehicles it may operate?) or of the time period used for the calculation (shorter term assessments of VMT may encourage consistent operation of EVs in overburdened communities, but could also discourage long-term investments if cost recovery by the EDC had to be re-evaluated frequently).

Second, VMT may not be a good proxy for pollution impacts on overburdened communities. Gasoline or diesel MHDV that travel on freeways to overburdened communities may spend a good deal of *time* idling or stopping and starting (such as delivery trucks or maintenance vehicles), and therefore they may cause significant amounts of air pollution and harm to public health within an overburdened community, although they have only covered a short *distance* in the overburdened community. As a result, the goal of encouraging EV MHDV adoption to address historic harms to overburdened communities could be undercut by focusing overmuch on VMTs instead of displaced emissions.

Finally, a 50% VMT requirement would place performance obligations on both EDCs and fleet operators that are outside of their core competencies and could thus discourage implementation. Gathering the data about where fleet vehicles are driving could require costly infrastructure, such as transponders and reporting software, that neither EDCs nor fleet operators are likely to be familiar with. EDCs lack expertise in assessing — or policing! — the driving habits of fleet operators. Fleet operators may be hesitant to share fleet vehicle location data with an EDC, even if they are able to collect data about the number of miles vehicles spend inside and outside of the overburdened communities the BPU designates. The requirement may also create confusing and inapposite incentives, whereby the EDC's ability to recover costs depends on the actions of the third-party fleet owner. The EDC thus would be incentivized to contract with the fleet operator to limit the flexibility of what can be done with the fleet, whereas the fleet operator would want to preserve flexibility in order to respond to changing business conditions and thereby maximize the value of its investment in EVs.

As a result, Commenters encourage the Board to adopt a flexible approach to EDC investment in fleets that serve overburdened communities, and to not preclude potentially novel and creative solutions submitted in EDC program proposals based on a bright-line 50% VMT rule.

d. The Requirement for a Managed Charging Program May Discourage Program Participation

Commenters strongly support managed charging programs in concept. When done well, managed charging programs provide for and incentivize participating customers to charge vehicles during off-peak periods to maximize availability of infrastructure and put downward pressure on rates. However, the commenters have several recommendations to strengthen the proposal.

First, the Board should examine the $200/kW cap. Although the NY PSC initially did choose this direction, after that initial determination the NY PSC acknowledged that caps may not be appropriate given variation in project costs. Next, we are concerned that the limitations and restrictions on the managed charging program may be too stringent to incentivize participation by customers — who may rightly fear that any changes in business or operations may disqualify them from the program and make them incur financial penalties or disconnects. The commenters recommend softening this requirement due to the punitive nature of their enforcement mechanisms.

e. The Board Should Encourage Utilities to Adopt Long-Term Rate Design Solutions for Publicly Accessible MHDV Charging

The demand charge rebate proposed by the Updated Proposal is insufficient to address the larger issues with demand charges Again, the Environmental Commenters implore the Board to implement long-term, sustainable solutions in lieu of band-aid approaches. In the early days of MHDV charging, it is critical that rates are developed that reflect the unique characteristics and costs of EV charging, rather than forcing stations to take service on commercial and industrial rates designed for large buildings and factories.

As an alternative to the demand charge mitigation measure proposed in the Updated Straw, we urge the Board to look closely at several recent utility MHDV charging orders discussed in a recent NARUC whitepaper entitled, "Best Practices for Sustainable Commercial EV Rates and PURPA 111(d) Implementation."[3] That whitepaper characterized several rate solutions such as those recently adopted by Pacific Gas & Electric (PG&E), San Diego Gas and Electric (SDG&E), Southern California Edison (SCE) and Alabama Power. Most of those settlements forgo demand charges, instead replacing them with smaller and more predictable subscription fees.

In the case of PG&E and SDG&E, rates are based on the utilities underlying marginal costs. That is, recognizing that commercial EVs are new load on the system and charging these customers only the additional costs they impose on the grid. Therefore, these rates improve the economics of EV adoption without subsidizing EV charging or shifting costs to other customers. Coupled with the downward

[3] Available at https://pubs.naruc.org/pub/55C47758-1866-DAAC-99FB-FFA9E6574C2B

pressure on rates, rates like this would benefit all customers on the grid. The MFRs should allow for and encourage similar requirements in EDC plans.

f. The Proposal Should Include Specific Consideration of Vehicle-to-Grid Uses

Using EV batteries as storage can help increase grid flexibility and help apply downward pressure on costs by balancing out supply and demand. Particularly for MHDV fleets, where fleet operators may be more able to plan in advance when charging will occur and coordinate with EDCs on optimal charging and discharging times, vehicle-to-grid ("V2G") integration can be an important additional tool for electrification. School bus fleets in particular may be well-suited for V2G, as school buses have predictable activity cycles, and are likely able to schedule charging for nights when electricity prices are low or midday when solar output is high and could be available for discharging to the grid at peak demand periods. Indeed, school bus batteries are particularly well suited to serve as distributed energy storage resources because they are largely idle in the hot summer months when the grid is most stressed.

While the proposal does not preclude V2G uses of MHDV electrification, New Jersey would benefit from additional clarity and guidance from the BPU to ensure that the state is able to take advantage of the benefits that V2G promises. As an example, the Maryland Climate Solutions Now Act ("MD CSNA")[4] specifically authorizes school districts and EDCs to develop structures in which the EDC may use the batteries of electric school bus fleets as storage "at times when the participating school system determines that the school buses are not needed to transport students," while requiring that the EDC, if it uses electricity from those batteries, "replaces that electricity at no cost to the participating school system." MD CSNA at 7-217(c)(5)-(6). The Act additionally provides direction that V2G program design consider "the locational benefits that the storage batteries of school buses may bring" as well as "the health and economic effects on low-income and minority communities." *Id.* at 7-217(c)(7)-(8). Another good model is Dominion Energy's V2G program in Virginia, which currently has 50 buses enrolled. This program is designed to scale to 1000 buses to ultimately provide 105 MWh of storage, or enough to power 10,000 homes.[5]

Adding similar language to the final order can help ensure that school districts, as well as other MHDV fleet operators, are best-positioned to coordinate with EDCs on developing programs that will benefit the grid as a whole.

[4] *See* https://mgaleg.maryland.gov/2022RS/Chapters_noln/CH_38_sb0528e.pdf.
[5] *See* https://news.dominionenergy.com/2020-01-16-Dominion-Energy-Moves-Forward-with-Electric-School-Bus-Program.

g. A Proper Order on MHDV EVSE Should Ensure School Districts Are Best Positioned to Use IIJA Funds

The bipartisan Infrastructure Investment and Jobs Act of 2021 (IIJA) provides a great deal of funding for vehicle electrification across the country, including for school districts to obtain electric buses. Specifically, IIJA allocates $5 billion dollars towards the Clean School Bus Program over the next five years (*see* 42 U.S.C. § 16091), for the purchase of reduced-emission or zero-emitting electric school buses. Under this program, school districts in New Jersey have already applied for and received grant awards for 2022: $1.5 million for the Atlantic City School District, and nearly $800,000 for the Bridgeton City School District.[6]

However, the Clean School Bus Program only provides grant money towards acquiring clean school buses, and does not provide funding for the EVSE infrastructure needed to power electric school buses. In other words, all EVSE and make-ready projects necessary to accommodate school bus electrification — even where federal dollars are paying for the buses themselves — will have to come from the EDCs and school districts themselves. As a result, without programs in place to help ensure that New Jersey's school districts can plan confidently to build out charging for electric buses, school districts may either miss out on federal funding entirely, or direct some portion of what funding is secured towards vehicles that still emit hazardous air pollutants. A strong order from the Board clearing a path towards school bus EVSE is thus vital to ensure that New Jersey's schools can make the most of federal dollars, and that cost-savings and air quality improvements are realized by New Jersey's communities.

III. CONCLUSION

For the foregoing reasons, Commenters urge the Board to swiftly adopt a final order, supportive of an expanded and more flexible role of EDCs in ensuring that all New Jersey communities and stakeholders are able to realize the cost savings, improvements in air quality, and other benefits MHDV electrification will bring to the state as rapidly as possible.[7]

[6] https://awsedap.epa.gov/public/extensions/Clean_School_Bus/Clean_School_Bus.html. Millions of dollars more area available in the years to come.

[7] As one final note, Commenters request that the final order issued by the Board include page numbers, as that will aid EDCs, MHDV fleet operators, the public, and Staff in reviewing and citing to the order.