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January 24, 2023

Via Electronic Mail board.secretary@bpu.nj.gov
Carmen D. Diaz
Acting Secretary of the Board
44 South Clinton Avenue, 1ST Floor
P.O. Box 350
Trenton, NJ 08625-0350

Re: In the Matter of Medium and Heavy Duty Electric Vehicle Charging Ecosystem
BPU Docket No. QO21060946

Dear Acting Board Secretary Diaz:

Please accept for filing the attached comments being submitted on behalf of the New Jersey Division of Rate Counsel ("Rate Counsel") in accordance with the Notice issued by the Board of Public Utilities ("Board") in this matter on December 22, 2022 and modified on December 23, 2022. In accordance with the Modified Notice, these comments are being filed electronically with the Board's Secretary at board.secretary@bpu.nj.gov.

Please acknowledge receipt of these comments.

Thank you for your consideration and attention to this matter.

Respectfully submitted,

Brian O. Lipman, Esq.
Director, Division of Rate Counsel

By: /s/ Maura Caroselli
Maura Caroselli, Esq.
Deputy Rate Counsel

MC
Enclosure
cc: Cathleen Lewis, BPU

IN THE MATTER OF MEDIUM AND HEAVY DUTY ELECTRIC VEHICLE CHARGING ECOSYSTEM
BPU Docket No. QO21060946

New Jersey Division of Rate Counsel Comments on Modified Straw Proposal

Introduction

Rate Counsel appreciates the opportunity to present comments on the Modified Medium and Heavy Duty ("MHD") Electric Vehicle ("EV") Straw Proposal ("Modified Straw Proposal"), issued by the Staff of the Board of Public Utilities ("Staff") on December 22, 2022 and revised on December 23, 2022.

These comments follow up on the comments filed by Rate Counsel on October 5, 2021 in response to the Board's initial Straw Proposal, issued on June 30, 2021. Rate Counsel's current comments focus on the changes made by the Board in its Modified Straw Proposal. The changes in the Modified Straw Proposal include:

- The Board proposes make-ready incentives to support private fleet charging depots under certain circumstances, including when they are located in or primarily serve overburdened municipalities.[1] Qualifying depots would have to demonstrate that they are supporting or will support EVs that displace existing, fossil-fuel vehicles that serve the same overburdened municipalities, and would have to participate in a managed charging program;
- The Board proposes technical and planning support for private entities that establish either public or private fast charging sites that exceed 500kW.

[1] The initial proposal had certain provisions for "Overburdened Communities," which were defined as U.S. Census blocks having certain characteristics. See original straw proposal, page 7. The modified proposal revises this focus to "Overburdened Municipalities," defined as municipalities with certain population characteristics. This change was not explained in the modified Straw Proposal or the associated Notice.

Before commenting on specifics of the Modified Straw Proposal, however, Rate Counsel considers it important to understand the significance and the effect of this Proposal. The significance of the Modified Straw Proposal to electrifying MHD transportation in New Jersey is difficult to evaluate absent its context within other EV programs; however, the Proposal provides no context and barely mentions that ratepayers would pay for part of it. The Modified Straw Proposal does not mention, for example, the $16 million in Regional Greenhouse Gas Initiative ("RGGI") funds that were allocated to MHD EV charging programs in the Board's October 26, 2022 Order, how those funds were spent, data on how that equipment is being used, an evaluation of the effectiveness of that investment, or how much more money is needed to convert the MHDs in New Jersey to EVs.[2] Absent such context, it is unclear how the Modified Straw Proposal relates to a Board plan to facilitate a statewide network for MHD EV charging. A well-planned and cost-effective MHD EV charging program would ensure that each incremental investment advances the overall plan, includes objective measures to evaluate the cost-effectiveness of each portion, includes synergies to utilize all sources of funding, and incorporates any lessons learned as each portion of the plan builds upon previous investments.

Moreover, the Modified Straw Proposal includes elements, such as the ratepayer-funded "last resort" chargers where market investors will not risk their funds, that represent another transportation fuel initiative funded by electric ratepayers. Ratepayers are an inappropriate source of funding for yet another EV initiative, on top of the electric utilities' own light duty EV charging programs and the RGGI MHD EV programs that ratepayers already support. Many ratepayers do not own any motor vehicle, and certainly not an EV or an MHD EV. Placing an additional

[2] BPU Docket Nos. QO22080479 and QO22080480.

financial burden on ratepayers, especially at a time of high inflation, when hundreds of thousands of electric utility customers already cannot pay their bills, is particularly inappropriate.

In our previous comments, Rate Counsel noted numerous differences between the issues facing MHD EVs and MHD EV fleets versus those facing light-duty EVs owned by individuals, that should be taken into consideration in establishing policies for any electric distribution company ("EDC") role in charging MHD EVs and MHD EV fleets. In brief, Rate Counsel noted (among other issues) that MHD EVs and MHD EV fleets are likely to be used and charged in a way that is more predictable and manageable compared to far more numerous non-commercial and individually-owned Light-Duty ("LD") EVs. MHD EVs and MHD EV fleet owners are likely to be far more able to plan charging times and driving routes, coordinate with other EV owners, and take actions to improve the demand profiles for MHD EV charging resources – and they should have an incentive to do so. Further, MHD EV charging infrastructure, including make-ready infrastructure, is more expensive than LD EV charging infrastructure. The Board should be wary of allowing EDC ratepayers to be placed at financial risk for supporting such investments when there is no business case that can attract private investment. Finally, Rate Counsel noted that MHD EV charging technology and standards are far less mature than LD EV technology and standards, and the risk of stranded assets related to MHD EVs is correspondingly greater.

Rate Counsel believes that any EDC support for MHD EVs and MHD EV fleet charging, which will in fact be funded by ratepayers, should be informed by these important distinctions. For example, there should be much less need for demand charge mitigation, since MHD EV fleet operators can – and should be encouraged to – manage their charging profiles to achieve high utilization factors. Further, any demand charge mitigation that is offered should be designed to offer rate relief only for charging during off-peak hours, because high-demand charging is less problematic for the EDC's distribution system during off-peak hours in general, and concentrating charging during off-peak hours is crucial to realizing the general ratepayer benefits of MHD EV charging load.[3] Any off-peak demand charge mitigation will incentivize MHD EV charging during off-peak hours and the development and use of technological measures (e.g. on-site storage) to limit the load placed on the electric distribution grid during peak use hours. The demand charge will also incentivize placement of MHD EV chargers in locations where they will be used more often, as with any prudent business investment.

Further, any ratepayer-funded EDC investment in and ownership of "last resort" charging stations should be viewed extremely warily. It is unclear from the Modified Straw Proposal how a site would be identified where such investment was necessary, except that it would be a site where no private investment or interest has materialized for some established period,[4] and in "situations in which the market does not adequately respond to provide publicly accessible or public-serving charging in a geographically equitable manner."[5] But if there is no market interest in a site for MHD EV and MHD EV fleet charging, that would indicate that there is no market for the charging services themselves. Fleet owners best understand the needs of their fleets, and ratepayers should not be forced to make costly investments in infrastructure that is unlikely to be used when the private market will not.

With these general notes in mind, Rate Counsel offers the following comments on the specific elements of Staff's proposed modifications to its MHD Straw Proposal framework.

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[3] See Modified Straw Proposal, pages 17-18, for a discussion of these benefits.
[4] See the definition of "Last Resort," Modified Straw Proposal page 9.
[5] Modified Straw Proposal page 20.

Comments on Modified Framework Elements

Private Fleets

Staff has modified its proposal for the "Shared-Responsibility" model to add support for "public-serving fleets and Private Fleet Charging Depots located in or primarily operating in Overburdened Municipalities."[6] Such depots would not be accessible to the public, but the intention is that they would serve a public function by alleviating pollution in overburdened municipalities, and by putting "downward pressure" on rates due to strictly managed charging requirements. The pollution reduction benefits would be ensured by requiring that the electrified fleets using these depots "are displacing existing fleet vehicles, rather than bringing new vehicles into Overburdened Municipalities."[7] Finally, "primarily operating" in an Overburdened Municipality is defined as a fleet that drives over 50% of its vehicle miles in such a municipality, measured over a three-year period.[8]

Rate Counsel had recommended a greater focus on replacing diesel vehicles and otherwise reducing environmental impacts on overburdened communities in our October 5, 2021 comments, and we are pleased to see these requirements incorporated here. However, details are needed to illustrate how both the "displacing existing vehicles" and the "50% of miles travelled" requirements can be enforced once an MHD EV fleet charging depot is in place. For example, Staff "proposes to require that ratepayer funding only be made available to those entities who commit to reducing the vehicle miles traveled within Overburdened Municipalities associated with

[6] Modified Straw Proposal, page 5.
[7] Modified Straw Proposal, page 16.
[8] Modified Straw Proposal, page 16. This requirement is based on the NJEDA's NJ Zero Emissions Incentive Program.

emitting vehicles by at least 25 percent, as measured on an annual basis, within two years."[9] What form such a commitment would take, or how it might be enforced after the fact, are unspecified.

Utilities should be directed to include in their MHD EV program proposals on how they intend to implement these requirements, at least in evaluating private MHD EV fleet charging depot proposals. The "managed charging" requirement is crucial to ensuring that ratepayers, who will be paying the costs of the EDCs' investments, benefit from increased and more efficient utilization of the electric distribution system. As proposed in the Straw, "each EDC would develop a proposal on how to best enforce these requirements, potentially including retroactive assignment of demand charges, disconnect switches, or other physical or financial means of enforcing the managed charging program." Rate Counsel concurs that the EDCs should be directed to show how their proposed managed charging programs will meet this goal, and to explain how the requirements will be enforced and by whom. At a minimum, there should be no demand charge relief offered for charging loads that take place during on-peak hours, or for any owner or operator of electric vehicle servicing equipment ("EVSE")[10] that fails to meet the other required commitments.

Technical support for high voltage fast charging

The Modified Straw Proposal includes "technical and planning support for private entities seeking to establish proprietary EV Ecosystems for their fleets and for private entities seeking to establish public fast charging sites that exceed 500kW."[11] This new proposal is associated with the roll-out of the National Electric Vehicle Infrastructure ("NEVI") program and federal funds to support it. As noted in the Modified Straw Proposal, "this proposal is designed to enable the EDCs

[9] Modified Straw Proposal, page 17 (emphasis in original).
[10] "EVSE" usually refers to EV chargers and associated hardware and software.
[11] Modified Straw Proposal, page 6.

to work with Publicly-Accessible, Public-Serving Fleets, Private Fleets and any Fast-Charging sites over 500kW to properly site charging locations, plan for fleet and charging growth, and determine when and if additional grid support is needed."[12] The Modified Straw Proposal also notes that "Such planning should address timing and size of charging, incorporation of storage to reduce grid impact and ensure resiliency, and address any interconnection issues that may arise."[13] Rate Counsel supports this technical support role for EDCs in support of high-voltage charging sites, and notes that close coordination will be required to ensure that stress and additional cost for the EDCs' distribution systems is minimized, while all potential benefits, including improved system utilization and any possible vehicle-to-grid benefits, are maximized.

Hosting Maps

As with the original Straw Proposal, the Modified Straw Proposal calls for New Jersey's electric utilities to develop "hosting maps that identify where to prioritize Make-Ready sites for potential MHD EV charging depots, as well as identify locations where charging infrastructure can be located so as to meet the requirements of the EV Act while avoiding lengthy and costly distribution upgrades."[14] Rate Counsel supports this role for the EDCs. Use of these maps can reduce the impact of charging stations on the EDCs' electric distribution grids and thereby reduce ratepayers' costs to upgrade the EDCs' electric grids. However, it is unclear the extent to which private EVSE developers will be required to limit themselves to the preferred sites identified on the hosting maps. Utilities should be directed to clarify how they will prioritize MHD charging proposals based on adherence to their charging maps, and how developers will be incentivized to invest in the identified locations.

[12] Modified Straw Proposal, page 20.
[13] Modified Straw Proposal, page 15.
[14] Modified Straw Proposal, page 15.

Areas of Last Resort

The Modified Straw Proposal retains a role for EDCs to invest in and own MHD EV charging depots on a rate-regulated basis where the market response is inadequate. As explained in the Modified Straw Proposal, "there may be situations in which the market does not adequately respond to provide publicly accessible or public-serving charging in a geographically equitable manner. Staff considers that the Board may need to develop these 'areas of last resort' provisions for approval of EDC expansion if adequate adoption of charging for MHD vehicles and light-duty fleets does not occur."[15] As noted in our October 5, 2021 comments, Rate Counsel does not believe that the "last resort" model that may be applied to light-duty EV filings is a good fit for MHD EV and commercial LD EV fleet charging depots. MHD EV charging depots should be built where there is a clear opportunity to serve existing or planned MHD EVs and MHD EV fleets, i.e., where there is an identified and tangible market opportunity. Ratepayers should not be forced to invest in sites where the prospects for adequate utilization are poor, and where private developers refuse to go. Presumably project developers will conduct their own analysis regarding the predicted usage of the EVSE and it is unclear whether the utilities or the BPU have similar resources available to conduct such an analysis. Such a program would raise the substantial risk of EDC-owned EV charging stations that never achieve a sustainable level of utilization because they are simply not optimal locations for MHD EV or MHD EV fleet charging. Fleet owners best understand the needs of their fleets. This program is not for an "if you build it they will come" situation, rather the fleets are already there. The goal here is to encourage those existing fleets to convert to EVs, not to create new fleets. Rate Counsel urges the BPU to allow market conditions to be the primary driver for the placement of EVSE.

[15] Modified Straw Proposal, page 20.

In fact, the Modified Straw Proposal articulates "the goal of substituting non-utility, investor-supplied capital for ratepayer capital wherever possible, particularly in portions of the EV Ecosystem that may change with time or, in some cases, may never be utilized at a high level."[16] The proposal for "last-resort" ownership by the EDCs runs directly counter to this goal, by assigning EDCs and ratepayers responsibility specifically for sites that are *likely* to be underutilized and in which developers have decided not to invest their own funds.

To the extent that any EDC funding is required to spur investment, the Board should not jump to the conclusion that EDC ownership is an appropriate model. As recommended in Rate Counsel's October 5, 2021 comments, the Board should consider a reverse auction model to establish the minimum subsidy necessary to spur investment by the private sector. EVSE developers would bid the minimum support they would require to develop a given site, and the auctioneer would select the lowest bid meeting all site requirements, thereby setting the ratepayer contribution at the minimum required. If the Board opts not to use the reverse auction model, EDCs should be required to provide a business plan to the BPU for approval prior to any construction of any EDC EV charging station.

Demand Charge Relief

Board Staff recommends that "each EDC develop a demand charge program that addresses the unique needs of MHD vehicle charging."[17] The Modified Straw Proposal includes certain additional details that Rate Counsels agrees are significant improvements over the initial Straw Proposal; specifically, a requirement to include managed charging, and retention of demand charges for on-peak charging. Rate Counsel also appreciates that any such relief must be temporary, decreasing in size, and include a sunset provision, as recommended in our October 5,

[16] Modified Straw Proposal, page 14.
[17] Modified Straw Proposal, page 19.

2021 comments. Rate Counsel does not believe indexing demand charge relief to liquid fuels on a per-mile-traveled basis is a practical or necessary requirement.[18]

In general, EVSE providers should be given a strong incentive to manage their own demand profiles to mitigate distribution system impacts so that all ratepayers can realize financial rate benefits.[19] The Modified Straw Proposal has significant improvements in this area, supporting programs that align EVSE provider incentives with ratepayer and grid stability imperatives.

Previously Allocated Funds

As noted above, the Modified Straw Proposal lacks any mention to the Regional Greenhouse Gas Initiative funds previously set aside to establish a MHD EV Charging Program in BPU docket Nos. QO22080479 and QO22080480.[20] In that Order, the Board approved the use of $16,150,648 of RGGI proceeds from Quarters 3 and 4 of 2021 for community charging and private EV fleet charging projects. These projects seem to overlap the goals of Staff's Modified Straw Proposal here. Rate Counsel suggests that the already-approved MHD EV program using RGGI funds be used before creating a new program. Further, an evaluation of the use and cost-effectiveness of that initial program should be concluded and made public before spending additional ratepayer money on MHD charging. Finally, any additional MHD EV charging program should, at a minimum, complement the existing MHD EV charging program and incorporate lessons learned in order to avoid inefficient use of ratepayer money on substantially similar projects.

[18] Staff's proposed requirements for demand charge relief may be found in the Modified Straw Proposal, page 19.
[19] See Modified Straw Proposal, pages 17-18 for a discussion of these benefits.
[20] I/M/O The Establishment of Programming for the 2020-2022 RGGI Strategic Funding Plan, BPU Dkt. No. QO22080479 and I/M/O The Establishment of the RGGI Medium and Heavy Duty Electric Vehicle Charging Program, BPU Dkt. No QO22080480, Order dated October 26, 2022, effective Nov. 2, 2022.