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VIA ELECTRONIC FILING

Jeffrey R. Gaudiosi, Esq.
Executive Secretary
Public Utilities Regulatory Authority
Ten Franklin Square
New Britain, CT 06051

RE: Docket No. 21-09-17—PURA Investigation Into Medium and Heavy-Duty Electric Vehicle Charging

Dear Mr. Gaudiosi:

Sierra Club applauds PURA for opening this investigation in recognition of the importance of medium- and heavy-duty vehicle (MHDV) electrification to meet Connecticut's climate commitments. It will not be possible to achieve the decarbonization mandate of the GWSA, which requires the state to reduce GHG emissions by 10 percent below 1990 levels by 2020, 45 percent below 2001 levels by 2030, and 80 percent below 2001 levels by 2050,¹ without MHDV electrification. Further, as a signatory to the Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding (MHD ZEV MOU), Connecticut has committed to have at least 30 percent of new medium- and heavy-duty sales be zero emission vehicles (ZEV) by 2030 and 100 percent of sales be ZEVs by 2050.² Connecticut has also recently adopted California's Advanced Clean Trucks rule, which requires electrification of between 40 percent and 75 percent of medium- and heavy-duty vehicles by 2035, depending on the type of vehicle.³ In order to achieve these targets, Connecticut will need to plan extensively to electrify the transportation sector and to deploy sufficient charging infrastructure to support electrification of MHDVs. PURA and utility involvement in MHDV electrification is necessary to support the growth of the charging market, and this investigation will prove critical in achieving the state's targets.⁴

Electrification of MHDVs is not only vital to achieving Connecticut's decarbonization goals, but also to alleviating the pollution from MHDVs that takes a significant toll on public

¹ Conn. Gen. Stat. § 22a-200a(a).

² Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding, available at https://www.nescaum.org/documents/mhdv-zev-mou_12-14-2021.pdf/

³ California Air Resources Board, Advanced Clean Trucks Fact Sheet, <https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-trucks-fact-sheet>.

⁴ PURA and utility involvement in MHDV electrification is important given the “chicken and the egg” problem that exists for EV adoption, where the private sector has not made a business case to install public charging infrastructure without a critical mass of EVs on the road, and there will not be a critical mass of EVs on the road until there is sufficient charging infrastructure.

health and imposes millions of dollars annually in public health costs. Such pollution is particularly harmful in EJC's that bear a disproportionate burden of pollution resulting from MHDVs. While MHDVs make up only 6 percent of Connecticut's 4.6 million registered vehicles they contribute a disproportionate amount of climate and harmful air pollution, including 25% of on-road fleet GHG emissions, 53% of on-road fleet NOx emissions, and 45% of on-road fleet particulate matter emissions.⁵ Given the outsize contribution of MHDVs to the state's GHG emissions, it will not be possible to achieve Connecticut's decarbonization goals without aggressive action to address MHDVs. Further, reduction in the non-GHG pollutants generated by MHDVs will reduce the pollution burden on underserved communities that are currently disproportionately burdened by transportation emissions resulting from polluting and health-harming vehicles and heavy traffic.

Sierra Club emphasizes that it is necessary to begin the buildout of charging infrastructure for MHDVs now, as the sector is already beginning its transition to electrification. As the Connecticut Department of Transportation (CTDOT) presented at the technical meeting in this proceeding on April 21, 2022, CTDOT already has 15 electric buses in operation and plans to purchase another 50 electric buses this year. Connecticut must build out sufficient charging infrastructure to support these and other electric MHDVs as they are deployed in the near-term.

I. PURA's proposed objectives for supporting MHD fleet electrification

PURA's proposed objectives identify appropriate priorities for this proceeding. Specifically, Sierra Club is supportive of utility-based programs to support build-out of charging infrastructure for MHDVs, rate design reform to ensure electric rates are manageable for MHDV charging, load management programs to maximize benefits of MHDV charging to the grid, and prioritizing electrification of public transit and electrification of fleets that operate in EJC's, to ensure those communities share in the benefits of electrified transportation.

II. Examples of utility initiatives implemented or otherwise being considered in other jurisdictions

Massachusetts provides a good example of another jurisdiction with utility initiatives under consideration to support the electrification of MHDVs. There, National Grid has proposed a charging infrastructure program to support electrification of 850 MHDVs, covering 100% of utility-side and customer-side make-ready costs and 50% of electric vehicle supply equipment (EVSE) costs.⁶ National Grid has further proposed to cover 100% of EVSE costs in environmental justice communities (EJC's) and to deploy 40% of fleet make-ready ports in EJC's.⁷ The Company has also proposed to offer Fleet Assessment Services for 150 private and non-profit fleets and for an additional 25 public fleets (in addition to 100 public fleet assessments already in process) and to conduct 40% of private and nonprofit fleet assessments in EJC's.⁸ The

⁵ M.J. Bradley and Associates, *Southern New England Clean Trucks Program*, 2021, p. 36, available at <https://www.ucsusa.org/sites/default/files/2021-11/southern-ne-clean-trucks-report.pdf>

⁶ See Docket No. D.P.U. 21-91 Exh. NG-EVPP-1 at 71-83.

⁷ *Id.*

⁸ *Id.* at 80.

Company projects the Fleet Assessment Services will enable ~2,625 electric MHDVs.⁹ National Grid will cover 50% of the cost of assessments for private fleets and will provide the services at no cost for non-profit and public fleets.¹⁰ National Grid has also proposed to extend its Off-Peak Charging Rebate to manage charging of 1,000 fleet vehicles.¹¹ Eversource in Massachusetts has proposed a smaller version of National Grid's plan, proposing to deploy charging infrastructure to support electrification of 120 MHDVs in EJC's and providing 100 private and non-profit fleet assessments.¹²

The Massachusetts utilities have also jointly proposed a demand charge alternative plan to alleviate the burden posed by demand charges on EV charging, pursuant to Section 29 of Massachusetts's Transportation Act, which required each electric distribution company to file an alternative rate design to traditional demand charges for commercial EV charging.¹³ Demand charge relief may be necessary for MHDV fleets that require direct current fast charging (DCFC). While the proceeding evaluating the Massachusetts utilities' demand charge alternative proposal is in its early stages, Sierra Club and other environmental partners provided expert testimony offering suggestions to improve the demand charge alternative plan suggested by the utilities.¹⁴

In its testimony, Sierra Club noted that reformed commercial and industrial rates that more accurately reflect the flexible nature of EV charging relative to traditional commercial and industrial loads and provide meaningful reductions in monthly charging costs for drivers and fleet operators could fundamentally change the economics of a decision to invest in an EV. Sierra Club urged that most distribution costs should be recovered through a time-varying volumetric rate, or through demand charges that apply to on-peak periods only, and that utilities should be required to conduct detailed marginal cost analyses of load on the distribution system in order to inform the setting of EV rates. Sierra Club urged that the ultimate goals for a demand charge alternative proposal should be to:

1. "Provide sufficient incentives to encourage EV adoption that facilitates the state's transportation electrification goals;
2. Recover at least the marginal cost of serving the additional load to prevent cross-subsidies; and

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.* at 87.

¹² See Docket No. D.P.U. 21-90, Exh. ES-KB-1 at 73-74. Sierra Club has urged Eversource to scale up its MHDV offering to match the size of National Grid's proposal.

¹³ Chapter 383 of the Acts of 2020, An Act Authorizing and Accelerating Transportation Investment, signed into law on January 15, 2021. In passing that Act, the Massachusetts legislature recognized that demand charges can pose a barrier to transportation electrification, particularly for public DCFC stations. When EV adoption is in its early phases, public DCFC typically have high demands relative to energy usage, which results in high electricity bills but low utilization. To address this, the Transportation Act required each electric distribution company to file an alternative rate design to traditional demand charges for commercial EV charging.

¹⁴ See Docket No. D.P.U. 21-90 Exh. CEP-MW-1, Direct Testimony of Melissa Whited on behalf of Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists (Clean Energy Parties) Regarding Demand Charge Alternative Proposal, May 27, 2022; Docket No. D.P.U. 21-91 Exh. CEP-MW-1, Direct Testimony of Melissa Whited on behalf of Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists (Clean Energy Parties) Regarding Demand Charge Alternative Proposal, May 27, 2022.

3. Promote the efficient use of the grid through meaningful price signals to encourage load shifting to off-peak hours where possible.”¹⁵

III. Northeast States for Coordinated Air Use Management (NESCAUM)’s draft Multi-state Medium- And Heavy-duty Zero-Emission Vehicle Action Plan

Sierra Club supports the recommendations outlined in the Electric Utility and Utility Regulator Actions section of the NESCAUM draft Multi-state Medium- And Heavy-duty Zero-Emission Vehicle Action Plan. In particular, Sierra Club urges that PURA prioritize the following recommendations:

- “Utility regulators should:
 - a. Consider adopting utility targets for deployment of “make-ready” and other charging infrastructure for MHD ZEVs that align with state air quality, climate, and transportation electrification goals and regulatory requirements for MHD ZEV penetration, and require utilities to develop plans to achieve those targets; and
 - b. Support state electricity decarbonization and renewable energy targets to maximize air quality improvements and avoid shifting transportation emissions to fossil-fueled power plants.”¹⁶
- “Utility regulators should consider adopting policies and guidelines encouraging utilities to:
 - a. Provide all necessary service-line extension and make-ready electrical infrastructure on the utility side of the meter for all non-residential customers installing separately metered charging infrastructure at no cost to the customer; ...
 - c. Offer commercial rates and customer incentive programs for charging that are designed to contain and recover utility costs while lowering charging costs, mitigating the economic barrier posed by demand charges, and providing clear grid benefit focused price signals to commercial customers that are consistent for all utilities within the state to the maximum extent possible; ...
 - f. Offer revenue-generating V2G services and enable vehicle-to-building services for electric school buses and other MHD ZEV fleets that are valued consistent with traditional grid services.”¹⁷
- “To ensure early emission reductions in frontline and overburdened communities, utility regulators should:
 - a. Prioritize investments in overburdened and underserved communities by establishing requirements for deployment of make-ready infrastructure and investment of incentive funding to benefit fleets operating in or near these communities; and
 - b. Support utility engagement with frontline and overburdened communities in their service territories in planning, developing, and implementing utility MHD ZEV

¹⁵ *Id.* at 3.

¹⁶ NESCAUM Draft Multi-state Medium- And Heavy-duty Zero-Emission Vehicle Action Plan at 31.

¹⁷ *Id.* at 32.

programs.”¹⁸

- “Utility regulators should encourage utilities to adopt a range of commercial rate structures and customer incentive programs for MHD ZEVs that are tailored to meet fleet charging needs and designed to recover utility costs while lowering charging costs, mitigating demand charges, and providing clear grid-benefit focused price signals to fleet customers. Rate reform should be focused on long-term sustainable rate design solutions that offer time-variant rates, promote off-peak charging and charging during periods of peak renewable energy generation, avoid non-coincident peak demand charges, and are consistent for all utilities within the state to the maximum extent possible.”¹⁹

Thank you for your consideration of these comments and the Sierra Club looks forward to continuing to work with PURA and stakeholders in planning for a decarbonized transportation sector in Connecticut.

Respectfully submitted,

Sarah Krame
Associate Attorney
Sierra Club Environmental Law Program
50 F St. NW, 8th Floor
Washington, DC 20001
(202) 548-4597
Sarah.krame@sierraclub.org

¹⁸ *Id.* at 33.

¹⁹ *Id.* at 34.