STATE OF NEW YORK PUBLIC SERVICE COMMISSION

CASE 18-E-0138 - Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure

COMMENTS OF EARTHJUSTICE AND SIERRA CLUB

Earthjustice and Sierra Club respectfully submit the following comments regarding DPS Staff's March 1, 2023 Electric Vehicle Make-Ready Program Midpoint Review and Recommendations Whitepaper.

I. Light-Duty Vehicle Programs

A. Updated Plug Targets

With the passage of ambitious zero emission vehicle legislation driving the state toward all-electric light-duty vehicles (LDVs) by 2035,¹ the promulgation of regulations adopting California's Advanced Clean Cars II (ACCII)² rule and California's Advanced Clean Trucks (ACT) rule, and significant further developments in the breadth and capabilities of electric vehicle (EV) offerings from automakers, it is timely for DPS Staff to update its modeling projections for L2 and DCFC charging needs under the Make-Ready Program. These regulatory and technological developments all post-date the initial Make-Ready Order and facilitate the State's push toward a fully electrified vehicle fleet while dramatically accelerating the pace at which electrification will need to occur in the latter half of this decade. Commenters support updating the EVI-Pro modeling used to estimate public charging infrastructure needs.³

While Commenters agree that greater deployment of DCFC and reduced deployment of public L2 is appropriate based on the updated EVI-Pro modeling, Commenters are concerned by the modified assumptions regarding the percentage of New Yorkers with access to home charging and the impact that this change has on the EVI-Pro modeling results. In its updated EVI-Pro modeling, DPS Staff found that projected DCFC needs increased more than four-fold from 1,500 to 6,302 plugs by 2025 and public L2 needs decreased from 53,773 to 19,293.⁴ This change is influenced by Staff's assumptions about the percentage of New Yorkers with access to home charging. In its initial EVI-Pro analysis, Staff assumed 57 percent of New York City residents and 82 percent of non-NYC residents have access to home charging.⁵ In the updated

¹ Env. Conserv. L. § 19-0306-B(1) & (2) (2021).

² ACCII was initially adopted on a time-limited emergency basis on December 29, 2022. NYSDEC, DEC Announces Adoption of Advanced Clean Cars II Rule for New Passenger Cars and Light-Duty Truck Sales (Dec. 29, 2022), <u>https://www.dec.ny.gov/press/126879.html</u>. DEC has solicited comments on a proposal to adopt ACCII on a permanent basis and has extended its emergency promulgation pending finalization of the permanent adoption. ³ DPS Staff Electric Vehicle Make-Ready Program Midpoint Review and Recommendations Whitepaper, Case 18-E-0138 (Mar. 1, 2023), at 22 [hereinafter "Whitepaper"].

⁴ Apr. 27 Tech Conf. at Slide 37.

⁵ Whitepaper at 22.

modeling, Staff presumes that early EV adopters will disproportionately have access to home charging and modifies the EVI-Pro modeling to assume that 77 percent of New York City residents and 95 percent of non-NYC residents have access to home charging.⁶

Commenters are concerned that the assumption that early EV adopters disproportionately have access to home charging—which has the effect of calibrating downward projected public charging infrastructure needs—will perversely ensure that this outcome actually occurs: viz., that New Yorkers with garages will continue to dominate the ranks of EV owners. A key value of the Make-Ready Program is its ability to facilitate EV ownership for New Yorkers that *lack* access to home charging and would otherwise be unable or unwilling to purchase an EV. In modeling supporting final plug targets, Commenters urge the elimination of the assumption that early adopters disproportionately have access to home charging and use instead figures reflecting *actual* service-territory-specific access to home charging for NYC and non-NYC residents.

B. Multi-Unit Dwellings

Commenters support Staff's recommendation to include an L2 plug goal for multi-unit dwellings (MUDs).⁷ Personal vehicles spend the vast amount of their time parked,⁸ and much of that time is either at home or at work. There are significant benefits both for the grid and also for the economics of EV ownership for residents of MUDs to be able to charge while parked at home. From a grid perspective, reducing the speed of charging (spreading it out over more hours) and shifting charging to times of lower demand places less strain on the distribution system and limits increases in peak demand. In this regard, having residents of MUDs charge their vehicles while parked overnight at their residence benefits all electric customers by mitigating increases to local peaks and reducing the need for grid upgrades whose costs would be socialized across all electric customers.

From a driver perspective, there are significant cost and convenience benefits to home charging for MUD residents. According to NYSERDA, average residential retail electricity in New York costs slightly over 21 c/kWh.⁹ DCFC charging through New York City fast charger program costs 35 c/kWh¹⁰ and costs are similar at NYPA EVolve NY corridor DCFC (35 c/kWh + tax).¹¹ Charging at private DCFC is typically more expensive, with Electrify America stations charging 48 c/kWh to non-subscription drivers (36 c/kWh to those with a monthly subscription)¹² and Tesla charging non-Tesla drivers 49-55 c/kWh for its Superchargers without

⁶ Id.

⁷ See id. at 23.

⁸ David Z. Morris, Today's Cars Are Parked 95% of the Time, Fortune (Mar. 13, 2016), available at <u>https://fortune.com/2016/03/13/cars-parked-95-percent-of-time/</u>.

⁹ NYSERDA, Monthly Average Retail Price of Electricity – Residential (updated Apr. 12, 2023), <u>https://www.nyserda.ny.gov/Researchers-and-Policymakers/Energy-Prices/Electricity/Monthly-Avg-Electricity-Residential</u>.

¹⁰ NYC, Motorists & Parking: Electric Vehicles, <u>https://www.nyc.gov/html/dot/html/motorist/electric-vehicles.shtml#/find/nearest</u>.

¹¹ NYPA, EVolve NY, <u>https://evolveny.nypa.gov/</u>.

¹² Electrify America, Pricing and Plans for EV Charging, <u>https://www.electrifyamerica.com/pricing/</u> (locational data for New York State).

a monthly subscription (39 c/kWh with a monthly membership).¹³ It is clear that drivers without access to home charging will end up paying significantly more to charge their vehicles than those that are able to access charging in their MUD. At the same time, since personal vehicles are parked at home so much of the time, it is also considerably more convenient to be able to charge while parked at home than to need to budget time for utilizing public DCFC.

For these reasons, Commenters are supportive of Staff's recommendations to prioritize deploying EVSE at MUDs in disadvantaged communities (DACs) and to incorporate premise-specific eligibility requirements on MUDs in these communities to ensure that those MUDs are not primarily housing the higher-income residents that live within the DAC.¹⁴ The cost concerns for drivers needing to rely on DCFC for their routine charging may be particularly acute for residents of DACs. New Yorkers already pay comparatively high retail electrical rates. Requiring EV drivers to pay considerably higher rates by charging their vehicles at public DCFC may reduce the financial attractiveness of EVs for residents of DACs. Due to the importance of accelerating deployment of EVSE in MUDs, Commenters urge a regular, periodic review of the updated program and consideration of alternative ownership structures (e.g., a turn-key model where utilities would finance and own EVSE) if MUD EVSE deployment continues to lag in order to ensure the benefits of the Make-Ready Program are being fully shared with residents of MUDs.

C. Curbside Charging

The challenges for EV drivers of exclusively relying on public DCFC also highlight the importance of the availability of curbside charging in areas with limited access to dedicated offstreet parking. Commenters strongly agree with Staff's recommendation that on-street L2 chargers be eligible for DAC tier incentives¹⁵ and urge that these curbside chargers, together with MUD L2 in DACs, be prioritized. Staff is correct that eligibility should be limited to parking spaces where "EV parking only" curb regulations are in place¹⁶ to ensure that ratepayers receive the full benefit of the chargers supported by these incentives. As for MUDs, Commenters urge a regular, periodic review of whether the Make-Ready Program is adequately supporting development of curbside L2 charging. If data indicate that it is not, Commenters urge the Commission to consider alternative ownership models that could accelerate deployment of public on-street L2 chargers.

D. DAC Budgets

Commenters generally support Staff's proposal to increase the dedicated carve-out in the Make-Ready Program budget for disadvantaged communities (DACs), while including in that carve-out non-EVSE investments that directly benefit DACs.¹⁷ The CLCPA provides that DACs "shall receive no less than thirty-five percent of the overall benefits of spending on clean energy

¹³ Consumer Reports, How Well Do Tesla Superchargers Work for Non-Tesla EVs? (Mar. 17, 2023), <u>https://www.consumerreports.org/cars/ev-chargers/how-well-do-tesla-superchargers-work-for-non-tesla-evs-</u> a4713673565/.

¹⁴ See Whitepaper at 29.

¹⁵ Id.

¹⁶ *Id*.

¹⁷ *Id.* at 27.

and energy efficiency programs, projects or investments . . .," with a goal of 40 percent of relevant programmatic funding.¹⁸ In crafting budgets to comply with the CLCPA's equity requirements, Commenters do not object to including budgets for programs, such as programs funded through prize money or new micromobility programs, that specifically target bringing the benefits of electrified transportation to DACs. To this end, however, it will be important to include safeguards on the new proposed \$25 million micromobility make-ready program¹⁹ to ensure that the beneficiaries of this program are actually residents of DACs. For example, for charging solutions intended to be located at MUDs, the program could employ the same eligibility criteria Staff has proposed for EVSE at MUDs in DACs.

E. Increased Per-Plug Incentives

In initial Midpoint Review comments filed last October, Commenters urged the Commission to revisit per-plug maximum incentive levels based on data from several utilities that make-ready costs have been higher than anticipated at the time of the Make-Ready Order and EVSE deployment was lagging program goals as a result.²⁰ Commenters are pleased to see that Staff concurs that the per-plug averages from the Make-Ready Order were insufficient and is recommending increasing the Upstate and Downstate maximum L2 per-plug incentive and the per-kW range for DCFC.²¹ To prevent a future delay in program implementation if EVSE costs again change unexpectedly, Commenters urge an annual review of the appropriateness and sufficiency of Make-Ready Program incentives with an opportunity for utilities to submit data supporting modifications to maximum incentives at that time.

F. Battery Storage and Advanced Technologies

Widespread deployment of DCFC creates the potential for large increases in local peak demand leading to the need for distribution system upgrades. In some contexts such as fleet charging, it may be possible to develop coordinated fleet charging strategies that avoid or mitigate impacts to system peak. However, in many situations, drivers utilizing public DCFC may have limited ability to alter the timing of their charging (e.g., because they are on a long-distance trip and their battery charge is depleted, or based on other practical considerations). As such, deployment of advanced technologies, such as battery storage collocated with DCFC, has the potential to limit impacts to local peaks and avoid upgrades to the power grid whose costs would otherwise be broadly borne by ratepayers.

Commenters support incentivizing the use of advanced technologies where they would provide quantifiable grid and ratepayer benefits. In doing so, it is important to strike an appropriate balance between providing sufficient economic incentive for DCFC owners to make grid- and ratepayer-beneficial investments, and avoiding over-subsidizing investments that DCFC owners already have some financial incentive to make (e.g., to mitigate the impacts of demand charges). Commenters suggest that DCFC owners seeking subsidies for advanced

¹⁸ E.C.L. § 75-0117.

¹⁹ Whitepaper at 29.

²⁰ Comments of Earthjustice, Natural Resources Defense Council and Sierra Club, Case 18-E-0138 (Oct. 3, 2022), at 7-8.

²¹ Whitepaper at 21.

technology should be required to provide information regarding any claimed grid and ratepayer benefits, and estimate both the cost and anticipated cost savings of the advanced technology. Where grid and ratepayer benefits are substantiated, an appropriate subsidy would provide DCFC owners sufficient incentive to overcome the upfront cost barrier, but avoid providing windfalls to stations owners by accounting for the anticipated savings to the station owner that the advanced technology will generate. Larger subsidies are appropriate for advanced technology solutions that are developed to be climate resilient and in circumstances where the technology would enable clean energy resources being available to DACs.

II. Medium- and Heavy-Duty Programs

While at the time of the Make-Ready Order, a "relatively small-scale program to test fleet electrification" may have been appropriate,²² it is clear that in 2023 many medium- and heavyduty vehicle (MHDV) segments are now poised for widespread electrification. A sizeable and growing range of MHDV applications are ready to electrify today, both technologically and economically. A recent analysis by M.J. Bradley found that approximately 66% of the current inuse fleet of MHDVs show "strong potential for near-term EV uptake."²³ The North American Council for Freight Efficiency and RMI have identified New York State as one of the highest potential regions for electric truck deployments.²⁴ Electrification of MHDVs is also a key component of the state's Final Scoping Plan and is a foundational strategy towards achievement of the CLCPA's binding, economy-wide emission limits.

The importance of a well-designed Commission program to support near-term MHDV electrification cannot be overstated. New York State, in its role on NESCAUM's Multi-State ZEV Task Force, recently released a MHDV ZEV Action Plan which found that "[u]tilities and utility regulators must play a central role in MHD fleet electrification to ensure a smooth and rapid transition."²⁵ This is echoed in the Final Scoping Plan, which calls on Staff and the Commission to "support the near-term buildout of public and fleet charging infrastructure" and to "work with utilities to plan for expected service levels needed to support the electrification of MHD fleets, especially in Disadvantaged Communities where such depots tend to cluster."²⁶

"If managed well, fleet electrification could deliver important grid and ratepayer benefits. The additional revenues generated from truck and bus charging have the potential to put downward pressure on electricity rates for all ratepayers. Fleet charging at times of peak solar and wind generation paired with investments in energy storage could help increase integration of renewable energy sources into the electric grid and manage load. In apportioning costs for utility

²² *Id.* at 46.

²³ M.J. Bradley & Associates, Medium- and Heavy-Duty Vehicles: Market Structure, Environmental Impact, and EV Readiness at 5 (2021),

https://www.edf.org/sites/default/files/documents/EDFMHDVEVFeasibilityReport22jul21.pdf.

²⁴ North Am. Council on Freight Efficiency & RMY, High-Potential Regions for Electric Truck Deployments (2020), <u>https://rmi.org/insight/high-potential-regions-for-electric-truck-deployments</u>.

²⁵ NESCAUM, Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Action Plan at 34 (2022), <u>https://www.nescaum.org/documents/multi-state-medium-and-heavy-duty-zev-action-plan.pdf</u>.

²⁶ Final Scoping Plan at 157, 160–61.

make-ready infrastructure and other MHD ZEV programs, it will be important to avoid imposing unfair burdens on low-income ratepayers.²⁷

While Commenters agree with Staff's contention that a comprehensive MHD-specific program should be addressed holistically in the new proceeding, there are several low-hanging fruit modifications that are appropriate for the Midpoint Review. These changes are critical to boosting near-term electric truck and bus deployments and to keeping the State on track towards achievement of the state's electric school bus mandate and other key public policies. Fixing some program design elements now will also allow utilities and other stakeholders to learn from the pilot phase, and incorporate those learnings into the development of the overarching MHDV make-ready framework.

At the same time, Commenters urge Staff and the Commission to consider the trajectory of charging needs for MHDVs specifically in the context of the CLCPA and other supportive policies, similar to the approach taken for designing the LDV program. Atlas Public Policy has produced a detailed analysis to identify the charging infrastructure needs to support full MHDV electrification. Their analysis breaks MHDV charging into three segments: at-home charging, on-road charging, and depot charging. For New York State, the analysis found that 2,500–3,000 level 2 chargers will be needed by 2025, with those needs increasing to 17,000–21,000 by 2030. Similarly, 50kW charging needs will grow from roughly 700–800 in 2025, to roughly 4,500–5,500 in 2030, and 150kW charging needs will grow from roughly 300–350 in 2025, to roughly 1,750–2,050 in 2030.²⁸ Near-term investments will be needed to meet those targets even as Staff and the Commission embark on a more holistic planning process.

²⁷ <u>Id</u>. at 35.

²⁸ Atlas Public Policy, U.S. Vehicle Electrification Infrastructure Assessment: Medium- and Heavy-Duty Truck Charging, NY Results (2021).





These findings underscore the need to move rapidly beyond the Pilot phase and begin developing programs to sharply accelerate the pace of charging infrastructure for MHDV fleets. Commenters acknowledge that it makes sense to defer most of the detailed analysis to the MHDV-specific proceeding, given the pronounced EVSE needs for these fleets, we believe these findings underscore the need to act urgently with a slate of much-needed reforms in the context of the Midpoint Review.

A. Pilot

Stakeholders, including the Joint Utilities and EDF, have identified several shortcomings that have inhibited the success of the MHD Pilot as designed in the original Make-Ready Order. Joint Utilities found that only 4% of MHDV fleets are able to participate in the Pilot, despite strong interest in near-term ZEV deployments.²⁹ The barriers identified by JU mirror EDF's findings: overly narrow eligibility and incentives are holding back fleet electrification in New York State.

Not all, but many proposed program modifications are easily fixable in the context of the Midpoint Review. Clearly, Staff recognizes this, and has made modest but important recommendations to expand the budget, include some funding for customer-side costs in DACs, and provide some modest adjustments to eligibility criteria requiring participation in public incentive programs.³⁰

Unfortunately, Staff's recommendations will be insufficient in removing the key barriers and will likely not stimulate the new investment in MHDV fleet electrification that would otherwise flow if robust utility incentives were available. Specifically, Commenters urge the Commission to reconsider the imposition on Pilot participants to also "be seeking and participate" in truck voucher incentive programs.³¹ Not only does this requirement impose substantial additional paperwork burdens and eligibility criteria on top of those explicitly adopted in the Make-Ready Order, there is the additional concern that whether it is selected to receive discretionary incentive funding is out of the fleet's control.

While we support Staff's and the Commission's interest in directly reducing diesel emissions in disadvantaged communities, there is an overarching interest in jumpstarting MHDV electrification more broadly, just as there is with LDVs. The Integration Analysis shows that every CLCPA-compliant scenario includes there being 4,500-5,200 zero-emission MHDVs on the road by 2025 – a substantial increase from the level of deployments we see today. Limiting access to make-ready funds to fleets that are able to access incentive funding, and that are able to scrap a diesel vehicle, constrains the deployment of electric trucks and buses in a manner that is inconsistent with other State policy objectives. As NYSERDA confirms on its website, the New York Truck Voucher Incentive Program has exhausted available CMAQ funding, meaning that

²⁹ Joint Utilities of New York, EV Make-Ready Program (MRP) Midpoint Review at slide 10 (2022).

³⁰ Whitepaper at 46–49.

³¹ Make-Ready Order at 131.

scrappage of a pre-2009 vehicle is an eligibility requirement.³² While some New York policies are focused on taking dirtier vehicles off the road, the Make-Ready Program is appropriately focused on ensuring the charging infrastructure is available to deploy clean, electric vehicles at a scale commensurate with New York's clean vehicle and climate commitments. Consequently, it does not make sense to freight eligibility for Make-Ready incentives with the obligation to scrap vehicles of any particular vintage. There are other ways to incentivize deployments and promote clean air in DACs, such as through enhanced incentives, that do not thwart access to make-ready funds generally.

B. Transit Authority Make-Ready

Commenters push back on Staff's recommendation to maintain the existing Transit Authority Make-Ready Program. The Final Scoping Plan, released by the Climate Action Council to guide the State towards achieving the requirements of the CLCPA, includes a recommendation that the "State should work with municipally supported public transportation systems on a plan to transition to all-electric, zero-emission public transportation vehicles."³³ The State's modeling shows that *any* CLCPA-compliant emissions scenario requires that 100% of new bus sales be zero-emission by 2030.³⁴

The existing allocation of \$10 million is demonstrably insufficient to support the ongoing transition to electric bus fleets, and moreover, only authorizes make-ready work for three utilities (Con Edison, National Grid, and RG&E) and four transit agencies (Westchester County Bee-Line, Capital District Transportation Authority, Niagara Frontier Transportation Authority, and Rochester-Genesee Regional Transit Authority).³⁵ While the exact specifications for a robust Transit Authority Make-Ready scaled to achieve full bus electrification (as recommended in the Final Scoping Plan) can be deliberated in the MHDV-specific proceeding, Commenters think that immediate fixes to the budget and scope are warranted and appropriate in the context of the Midpoint Review.

Specifically, commenters believe an enhancement to \$50M – which is in line with what the New York Public Transit Association sought in the Make-Ready Order³⁶ – is appropriate at this stage. As acknowledged by Staff, "costs remain the greatest impediment to public transportation electrification efforts."³⁷ Based on the limited data available, site upgrades to accommodate initial electric bus deployments range between \$2.2M and \$3M,³⁸ meaning the current \$10M allocation might only support a grand total of three or four projects.

³² NYSERDA, Truck Voucher Incentive Program, <u>https://www.nyserda.ny.gov/All-Programs/Truck-Voucher-Program</u>.

³³ Final Scoping Plan at 163.

³⁴ Integration Analysis Technical Supplement, App'x G to Final Scoping Plan, at 16 (2022).

³⁵ Make-Ready Order at 133.

³⁶ See id. at 132–33.

³⁷ Whitepaper at 50.

³⁸ See National Grid, First Electric Bus Added to NFTA Fleet, Apr. 25, 2022,

https://www.nationalgridus.com/News/2022/04/First-Electric-Bus-Added-to-NFTA-Fleet-/; Regional Transit Service, RTS Celebrates the First 10 Electric Buses in its Bus Fleet, Oct. 7, 2020, https://www.myrts.com/Newsroom/News/Article/310/RTS-Celebrates-the-First-10-Electric-Buses-in-its-Bus-Fleet#:~:text=Following%20is%20the%20list%20of,their%20roles%20in%20the%20project.&text=The%2010%20 battery%20electric%20buses,project%20cost%20of%20%2412.4%20million.

Furthermore, given the interest in bus electrification across the State, Commenters find it necessary to open up the Transit Authority Make-Ready program to all utilities and all transit agencies. This would correct the most conspicuous flaw in the existing Transit Authority Make-Ready program, which excludes MTA, despite its full electrification goal, the pace of its electrification efforts, and the fact that it operates the largest bus fleet in the country. It would also support ongoing bus electrification efforts on Long Island, and in more rural areas such as Broome County, Tompkins County, and Ulster County. Opening up the eligibility requirements will support these and other efforts, and would provide meaningful support towards increasing electric buses' still tiny share of the 190+ million miles traveled by transit buses in New York State each year.

We recognize Staff's interest in proceeding prudently in allocating ratepayer funds. These near-term modifications are reasonable, modest, critical to achieving existing bus electrification policies, and would further the Commission's aim to provide benefits to disadvantaged communities. Staff recognizes that electric transit buses are the "most mature" segment of the zero-emission MHDV sector,³⁹ and the data bear this out. In 2022, nearly 50% of all new bus sales globally were zero-emission buses.⁴⁰ In the U.S., zero-emission bus adoption increased 66% from 2021 to 2022.⁴¹ Given the direct benefits of transit bus electrification on disadvantaged communities, in terms of cleaner air where bus depots are disproportionately located and electrifying an important mode of transportation used by low-income New Yorkers daily, these simple, near-term modifications will support a broad range of public policy goals.

C. School Bus Electrification

Commenters support Staff's inclusion of specific recommendations regarding the electrification of New York State's school bus fleet. Getting a robust school bus make-ready program off the ground must be a critical priority, given the statutory requirement to purchase only zero-emission school buses starting in 2027, and for a fully-zero-emission school bus fleet by 2035, and the \$500M allocated towards school bus electrification. Commenters support the specific recommendation to direct utilities to proactively identify load serving capacity at school bus depots, and suggest that this be taken further, by initiating a process to identify all school bus depots, garages, and parking lots used for school buses within each utility's service territory. Commenters are also generally supportive of Staff's recommendation to deepen engagement between utilities, state agencies, and school districts. Early identification of grid constraints and load pockets that can support early electrification will be critical as school districts take on the novel task of acquiring and deploying electric school buses.

Beyond these planning steps, Commenters urge the Commission to authorize and support dedicated incentives to support school bus electrification in the near-term, in the context of the Midpoint Review. Within New York State, twenty-two school districts will be receiving \$69M

³⁹ Whitepaper at 51.

⁴⁰ Nat Bullard, Annual Presentation, <u>https://www.nathanielbullard.com/presentations</u>, at Slide 57 (electric buses represented 49 percent of the market in 2022).

⁴¹ CALSTART, Zeroing in on ZEBs (2023), <u>https://calstart.org/wp-content/uploads/2023/02/Zeroing-in-on-ZEBs-</u> February-2023_Final.pdf.

from the U.S. Environmental Protection Agency to purchase 184 electric school buses. These awards are only from year one of the five-year Clean School Bus Program enacted in the Bipartisan Infrastructure Law. While these funds are critical to jumpstarting the transition to electric school buses, they come with certain eligibility restrictions that limit the amount of EPA funding that can go towards EVSE and electrical upgrades. Commission assistance will be vital to ensuring that these school districts, and others that may receive EPA awards in the coming years, are able to realize the benefits of this federal funding and deliver the climate and clean air benefits by getting these electric school buses on the road.

Additional program elements will be needed to enable near-term school bus electrification, and should be included in the context of the Midpoint Review. In addition to the planning steps recommended by Staff, Commenters suggest that utilities be directed to proactively engage the school districts in their territories with a full array of fleet advisory services and technical assistance that will be needed to meet the 2027 phase-out of new combustion buses. Moreover, in line with the CLCPA's requirement to affirmatively prioritize clean energy deployments in disadvantaged communities, Commenters urge the Commission to provide extra resources to identified school districts and depots that serve disadvantaged communities. These areas are likely the least ready to transition today, and will need more robust support from utilities and state agencies to ensure that they are not last in line for zero-emission bus deployments.

Finally, Commenters also acknowledge the ongoing collaboration regarding vehicle-togrid integration and suggest that school buses are an ideal use case that should be prioritized in the development of a pilot program.

D. Fleet Assessment Services

Commenters support Staff's recommendations to modify the Fleet Assessment Services program to move towards a more robust and standardized program. It is important to prioritize school districts in this work, as Staff proposes, but it is unclear why other public or private fleets – especially those that impact public air quality and public health in DACs – should not benefit from these adjustments. Commenters urge the Commission to consider broadening the scope of Staff's recommendations by including at a minimum transit authorities, and potentially including refuse trucks. Commenters also recommend including provisions to facilitate the inclusion of representatives from DACs in the fleet assessment and transition process, perhaps by requiring some form of outreach from the utility or the fleet. Generally, Commenters also support more Commission guidance and minimum standards on what should be included in these services – e.g., total cost of ownership, interconnection, fleet conversion schedule, which were identified in the Whitepaper, should be part of any fleet assessment.

E. Other Fleets

Finally, Commenters urge the Commission to direct utilities to prepare for the widespread electrification of MHDV fleets by proactively identifying the major fleet depots and hubs in their service territories, noting specifically any "clustered" fleets that could feasibly be made electrification-ready at one time, and identifying grid constraints if any that might inhibit

electrification. This recommendation furthers the emission reduction and equity provisions of the CLCPA, and is in line with recommendations made by NESCAUM.

Commenters fully endorse Staff's recommendations that utilities be directed to update their load serving capacity maps on a quarterly basis, and that such maps be tailored to support electric vehicle charging.⁴² These maps should be detailed, and should enable the identification of optimized, least-cost locations for charging infrastructure installations, as well as identify locations that should be prioritized for distribution system upgrades.

⁴² Whitepaper at 53.