

October 3, 2022

Submitted electronically via dps.ny.gov

Honorable Michelle Phillips
Secretary State of New York Public Service Commission
Building Three Empire State Plaza
Albany, NY 12223-1350

RE: Case No. 18-E-0138 – Proceeding on Motion of the Commission Regarding Electric Vehicle Supply Equipment and Infrastructure

Dear Secretary Phillips:

On August 30, 2022, the Commission filed a notice soliciting comments in response to Department of Public Service (DPS) Staff questions in the above subject case. Tesla appreciates this opportunity to provide written comment. Tesla supports Make-Ready Programs across the country as a mechanism to help overcome the large upfront cost of installing electric vehicle (EV) infrastructure, which is one of the major barriers to more widespread EV infrastructure deployment and EV adoption. More and faster EV infrastructure deployment will help increase adoption of EVs in New York State to meet state goals.

The State of New York has taken a strong and supportive stance in support of EV growth. New York is a signatory to public health and environmental standards that will require total sales of Zero Emissions Vehicles ("ZEVs") within the state to reach 850,000 by 2025,¹ up from the cumulative 100,000 ZEVs in the state today.² New York is also a signatory to the Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding committing to striving to make at least 30% of all new medium- and heavy-duty vehicle purchases zero emission vehicles by 2030 and 100% by 2050.³ Further, last year Governor Hochul signed even more ambitious goals into law, setting a goal that 100% of "new passenger cars and trucks offered for sale or lease, or sold, or leased, for registration in the state shall be zero-emissions" by 2035, and 100% medium- and heavy-duty vehicles by 2045.⁴ And just in the last week of September 2022, the Governor directed the State Department of Environmental Conservation to adopt California's Advanced Clean Cars II regulation, requiring all new passenger cars, pickup trucks, and SUVs sold in New York State to be zero emissions by 2035.⁵ Adequate DCFC infrastructure is critical to achieving New York's ambitious EV adoption goals.

The potential benefits of greater EV adoption in New York are significant. With no tailpipe emissions, EVs can help reduce ozone-forming nitrogen oxide emissions and greenhouse gas emissions. Additionally, increased adoption of EVs means there will be more charging of EVs in the evening hours, which results in higher utility system utilization during off-peak hours. This provides more electricity sales to the utility at average cost rates that typically exceed the utility's marginal costs. The increased revenue to the utility from EV charging means that the utility's revenue requirement will be reached more quickly; therefore, all other ratepayers should enjoy a rate decrease. MJ Bradley & Associates estimated that by 2030, each plugin EV in New York would provide \$265 of net present value benefits annually. Of those benefits, utility customers would have a benefit of

¹ https://www.energy.ca.gov/sites/default/files/2019-12/StateZero-EmissionVehiclePrograms_20180503_ada.pdf

Zero Emission Vehicle Memorandum of Understanding: New York portion of 3.3 million EVs by 2025.

² <https://www.nysenda.ny.gov/All-Programs/chargenyl/support-electric/map-of-ev-registrations>

³ <https://www.nescaum.org/documents/mhdv-zev-mou-20220329.pdf/>

⁴ <https://www.nysenate.gov/legislation/bills/2021/S7788>

⁵ <https://www.governor.ny.gov/news/governor-hochul-drives-forward-new-yorks-transition-clean-transportation>

\$166/EV/year due to higher utility revenues from EV charging obviating the need for future rate increases.⁶

Increasing access to charging enables the adoption of more zero-emission light-duty vehicles (“LDVs”) as it allows for consistent, reliable, and affordable charging which will make the difference between buying an EV or a traditional internal combustion engine vehicle. While today a majority of EV drivers’ charging occurs at home or work, customer access to DCFC is essential for long-distance travel or emergency situations, and for customers without access to at-home charging, such as those who reside in multi-family dwellings. The National Renewable Energy Laboratory estimates that approximately 3.4 DCFC chargers will be needed to support every 1,000 battery EVs.⁷ As reflected in New York’s Make-Ready program targets, New York will need approximately 1,500 total DCFC plugs to support the LDV ZEV targets by 2025.⁸ This represents a significant increase over the State’s approximately 1,041 existing DCFC plugs.⁹

High-power charging will also be important for the development of medium and heavy duty (“MHD”) EV applications as well as EV fleets across the spectrum from LDV to MHD. Building on the success to date of the Make-Ready Program is critical to support the further growth and development of all EV use cases from LDV to MHD and vehicle fleets. Despite MHD vehicle adoption lagging LDV deployment, the MHDV Make-Ready Pilot could be even more important for MHD vehicles than LDV and will help pave the way for MHD applications in New York, removing a significant barrier to adoption currently.

In the comments below, Tesla addresses several questions raised by DPS Staff. Tesla looks forward to continuing to engage with Staff to provide feedback, answer questions, and work with stakeholders to improve this vital program.

Program Budget and Incentive Levels

1) Provide comments and suggested modifications for the non-DAC incentive levels for both the light-duty program and the Medium Heavy Duty (MHD) Make-Ready pilot.

Two new Federal incentive programs were created since New York’s Make-Ready Program launched. The first is the National Electric Vehicle Infrastructure (NEVI) program as part \$7.5 billion allocated to alternative re-fueling infrastructure in the Infrastructure Investment and Jobs Act. The second is a reformed and expanded Alternative Fuel Vehicle Refueling Property Tax Credit (30C). To ensure New York’s funding is maximized and to prevent double-dipping in multiple programs, New York should consider developing program rules so that funding under the New York Make-Ready program only applies to the project’s net costs after receiving other incentives.

Light-Duty

The current incentive levels appear to have incentivized some growth in New York’s light-duty EV charging infrastructure as reported in the Make Ready Program Midpoint Review Kickoff Meeting Presentation.¹⁰ The

⁶ <https://www.mjbradley.com/reports/mjba-analyzes-state-wide-costs-and-benefits-plug-vehicles-five-northeast-and-mid-atlantic>

⁷ Wood, Eric et al., National Plug-In Electric Vehicle Infrastructure Analysis, U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy, September 2017, p. xi, available at <https://www.nrel.gov/docs/fy17osti/69031.pdf>.

⁸ NYSpsc Case 18-E-0138 Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs. Issued and Effective: July 16, 2020. Appendix B.

⁹ Alternative Fuels Data Center, U.S. Department of Energy, Electric Vehicle Charging Stations (as of September 27, 2022) https://afdc.energy.gov/fuels/electricity_locations.html#/analyze

¹⁰ NYSpsc Case 18-E-0138 Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs. Make Ready Program Midpoint Review Kickoff Meeting Presentation filed by New York State Department of Public Service September 20, 2022. Slide 27 of 48.

Joint Utility Make-Ready Program investment has contributed to 100% growth of Level 2 ports and 41% growth of DCFC ports in New York State since July 2020.¹¹

Despite EV charging infrastructure having grown over the course of the Make-Ready Program to date, the pace of deployment in many of the utility territories has fallen behind targets. Although many projects have applied and some utilities appear to have a full pipeline, there is no guarantee that all of those projects will be brought to completion as there are many obstacles that can prevent a project from being fully constructed. Further, it is not clear from the Presentation whether the growth of EVSE since the Make Ready Program started is in fact more rapid than what would have happened with no incentive. Additional transparency about the number of ports completed, and that have committed funds or have applied under the program, would be helpful to developers and stakeholders to understand how the program is progressing. This can be achieved by Joint Utilities including program updates on their customer facing websites, similar to the updates provided for the Per Plug Incentive program.

For these reasons it is reasonable to consider expanding eligibility for some equipment that has previously not been eligible under the program, namely customer-owned switchgear and the wiring all the way up to the customer meter. Additionally, it is worth considering whether the 50% incentive should be modestly increased for private access and proprietary Level 2 and DCFC projects up to 75%.

Medium Heavy Duty

Given the statistic provided that 96% of fleets that have engaged with the utilities have not been able to participate in the Medium Heavy-Duty Vehicle ("MHDV") Pilot¹² there appears to be opportunities for improvement. Most importantly, it is critical that DPS take the opportunity during this Midpoint Review to remove the "pilot" label and create a proper Make Ready Program that fleets can utilize as they begin to transition their fleets to zero emission. If New York would like to see the national fleets with a presence in the region begin to electrify their vehicles, a strong Make Ready Program is essential and will provide an incentive for these fleets to focus their early electrification efforts in New York. The budget for this new MHD Make Ready Program should be at least \$150 million through 2025, with the opportunity to increase the budget if the funds deplete rapidly.

- 2) Provide comments regarding the state of the EV charging station market and it's continued need for make-ready subsidies. Is the market ready to begin reducing the percentage of make-ready costs subsidized by the program from 90 percent for publicly accessible non-proprietary stations and 50 percent for other types of chargers? If so, what percentage of costs should be subsidized?***

It is appropriate to maintain the incentive levels at 90% for publicly accessible non-proprietary stations and considering a modest increase in the private access and proprietary category up from 50% today to 75%. The reason for this recommendation is there are a number of large fleet customers (including rental companies) who would greatly benefit from additional charging infrastructure, and every taxi or transportation network company ("TNC") vehicle that electrifies accounts, on average, for many more electrified miles than a standard light-duty passenger vehicle.

The Need for Additional Phases of the Program

¹¹ *Id.*

¹² *Id.* Slide 31 of 48.

1) What program modifications would improve the MHD Make-Ready pilot?

As stated in response to question 1 under “Program Budget and Incentive Levels,” Tesla supports creating a MHD Make-Ready Program and believes it would be one of the most consequential actions that DPS could take during the Midpoint Review. Tesla supports the following modifications to the MHDV Make-Ready Program:

- Removal of the New York Truck Voucher Incentive Program (“NYTVIP”) requirement.
- Inclusion of customer-side make-ready costs. Covering all upgrade/infrastructure/construction costs up to the meter would be a big improvement for MHDV customers.
- Transparency about how much of the costs the utility will cover. Recommend that any project level caps are removed to ensure that fleets are able to lay the groundwork for full fleet electrification up front, rather than having to do additional construction work as they grow their fleet.
- Premise-specific eligibility and/or DAC requirements are oftentimes met by most MHD installations, but regardless of where the trucks are charged, their operation will directly benefit a host of DACs.
- For MHD, do not require sites to be publicly accessible since most fleets will have dedicated charging.
- Include energy storage make-ready costs similar to what is conceived for MHD charging infrastructure.
- Do not include requirements in terms of connector type. A fleet needs to be able to purchase the vehicles and EVSE of its choosing. Their chargers will be located at their private depots so it should not matter to the state whether they are proprietary connectors or not. The important piece is that the fleet electrifies and feels comfortable doing so with the technology of its choosing.

2) Should the Commission consider creating eligibility criteria and program requirements for specific MHD vehicle use cases or vehicle-types, to address the varying charging infrastructure needs across the class 2 – 8 vehicle markets? If so, which vehicle types or use cases should have unique program requirements?

Tesla does not recommend additional eligibility criteria at this time given the nascent stage of the class 2 – 8 vehicle market, but reserves the right to provide further comment in the future as the MHD market develops.

3) Should additional equipment be added as eligible EV make-ready costs, for either the light-duty or MHD Make-Ready pilot?

Yes, as stated above, including customer-side make-ready costs up to the meter.

Redirecting unused program funding to multi-unit dwellings and workplace or redefining the accessibility criteria to include multi-unit dwellings and workplaces

1) Provide comments on whether program funding should be further directed to multi-unit dwellings and workplaces.

Yes, unused funding should be redirected to supporting the deployment of charging in multi-unit dwellings and workplace. Simply put, if New York is going to make it convenient to go electric, New Yorkers who live in multi-unit dwellings must feel confident that they will be able to access convenient charging where they park at home, work, or around town. Similarly, workplace charging is another opportunity for New Yorkers to charge where they consistently park for long-periods of time. Ideally most EV drivers in New York will use the DCFC infrastructure in the state sparingly when traveling long distances or when quick charges are necessary, while the majority of their charging occurs with Level 2 at home, work, or around town. To the extent utilities are not able to fully deploy their funding as originally conceived by the program, they should be permitted and encouraged to redirect those funds to support these essential charging locations.

Revising the accessibility criteria to include public pay to park lots

1) Should nonmunicipal pay to park lots be eligible for the higher incentive tier?

Yes, given the urban density in parts of the JU's service territories it would make sense to allow nonmunicipal pay to park lots to be eligible for the higher incentive tier in certain cases. The State should want to encourage commercial parking garages to install vast amounts of chargers so more and more New Yorkers can access charging where they park.

Recalibrating the 50 percent utility-funded, make-ready level for private and proprietary technology types

1) Provide comments on whether the 50 percent utility-funding make-ready level for private and proprietary technology types remains appropriate.

Tesla recommends considering a modest increase in the private access and proprietary category up from 50% today to 75%. The reason for this recommendation is there are a number of large fleet customers (including rental car companies) who would greatly benefit from additional charging infrastructure and every taxi or transportation network company ("TNC") vehicle that electrifies accounts, on average, for many more electrified miles than a standard light-duty passenger vehicle. Large fleets have been purchasing Tesla vehicles and are requesting proprietary chargers to avoid the need and use of adapters.

Emerging plug standards

1) Are there any topics that the Technical Standards Working Group should address that are not already delineated in the Make-Ready Order or have not been discussed in previous TSWG meetings?

It is important the the Make-Ready program and other programs maintain flexibility so that new charging technologies can be easily incorporated into programs once they begin commercial deployment. It is highly likely that new types of charging will be commercially viable and deployed prior to the completion of the Make-Ready program. Tesla provided written comment in this docket in conjunction with the Technical Standards Working Group on August 22, 2022.¹³

¹³ Case 18-E-0138 Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs. Tesla submitted written comments on Technical Standards in this docket, filed August 22, 2022.

Potential need for residential make-ready

1) Provide comments on the potential need for residential make-ready.

Residential customers can face the same initial upfront cost barriers as commercial customers when it comes to installing EV charging infrastructure. Residential make-ready programs are becoming more common as part of utility EV charging programs and a residential make-ready program was recently approved in Jersey Central Power & Light as part of their EV Driven program.¹⁴

A residential make-ready program could help offset costs associated with main-panel upgrades or utility-side upgrades which can be cost prohibitive for residential customers. Additionally, some residential customers also face significant costs due to the location of their electrical panel and the distance to their typical parking spot. A make-ready program can help overcome these barriers. For eligible customers, JCP&L provides up to \$5,500 for utility side make-ready work and up to \$1,500 for customer side make-ready work.¹⁵ Any residential Level 2 make-ready program should not restrict EV drivers purchasing decisions when it comes to the type of Level 2 hardware that they would like to install.

Tesla appreciates the opportunity to provide comments on these questions, and the Commission's consideration. The continuation of New York's Make-Ready Program with improvements will help encourage deployment of DCFC infrastructure and increase adoption of EVs in New York State. As shown in the data presented in the kickoff meeting, make-ready incentives result in increased deployment of the best available emissions reduction technology (BEVs) and can help ensure New York State meets its ZEV deployment target of 850,000 EVs by 2025 and is prepared for 100% of new vehicle sales to be zero emission by 2035.

Respectfully submitted,



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¹⁴ https://www.firstenergycorp.com/help/saving_energy/electric-vehicles/nj-ev/new-jersey-ev.html

¹⁵ <https://www.firstenergycorp.com/content/dam/customer/get-help/files/PEV/nj-ev/jcpl-ev-customer-program-guide.pdf>