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335 E. Middlefield Rd, Mountain View, CA 94043

July 1, 2022

Draft Scoping Plan Comments
NYSERDA
17 Columbia Circle
Albany, NY 12203-6399

Re: Comments of AMPLY Power on the New York Climate Action Council Draft Scoping Plan

I. Introduction

AMPLY Power, Inc. (AMPLY) appreciates the opportunity to provide comment on the New York Climate Action Council Draft Scoping Plan (Draft Scope) released on December 30, 2021. We support the State’s ambitious targets set forth in the Climate Leadership and Community Protection Act (CLCPA), and we applaud the policy that has been adopted since the Draft Scope was published. Transportation electrification is essential to New York reaching its climate goals and the sector strategies included in the Draft Scope are an appropriately comprehensive set of policies to transition the State to zero-emissions vehicles (ZEV). In these comments, AMPLY offers the Climate Action Council our perspective on policy implementation in proposed transportation sector strategies, based on our experience with fleet electrification customers in New York City and other markets.

II. About AMPLY Power

AMPLY is a comprehensive electric vehicle charging and energy management provider for fleets operating trucks, buses, vans, and other vehicles. As fleets work to meet sustainability goals, AMPLY’s fully managed charging solutions are cost effective and service-focused, reducing fuel costs and making electrification easy for organizations of all sizes. We have firsthand experience overcoming the barriers of fleet electrification and helping our customers realize benefits such as lower total cost of ownership for operators, reducing local air pollution, and lowering greenhouse gas emissions. For more information on AMPLY and our proprietary charge management system, OMEGA™ CMS, please visit our website, amplypower.com.

III. Policies that Support State Targets of Zero-Emission Vehicles Sales

The Draft Scope includes several strategies to accelerate the growing use of electric vehicles in New York. The State has since implemented some of these policies. Gov. Hochul signed legislation in 2021 creating ZEV targets for all vehicle classes, including 100% ZEV sales of medium- and heavy-duty vehicles (MDHD) by 2045.¹ In support of the MDHD sales target, the

¹ “In Advance of Climate Week 2021, Governor Hochul Announces New Actions to Make New York's Transportation Sector Greener, Reduce Climate-Altering Emissions.” Sep. 8, 2021. The signed legislation requires 100% ZEV LDV (e.g., passenger cars and trucks) sales by 2035 and requires 100% ZEV MDHD sales by 2045.



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New York State Department of Environmental Conservation (DEC) later established the Advanced Clean Trucks (ACT) rule requiring vehicle OEMs to increase ZEV sales.² In April 2022 New York announced that all new school buses in the State will be ZEV starting in 2027, toward a requirement of 100% ZEV school buses by 2035.³

The next step in the Draft Scope is an Advanced Clean Fleets (ACF) policy requiring procurement of ZEV vehicles by fleet operators.⁴ This buyer-side mandate complements ACT’s seller-side mandate to create long-term market confidence for fleet owners, project developers, vehicle and charging equipment manufactures, and utilities to plan accordingly for future EV charging projects.

New York can prioritize fleet vehicles subject to ACF such as government owned and contracted fleets, drayage and short-haul HD trucks, last-mile delivery trucks, and other high potential end uses. AMPLY also supports the Draft Scope consideration of fully electric transit buses by 2035.⁵ Transit buses have predictable energy needs and manageable charging behavior, and their high annual mileage will translate into greater fuel savings than many other vehicle types.

IV. Incentives that Encourage Investment in EV and Charging Infrastructure

AMPLY agrees with the Draft Scope that a significant multi-year investment in EVs and EV charging infrastructure is needed to accelerate the deployment of charging infrastructure.⁶ Near-term incentives are needed since current EV costs are higher than comparable fossil fueled vehicles. For example, today electric school buses can be approximately \$300,000 – \$400,000, about three times the cost of comparable diesel options.⁷ Other types of EV also cost more compared to their fossil-fueled counterparts.

The Draft Scope considers incentive programs and financial strategies to overcome the current high costs of transportation electrification.⁸ AMPLY believes incentives can leverage other funding and financing sources and encourages New York to consider an approach to incentive programs that includes:

- *Provide incentives for public and private charging.* Incentive programs should be open to the broad variety of EV use cases and charging types. This should include private “behind-the-fence” EV charging for commercial fleets. Compared to passenger vehicles, commercial fleet vehicles generally log far more miles, and vehicles in the medium- and heavy-duty segments are among the highest emitting vehicles per mile.⁹ Most

² “Governor Hochul Announces Adoption of Regulation to Transition to Zero-Emission Trucks.” Dec. 20, 2021

³ “Electric school buses are coming to New York within five years.” *The Buffalo News*. April 14, 2022

⁴ Draft Scope, Sector Strategy T2, Pgs. 105 – 106.

⁵ Draft Scope, Sector Strategy T5, pg. 109

⁶ Draft Scope, Sector Strategies T1 and T2, pgs., 103-104 and 106, respectively

⁷ “Electric School Bus Projects – Buses and Routes.” VEIC and VA Clean Cities. June 21, 2021

⁸ Draft Scope T11 pg. 117.

⁹ United States Department of Transportation Bureau of Transportation Statistics, *Estimated U.S. Average Vehicle Emissions Rates per Vehicle by Vehicle Type Using Gasoline and Diesel*, [https://www.bts.gov/content/us-vehicle-](https://www.bts.gov/content/us-vehicle-emissions-rates-per-vehicle-by-vehicle-type-using-gasoline-and-diesel)



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commercial EV fleets charge at their depots using dedicated charging equipment owned by the fleet operator, rather than publicly available EV chargers. Further, fleet vehicle driving cycles and their concentration in depots allow for charging solutions that require less hardware investment per vehicle than what is needed for private EVs and lower overall charging costs. Managed fleet charging solutions also minimize grid impacts and offer the prospect of turning electrified fleets into grid assets. As the total cost of ownership for EVs continues to decline, the economics of fleet electrification are increasingly compelling. This is especially true for state, county and municipal fleets. Accordingly, incentive programs should avoid prescriptive language and maximize flexibility to evolving business models.

- *Aligning State incentive programs with other opportunities.* Over the next several years there will be multiple funding opportunities from governmental or other sources. In the near term, for example, the Infrastructure Investment and Jobs Act includes \$5 billion in new federal funding for electric and low emission school buses across the country.¹⁰ Combining incentives should be allowed and consistent eligibility, timeline, and reporting requirements should be aligned to ease the customer experience. This includes deploying New York Green Bank (NYGB) capitalization to support large scale EV purchases and investments in EV charging infrastructure with term loans, loan guarantees, or other arrangements that lower the cost of private loans and improve project total cost of ownership.
- *Provide incentives for operating & maintenance costs.* Example O&M costs include licensing fees, data reporting costs, preventative and corrective maintenance, and extended equipment warranties. EVSE manufacturers generally offer no more than two-year warranties on their equipment. As a result, they pass along risk to their customers. Extended warranties ensure that EVSE purchased with state incentives remain operational throughout their anticipated minimum service time. New York offers a tax credit for EV charging equipment. The State should adopt a similar tax credit for annual expenses related to EVSE operations.
- *Offer multiple project application acceptance periods.* Fleets start their electrification implementation at different times due vehicle model availability, age of existing vehicles, etc. Incentive programs that stagger acceptance periods provide time for fleets to plan vehicle procurement and arrange cost-share financing. Project applications should align infrastructure deployment with vehicle arrival to minimize idle time for chargers. Incentive awards should be flexible as proposal evaluation and project timelines may not align - over time project details may change and costs may rise.

[miles](https://www.mdpi.com/1996-1073/14/20/6595). See also Krzysztof Zamasz, Jakub Stechly, Aleksandra Komorowska, Przemysław Kaszyński, *The Impact of Fleet Electrification on Carbon Emissions: A Case Study from Poland*, Energies, October 2021, <https://www.mdpi.com/1996-1073/14/20/6595>.

¹⁰ U.S. Environmental Protection Agency Office of Transportation and Air Quality. “2022 Clean School Bus Rebates – Prioritized School Districts.” May 2022. Accessed June 27, 2022 at <https://www.epa.gov/system/files/documents/2022-05/2022-csb-rebates-prioritized-school-districts-2022-05.pdf>



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V. **Utility Preparedness for Large-Scale Electrification**

The Draft Scope calls for removing barriers to ZEV charging infrastructure with solutions such as financing and building codes.¹¹ Electric system preparedness should also be included in the discussion. Simplifying the grid interconnection process and increasing its transparency will help New York meet its ZEV goals. Today, interconnection is a complicated and dynamic process that can take over a year for a single site. Uncertain timelines and requirements during the service interconnection process delays and discourages EV infrastructure installation, in turn stalling EV adoption. AMPLY offers the following suggestions to enhance the EV customer experience with timely deployment of charging infrastructure:

- *Provide a Single Point of Contact per Customer Portfolio:* Utilities of all types should be required to assign a single project manager for each company’s portfolio of charging infrastructure projects within that utility’s service territory. This project manager should be responsible for overseeing dedicated utility engineering and implementation resources across the developer’s portfolio irrespective of project type, number, or region.
- *Clearly Define Customer Requirements and Obligations:* Drawn out approval processes for standard gear, and unforeseen utility requirements and document sign offs can unnecessarily delay service upgrades. Establishing standard review processes and timelines for these matters and addressing them upfront will speed execution and reduce costs.
- *Create a Dedicated New Service Request Process for EVSE Interconnection and Energization:* Utilities of all types should be required to create a new service request process available for EVSE interconnection and energization. That process may incorporate standard engineering review processes but should also include a threshold of installed EVSE capacity (e.g., 500 kW) below which sites would be exempt from engineering reviews absent separate complicating factors.
- *Standardize Utility Turnaround Timelines:* Utilities of all types should be required to complete service upgrades and/or interconnection requests within six months of receiving a complete application, absent exigent circumstances,
- *Automated or Adaptive Load Management (ALM):* Utilities of all types should be required to allow third-party ALM solutions to manage coincident EVSE load, which in turn will reduce the required infrastructure investment. ALM refers to load management technologies that allow a ratepayer to safely install more charging capacity than the rated capacity of their connection. The application of these technologies reduces the need for utility-side system upgrades.

¹¹ Draft Scope Strategy T1, pg. 104



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VI. Clean Fuel Policies to Lower Carbon Intensity of Transportation Fuels

AMPLY strongly supports the proposed New York Clean Fuel Standard (CFS) included in the Draft Scope.¹² A CFS is a market-based policy that supports a portfolio of clean transportation fuels. It ensures that transportation fuels are continually less carbon intensive year to year. The success of this mechanism is apparent in California, where the state's Low Carbon Fuel Standard, in place since 2011, aims to deliver a 20 percent reduction in carbon intensity of transportation fuels by 2030. The program has encouraged greater use of a variety of alternative fuels and vehicle electrification has grown to over 20 percent of the program credits in Q2 2021.¹³

As we have experienced in California, a technology neutral CFS allows the marketplace to determine which fuel sources are the most effective at reducing carbon emissions. It does not pick winners and losers and so is supported by a wide range of businesses, environmental groups, public health groups, faith groups, and consumer advocacy groups. The success in California has led Oregon and soon Washington to implement their own CFS.

An effective CFS enables commercial EV charging operators, serving public and/or private vehicles, to earn revenue through sale of CFS credits and for investment in EV charging capacity. It also allows commercial EV charging operators to borrow against the value of future credit generation. This revenue stream finances infrastructure investments and lowers consumer costs. Credits for residential EV charging can be collected through the utility and directed into point-of-sale EV or infrastructure rebates, or other incentive mechanisms, further encouraging mass market adoption of EVs.

VII. Conclusion

Thank you again for this opportunity to comment on the Draft Scope. AMPLY commends New York for leadership in this matter and appreciates its thoughtful consideration of our recommendations.

Sincerely,

/s/Brian Ross

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AMPLY Power

¹² Draft Scope T12 pg. 118

¹³ California Air Resources Board. *2021 LCFS Reporting Tool Quarterly Data Summary Report No. 2 - Q2 2021*. Oct. 29, 2021