



March 20, 2018

VIA ELECTRONIC FILING

Hon. Kathleen H. Burgess
Secretary to the Commission
New York State Public Service Commission
Empire State Plaza, Agency Building 3
Albany, New York 12223-1350

Re: Case No. 14-M-0101; Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision;
Case 16-M-0411; In the Matter of Distributed System Implementation Plans

Dear Secretary Burgess:

Advanced Energy Economy Institute (AEE Institute) is pleased to submit these Comments supporting the *Petition for an Order Establishing a Separate Proceeding to Advance New York's Electric Vehicle Market* that was filed on February 22, 2018 in Case No. 14-M-0101 and Case No. 16-M-0411.

AEE Institute has long supported policies and processes that advance the deployment of the best available technologies for meeting the energy needs of today and tomorrow. In the transportation sector, we believe that electric vehicles (EV) offer substantial value to the citizens of New York, including broad-based cost savings for ratepayers,¹ enhanced consumer choice amongst transportation options, better economic competitiveness as human mobility transforms, improved national security from reduced dependence on imports of conventional fuels, and improved air quality. At the same time, EVs provide drivers with substantial performance improvements over conventional vehicles. The improvements range from the financial – lower fuel and maintenance costs mean that the total cost of ownership for an electric vehicle is lower than that of a comparable conventional vehicle² – to the driving experience – EVs offer instant torque allowing the vehicles to accelerate faster.³

Given these benefits, it is little surprise that the EV market is expanding rapidly. In the period between 2011 to 2017, sales of light-duty EVs – i.e. the sedan driven by the typical consumer – increased by an average of 50% annually.⁴ Furthermore, the market for medium and heavy-duty EVs has also gained momentum, and is projected to grow by 19% annually over the next decade.⁵ New York State specifically

¹ Analysis supporting this assertion can be found in the following sources: <http://www.mjbradley.com/content/mjba-analyzes-state-wide-costs-and-benefits-plug-vehicles-colorado>; <http://mjbradley.com/content/mjba-analyzes-state-wide-costs-and-benefits-plug-vehicles-michigan>; <http://www.mjbradley.com/content/mjba-analyzes-state-wide-costs-and-benefits-plug-vehicles-illinois>; <http://www.mjbradley.com/reports/mjba-analyzes-state-wide-costs-and-benefits-plug-vehicles-five-northeast-and-mid-atlantic>; <https://www.ethree.com/tools/electric-vehicle-grid-impacts-model/>

² Constance Douris, "The Bottom Line On Electric Cars: They're Cheaper To Own," Forbes, October 24, 2017, <https://www.forbes.com/sites/constancedouris/2017/10/24/the-bottom-line-on-electric-cars-theyre-cheaper-to-own/#6490ef7610b6>.

³ David Morris, "Tesla Veteran Explains How Electric Motors Crush Gas Engines," Fortune, November 17, 2015, <http://fortune.com/2015/11/17/electric-motors-crush-gas-engines/>

⁴ Inside EVs. Monthly Plug-In Sales Scorecard. <http://insideevs.com/monthly-plug-in-sales-scorecard/>

⁵ Navigant Private Study. 2017. Summary of findings can be found online at <https://www.navigantresearch.com/research/market-data-ev-market-forecasts>

has witnessed significant growth in EV adoption across the board, from individuals buying cars to transit agencies like the Metropolitan Transit Authority adding buses. Over the first six months of 2017, EV sales (inclusive of all vehicle classes) rose 61% relative to the same period in 2016.⁶

This growing EV fleet creates new opportunities to benefit the electrical grid and New York ratepayers. Although EVs are a source of new electricity demand, if shifted to off-peak hours this demand could improve asset utilization for power generators and distribution utilities. In turn, this improved asset utilization could lead to lower rates for consumers; a recent analysis by M.J. Bradley & Associates estimated that by 2050 this impact could equate to a 7% reduction of the average consumer's utility bill.⁷ In the longer term, EVs have the potential to provide additional ancillary services to the electricity grid including emergency backup power and enhancing power quality. To the contrary, if the growing fleet of EVs in New York utilizes suboptimal charging patterns, the New York grid could see congestion as EVs cluster in neighborhoods.

Since a thoughtful regulatory approach can help maximize the potential benefits of EV deployment while mitigating potential issues, we believe it is important for the Public Service Commission (PSC) to address the EV regulatory framework now. Indeed, the PSC has already started to tackle a few of these issues by integrating EVs into the Reforming the Energy Vision (REV) Distributed System Implementation Plan (DSIP) requirements⁸ and by requiring utilities to file EV Readiness Frameworks and EV-only rate proposals. Additionally, the PSC has approved incentives for growth in EV registrations in the recent rate cases for Con Edison and National Grid. However, the transformational nature of EVs means that their deployment raises several important regulatory issues that impact transportation electrification in the state including:

- Challenges to the deployment of charging infrastructure
- Interoperability of charging networks
- EV-only rates and the ability to meter charging infrastructure
- Rate designs that accommodate EV ownership and encourage off-peak charging
- Barriers and opportunities that are specific to fleet electrification
- Role of utilities in helping customers understand EVs and EV charging so they can make informed purchasing decisions
- Medium- and heavy-duty vehicle electrification considerations
- Data access across the EV ecosystem
- Role of different stakeholders from the PSC itself to utilities and third parties

Based on our experience with EV regulations, we believe it would benefit the PSC to draw together all EV issues into a single comprehensive proceeding, given the interdependency of the multi-faceted regulatory questions and need for wide ranging input from stakeholders. In fact, the creation of an EV-focused proceeding is emerging as a best practice, with states like Michigan, Minnesota, Colorado, and Washington having already initiated proceedings focused on EVs within their respective public utility commissions, and others states currently considering similar efforts.

Many of the issues involved in these EV regulatory proceedings relate to the development and use of EV charging infrastructure. Current metrics indicate that New York is struggling with its charging infrastructure – the state ranks 30th amongst U.S. states in charging stations per capita⁹ and was rated

⁶ NYSERDA press release. 2017. Text can be found online at <https://www.nyserda.ny.gov/About/Newsroom/2017-Announcements/2017-09-27-Governor-Cuomo-Announces-74-Percent-Increase-in-Electric-Car-Sales>

⁷ M.J. Bradley & Associates Private Study. 2017. Summary of findings can be found online at <https://www.mjbradley.com/sites/default/files/NE%20PEV%208%20state%20Summary%2009nov17.pdf>

⁸ Case 14-M-0101, Order Adopting Distributed System Implementation Plan Guidance, 26. April 20, 2016.

⁹ AEE analysis based on data provided by Alternative Fuels Data Center and US Census Bureau.



poorly by the International Council of Clean Transportation on availability of urban charging stations.¹⁰ The underdevelopment of the state's charging infrastructure stands in sharp contrast to Governor Cuomo's stated goal in his [2018 State of the State address](#) of achieving an installed base of 10,000 EV chargers by 2021. Given these challenges and the important role that utilities have to play in accelerating the deployment of charging infrastructure, an order requesting proposals from utilities for scalable charging infrastructure pilot programs would provide an important complement to the EV-only regulatory proceeding.

In summation, AEE Institute firmly supports the petitioners' requests for the PSC to open an EV-specific proceeding and for the PSC to request concurrent proposals from the utilities for scalable infrastructure pilots. A combination of these two actions will position New York State to capture the benefits of EVs and achieve the state's policy objectives.

Respectfully Submitted,



Matt Stanberry
Vice President

¹⁰ International Council of Clean Transportation, "Expanding the Electric Vehicles Market in U.S. Cities". 2017. Report can be found online at https://www.theicct.org/sites/default/files/publications/US-Cities-EVs_ICCT-White-Paper_25072017_vF.pdf