



Edison Electric
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FEB 26 2018

Power by Association™

BOARD OF PUBLIC UTILITIES
TRENTON, NJ

February 22, 2018

Secretary of the Board
Board of Public Utilities
44 South Clinton Avenue, 3rd Floor, Suite 314
P.O. Box 350
Trenton, NJ 08625-0350

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CASE MANAGEMENT

FEB 26 2018

BOARD OF PUBLIC UTILITIES
TRENTON, NJ

Dear Secretary,

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The Edison Electric Institute (EEI) respectfully submits this letter to the Board of Public Utilities regarding Atlantic City Electric's Plug-in Vehicle Infrastructure proposal. EEI has been monitoring electric vehicle (EV) proceedings taking place across the country and appreciates the opportunity to provide the Board with a national perspective on the importance of the electric company role in growing the EV market for all participants, integrating EV charging into the grid in a cost-effective manner, and protecting customer interests and maximizing customer value.

EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for 220 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than seven million jobs in communities across the United States. EEI's member companies, which include Atlantic City Electric, deliver reliable, affordable, and sustainable electricity that powers the economy and enhances the lives of all Americans.

The lack of EV charging infrastructure is one the primary barriers to widespread EV adoption.¹ In fact, EEI and the Institute for Electric Innovation (IEI) recently released a report forecasting EV sales in the U.S. to grow to seven percent of all new car sales by 2025, but found that approximately 2.2 million additional public charging ports will be needed to support this forecast – a roughly 30 to 40 times increase over the charging infrastructure available today.² Similarly, a concurrent increase in deployment of charging infrastructure in New Jersey will be needed to meet the state's own Zero Emission Vehicle (ZEV) regulation, which requires approximately 15% of new vehicle sales to be ZEVs by 2025 – compared to a market share of about 0.9% in the state today.³

¹ See, e.g., National Renewable Energy Laboratory, *Consumer Convenience and the Availability of Retail Stations as a Market Barrier for Alternative Fuel Vehicles*, <https://www.afdc.energy.gov/uploads/publication/56898.pdf>.

² Edison Electric Institute and the Institute for Electric Innovation, *Plug-in Electric Vehicle Sales Forecast Through 2025 and the Charging Infrastructure Required*, p. 7 (June 2017), http://www.edisonfoundation.net/iei/publications/Documents/IEI_EEI%20PEV%20Sales%20and%20Infrastructure%20thru%202025_FINAL%20%282%29.pdf.

³ Zero Emission Vehicles (ZEVs) sales represent 0.9% of all new vehicle sales in New Jersey from January 2017 through October 2017, according to the ZEV Sales Dashboard, <https://autoalliance.org/energy-environment/advanced-technology-vehicle-sales-dashboard/>.

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Electric companies are well-positioned to make targeted and strategic investments in EV charging infrastructure that benefit the broader community and accelerate EV adoption. Atlantic City Electric's proposal would reduce the cost of charging equipment and installation for participating customers at homes, multi-unit dwellings, and workplaces. Home and work are the two biggest opportunities for EVs to charge; making charging easier at these locations will encourage EV adoption. The proposal also increases the availability of public charging, both DC Fast Chargers and Level II chargers, that will make EVs a more attractive proposition for drivers by making it easier to charge not just at home and work, but during trips.

As states, including New Jersey, develop policies to support the deployment of EVs and grow the market for all participants, electric companies should not only be permitted to provide charging infrastructure but also can play an important role in designing programs that best meet the needs of their customers. Importantly, these investments can complement and accelerate other efforts underway to grow the EV market by third-parties and state governments. At the end of the day, a healthy electric transportation market will help spur new entrants into the market and innovative products and services for customers.

As EV adoption grows, both the energy grid and the electric company's role as an integrator of energy resources become increasingly important. Significant EV adoption without a coordinated or managed charging program could lead to capacity constraints on the grid. Conversely, programs that encourage charging to occur when the power grid has available capacity will minimize costs and help the grid operate more efficiently – effectively lowering the average system cost for all electric customers.⁴

One key element in enabling beneficial EV growth is the ability to manage charging. Electric company EV charging programs can lay the groundwork for a managed charging solution that will benefit all customers in the long run. Atlantic City Electric's proposal does this by offering rate options that encourage EV drivers to charge off-peak, including a whole house Time-of-Use (TOU) rate and an EV-only TOU rate. Furthermore, the proposal enables future managed charging solutions by deploying "smart" Level II chargers capable of responding to demand response (DR) signals. This proposal would allow Atlantic City Electric to use multiple tools to encourage charging behavior that is beneficial to the grid and evaluate which strategies work best for customers.

Finally, electric company EV programs can drive outcomes that protect customer interests and maximize customer value. Electric company investment is appropriate because:

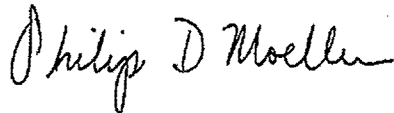
- Electric company investment in charging infrastructure enables more choices for customers;
- Electric company investment in charging infrastructure lowers the barrier to entry for customers by reducing the cost and difficulty of installation;
- A wide range of customers, such as homeowners and commercial property owners, and industry stakeholders, such as automakers and charging service providers, are increasingly asking electric companies for affordable, reliable, and easy-to-use charging infrastructure options;

⁴ See, e.g., M.J. Bradley & Associates LLC, *Plug-in Electric Vehicle Cost-Benefit Analysis: Maryland* (Dec. 2016), http://mjbradley.com/sites/default/files/MD_PEV_CB_Analysis_FINAL.pdf.

- Electric companies can locate charging infrastructure in a way that is cost-effective for the energy grid and geographically useful for the charging needs of its customers. This system-level planning can help fill gaps that the private market may not;
- Electric companies can support EV charging in their service territories such that all customers benefit, which may include providing access in disadvantaged and low-income communities where private investments may be lacking;
- The additional electricity use from EV charging – if added to the system in a cost-effective manner – can reduce the average cost of service to all customers;
- Electric companies can maximize customer value by making investments that are targeted and phased to meet the needs of the local market.

The New Jersey Board of Public Utilities has the opportunity to oversee electric company investments in EV charging infrastructure that can grow the market for all participants, help integrate EV charging into the grid in a cost-effective manner, and drive outcomes that protect customer interests and maximize value. The Atlantic City Electric Plug-in Vehicle Infrastructure proposal supports these goals, and we therefore encourage the Commission to approve it.

Respectfully submitted,



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