

# GENERAL MOTORS

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Richard Mroz, President  
New Jersey Board of Public Utilities  
44 South Clinton Avenue  
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EVStakeholder.Group@bpu.nj.gov

ATTN: President Mroz and Staff

**Subject: BPU EV Stakeholder Group Task 2 – GM comments**

General Motors LLC (GM) appreciates the opportunity to provide comments on questions posed by the New Jersey Board of Public Utilities (BPU) relative to the deployment of Plug-in Electric Vehicle (PEV) charging infrastructure in New Jersey. GM would like to encourage the BPU to increase the availability of critically-needed electric vehicle (EV) charging stations in order to accelerate the adoption of PEVs and other advanced transportation technologies, such as self-driving EVs, to the state. There are approximately 15,000 EVs registered in New Jersey today, but only 33 DC fast-charge stations (SAE industry standard) and only 166 public L2 charge stations (SAE). Infrastructure investment has been lagging vehicle offerings and there is a resulting lack of consumer-confidence today in the availability of EV charging infrastructure.

Automakers have made enormous investments in the electrification of transportation – GM alone has invested billions of dollars to develop electrification technologies, including the state-of-the-art Chevrolet Volt and Chevrolet Bolt EV, which has swept the industry’s most prestigious car awards, including North America Car of the Year, Motor Trend’s® 2017 Car of the Year, MotorWeek’s 2017 Drivers’ Choice “Best of the Year” Award, and Green Car Journal’s Green Car of the Year. The Bolt EV is the industry’s first affordable, long-range EV with an EPA estimated range of 238 miles-per-charge. Last month, after 8 months of continual sales growth, the Bolt EV was the top-selling EV in the United States. This advanced technology will require more widespread charging infrastructure to convince consumers that EVs can be driven anywhere they need to go. Thus, the urgency to rapidly expand EV charging infrastructure in New Jersey.

EV charging infrastructure today has proven to be a very challenging business case, and therefore has not attracted sufficient investment to establish a compelling foundation of EV charging stations. This market will become more viable and competitive over time, but this early market currently requires additional investment to close the infrastructure gap and establish a network of charging stations that is highly visible to consumers and drives consumer-confidence in the ability to drive EVs anywhere in the state.

While the majority of all EV charging today is done at the home, there are still critical infrastructure needs not met by single-family home charging. GM would prioritize today's key infrastructure needs as follows:

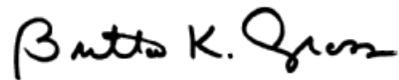
1. **Highway corridor DC fast-charging** most visibly inspires consumer confidence in the driving range, and practicality, of EVs. A 2016 survey of 2,500 consumers by Altman Vilandrie & Company found the top reason customers gave for not wanting to purchase a plug-in electric vehicle was a perceived lack of charging stations (85%). Highly visible corridor EV charging (SAE industry standard) on key, high-volume routes can help address this consumer perception issue.
2. **Workplace EV charging** creates an EV "showroom" that very effectively grows EV awareness among corporations, and employees of these corporations. According to US DOE data, workplace charging results in employees 6X more likely to purchase an EV than employees at companies not offering workplace charging.
3. **Multi-unit dwelling EV charging** provides an important opportunity to expand EV adoption to consumers residing in townhomes, condominiums, and apartments, who may not have access to a "home" charger every evening. This is currently an untapped segment of potential EV buyers. This need can be met by Level 1 or Level 2 charging directly at the multi-unit dwellings, or by neighborhood DC fast-charge hubs that can serve these residents.
4. **Public EV charging at key destinations** is also important to increase the practicality of EVs and the number of places an EV can go, with a special focus on destinations typically outside a consumer's normal daily driving patterns (e.g. airports, hotels, resorts, etc.).

All these areas of EV charging are critically important to the successful growth of EV-adoption in New Jersey. EV infrastructure is also key to developing innovative and advanced mobility solutions in New Jersey, such as car-sharing, ride-hailing, and autonomous vehicles. The ability to introduce and grow these advanced mobility services relies on a robust foundation of EV charging infrastructure, especially DC fast-charging.

We suggest the electric utility companies need to play a central role in both the strategic planning of EV infrastructure to ensure the most cost-effective and grid-responsible EV charging solutions, as well as in expanding EV charging infrastructure across the state. Furthermore, the electric utility companies are uniquely positioned to reach every consumer in New Jersey with programs that grow consumer awareness of EVs through education and outreach.

GM greatly appreciates the BPU's efforts to open this dialogue and accelerate the strategic transition to transportation electrification and all efforts to help drive this emerging market in New Jersey. The speed with which EV charging infrastructure can be expanded will determine the pace of EV adoption in New Jersey as well as the ability to drive towards even more advanced transportation technologies.

Sincerely,

A handwritten signature in black ink that reads "Britta K. Gross". The signature is written in a cursive, flowing style.

Britta K. Gross, Director

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