



June 30, 2017

Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

Greenlots' Comments Regarding the Utility's Role in Deploying Beneficial Electrification with Focus on Plug-In Electric Vehicles

Greenlots appreciates the opportunity to provide these comments for the Commission's consideration. In addition to Greenlots' comments, Greenlots is also providing into the record for the Commission's consideration the June 14 Policy Statement of the Washington Utilities and Transportation Commission. The Policy Statement examines the utility role in transportation electrification in some depth. While there are clear jurisdictional and policy landscape differences between Rhode Island and Washington, the UTC's analysis and consideration may prove a useful resource for the Commission's consideration of the issues and questions at hand.

Greenlots is a leading provider of grid-focused electric vehicle charging software and services. The Greenlots network supports a significant percentage of the DC fast charging infrastructure in North America. Greenlots' smart charging solutions are built around an open standards based focus on future-proofing while helping site hosts, utilities, and grid operators manage dynamic EV charging loads. By communicating with hardware through an open communication language, the Greenlots' software platform is able to be paired with a wide range of hardware options, with a focus on protecting the hardware investments made by our partners and clients, and maximizing site host choice.

Greenlots appreciates the opportunity to provide comments. Greenlots' comments are focused on responding to the Commission's questions on the role of the utility. Greenlots will be available to the Commission to discuss the many other considerations at play and questions at hand, including the many identified in the Commission's notice of inquiry and request for comments. In particular, Greenlots stands at the ready to discuss EV equity and creating benefit for all ratepayers.

Questions on the role of the utility

Q. Are there other roles the utility might play in PEV adoption?

The utility has an inherently critical role to play in PEV adoption and the beneficial electrification of the transportation sector. The roles identified in the June 14 request for comments are broad and arguably encompassing. For the growth of PEV adoption, the most critical role for the utility to play in the near term is market accelerator. The PEV market has struggled to achieve scale, in large part due to the lack of readily available charging infrastructure, forcing even the most passionate potential EV drivers to run a complicated analysis of their transportation psychology.

The inadequate volume of infrastructure has two primary root causes that are effectively the same: there is not great enough scale of EV adoption to beget needed additional charging Infrastructure, or indeed, to potentially reach a point where there is a virtuous cycle of adoption begetting more infrastructure begetting more adoption, and so on; and the fundamental economics that do not facilitate a business model based on charging for charging. A lack of fundamental business model around charging station ownership and operation has caused a severe constraint on the amount of private investment flowing into charging hardware and software purchase. The utility is uniquely positioned to break this investment cycle and help the market grow and scale—creating opportunity for all market participants.

Without prescribing a specific role for the utility within the context of market accelerator, Greenlots believes that providing flexibility for the utility to self-select the role(s) that best fit(s) its distribution system, customers, and future planning is essential to helping motivate the utility to be excited about its involvement in accelerating the market. While some jurisdictions are examining a range of utility roles and program designs through pilots, others are considering a broader “portfolio” approach. At this stage of the market, Greenlots believes, for a number of reasons, that ownership and operation of charging infrastructure—including charge stations—is an appropriate (and indeed, possibly necessary) role for the utility in accelerating the market, supporting competition and choice, and attracting private investment.

Q. Who are the other key actors and what should their respective roles be?

There is a large spectrum of key actors in the electric vehicle charging ecosystem. As a network and turnkey charging service provider, Greenlots primarily interfaces with drivers, site hosts, cities, utilities, automakers, Commissions, ratepayer advocates, other charging service providers, private investors, and a range of other stakeholders. Of this list, Greenlots will comment on the role of the Commissions. Commissions are, by and large, economic (and safety) regulators ensuring ratepayer investments are well made and beneficial, and ensuring that monopolistic utilities are not unduly impeding the development of a competitive market for charging services, among other considerations.

While consideration of a private market failure in California caused the Public Utilities Commission there to accept, analyze, and ultimately approve, utility program applications, Commissions in other jurisdictions have not necessarily had the benefit of adequate information in their proceedings' records to recognize the degree of market failure this industry has seen in its efforts to deploy charging infrastructure through private investment. Indeed, proving a negative can be inherently difficult when seen through the lenses of different stakeholders' perspectives of market trajectory.

By and large, when examining the competitive market for charging services, Commissions have positioned the analysis as the private charging companies or the private marketplace for charging services versus the utility. While logical, unfortunately this positioning fails to

adequately take into consideration the economics and market dynamics within the charging industry. Firstly, this analysis assumes that there is a competitive marketplace for charging services. While undoubtedly there is a competitive (if unsustainably small) market for selling charging software and hardware, the lack of business model based on charging for charging means that there is not a competitive marketplace for owning and operating charging infrastructure. While there are certainly companies that are trying to build a business model around charging for charging, at this stage of the market, utility involvement should not have a deleterious effect. Indeed, utility investment in charging infrastructure is likely to have the opposite effect: by growing the installed infrastructure base, utilities will help grow EV adoption, which will increase the customer base and asset utilization of private charging for charging companies.

The positioning of the analysis that may more accurately reflect the Commission's intent and mandate in its consideration of the utility's impact on the competitive marketplace is to examine not the aforementioned ownership and operation model based on charging for charging, but to instead examine the market for selling charging software and hardware in the absence and presence of the utility role or program. While not suggesting that the Commission should analyze every company's business and operational model in this space, it is instructive for the Commission to recognize that companies doing business in this space have sometimes disparate operational models, even with similar business models, and vice versa.

Indeed, some companies employ aggressive boots on the ground sales strategies, while others prefer a more traditional vendor/buyer procurement model. While a competitive procurement process by a utility may provide equal opportunity to companies of all shapes, sizes, and operational strategies, this conclusion has not proven adequate for Commissions in some jurisdictions. Indeed, some Commissions have recognized that a company selling product A at a higher cost v. a utility program offering product B at a lower cost is inherently at a competitive cost disadvantage with a utility's entry into the market in that geography. On its face this is a logical conclusion, but it fails to adequately take into account the utility's entry into the market on the trajectory of the market, and the opportunities created in the market as a whole, by its entry into the market as a procurer or facilitator.

Although utility programs to date have not been designed to corner the market for purchasing charging software and hardware, there has been an optics and analysis tendency to assume that there is no market for purchasing software and hardware outside the utility program. Even in California, some of the more aggressive utility applications have been calculated to have a ceiling at 25% or 30% of the market necessary to reach California's ZEV goals. Operationally in geographies where the market has essentially failed, a utility program could represent a relatively larger percentage of a given market in the near term, with a diminishing role over time, all while begetting a much stronger market over time.

A deeper role for a utility in growing EV adoption and the deployment of infrastructure is a strong positive for the market, with EV charging software and hardware sellers benefiting from utility procurement or procurement facilitation in the near term, and benefitting from a more robust market over time. An emphasis on avoiding stranded assets through hardware/software interoperability is also a key component of a utility's ability facilitate competition and future investment. Greenlots welcomes a strong utility role in growing and helping scale transportation electrification in Rhode Island. Indeed, a strong utility role may be the key to growing EV adoption and scaling the market for EV charging hardware and software in line with the state's goals.

Greenlots encourages the Commission to consider the concepts described above in its analysis of the utility's relationship to other market participants and the market as a whole, and in the depth of role for the utility. The Commission has a critical role to play in the transformation of the power sector, especially with regard to growing the market for transportation electrification. It will require a collective effort, and we stand at the ready to support the Commission's inquiry and ongoing information gathering, analysis, and planning efforts.

Thank you for your consideration. Please do not hesitate to contact me should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Ashley', with a stylized flourish at the end.

Thomas Ashley
VP, Policy
Greenlots