June 19, 2018

Ms. Luly Massaro
Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02988

Subject: Case Nos. 4770, 4780, In Re: The Narragansett Electric Company d/b/a National Grid's Application to Change Electric and Gas Base Distribution Rates and In Re: The Narragansett Electric Company d/b/a National Grid's Proposed Power Sector Transformation (PST) Vision and Implementation Plan

Dear Ms. Massaro:

Enclosed for filing in the above-referenced matters please find the written comments of the Alliance for Transportation Electrification Supporting the Settlement Agreement dated June 6, 2018.

Respectfully submitted,

Philip B. Jones

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Philip B. Jones
Executive Director
Alliance for Transportation Electrification

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Enclosure
cc: Docket Nos. 4770, 4780 Service Lists (via email)

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

In Re: The Narragansett Electric Company d/b/a National Grid's Application to Change Electric and Gas Base Distribution Rates	* * *	Case No. 4770
In Re: The Narragansett Electric Company d/b/a National Grid's Proposed Power Sector Transformation (PST) Vision and Implementation Plan	* * *	Case No. 4780

COMMENTS OF
THE ALLIANCE FOR TRANSPORTATION ELECTRIFICATION
SUPPORTING SETTLEMENT AGREEMENT

The Alliance for Transportation Electrification (the Alliance) is pleased to submit the following comments supporting the Settlement Agreement dated June 6, 2018. The Alliance is a broad and diverse coalition of about 40 organizations in many states across the country, including utilities (25) both investor-owned and publicly-owned, auto manufacturers, EV supply equipment (EVSE) firms, and related trade associations and other non-profit organizations involved in electric vehicles. The Alliance's overall goals are to engage with State Commissions and other state agencies to encourage a collaborative and open approach to accelerate the deployment of EV infrastructure, encourage a strong and robust utility role at this stage of market development, and to promote interoperability and open standards in all parts of the EV ecosystem.

The Alliance particularly supports the Electric Transportation section of the Settlement's Clean Energy Program (Settlement at 52-59) because advancing Rhode

Island's goals reducing greenhouse gas emissions by 80% by 2050[1] requires increased sales of electric vehicles. Stakeholders in this case and nationwide have broadly concluded, as described in the Settlement, that electric vehicle adoption is greatly enhanced by charging infrastructure and that utility investment is essential while the market matures.

The provisions of the Settlement directly applying to electric vehicles contain five components:

(i) Off-Peak Charging Rebate Pilot,
(ii) Charging Station Demonstration Program,
(iii) Discount Pilot for Direct Current Fast Charging (DCFC) Station Accounts,
(iv) Fleet advisory services, and
(v) Electric Transportation Initiative Evaluation.

The Alliance commends the Commission, and the settling parties, for reaching a broad settlement agreement on these issues, which should provide a strong impetus for the development of the EVSE market in Rhode Island with Narragansett Electric Company/dba National Grid. We support the Agreement, and offer several comments on these provisions as the utility moves forward to implement them in practice.

Charging Station Demonstration Program

The electric vehicle charging landscape is complex and challenging to the vast majority of the population, and especially for a new EV owner as the market moves in to an "early majority" phase. While certain consumers and select commercial landlords invest the time and resources to learn and execute on the options, unfortunately a more common outcome is the "do nothing" approach. One way to jump-start the market is for the utility to offer to shoulder the burden in this early phase of market development by providing,

[1] Resilient Rhode Island Act (2014), the Rhode Island Zero Emission Vehicle Draft Plan (2015), Executive Climate Change Coordinating Council's GHG Emissions Reduction Plan (2016).

installing, operating, and maintaining infrastructure both public and private. This is particularly so where the need is urgent yet the business case is challenging, such as in multifamily communities and public DC fast charging.

The Alliance believes it is urgent to address this EVSE infrastructure gap, namely the large and growing gap between the expected introduction of a large number of light duty passenger EV's in the next several years and the very inadequate infrastructure for charging in Rhode Island that is deployed, reliable, and well known to vehicle owners. Based on the evidence in this proceeding in Rhode Island and in other proceedings in neighboring states, we believe it is indisputable that charging hardware is being installed too slowly in relation to the imminent introduction of a wide array of electrified (i.e., fully electric and, just as importantly, plug-in electric hybrid) vehicles.[2] For this reason, and because utilities are well suited to address multiple examples of market challenges in a "portfolio approach" consisting of various charging categories, the Alliance would have supported National Grid's relatively modest original proposal to develop, own, and operate four public DC fast charging locations and to offer to own and operate all of the Level 2 installations.[3]

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[2] The private sector has generally not provided adequate solutions because of investor demands for a rapid return on capital investment, particularly in certain types of charging such as multifamily Level 2 charging and public DC fast charging. Utilities, on the other hand, can take the long view and use their strong balance sheets, low cost of credit, and expertise to make strategic investments that will, over time, benefit all ratepayers. There is no one-size-fits-all approach, but appropriate utility roles can include ownership of the make-ready portion of EVSE installations, ownership of EVSE itself, cost-effective rebates for EVSE infrastructure, as well as outreach and education to potential EV owners and automobile dealers.

[3] *Investigation as to the Propriety of Proposed Tariff Changes*, Testimony and Schedules of: Power Sector Transformation Panel, Book 1 of 3, at 103-105 (Nov. 27, 2017) (available at http://www.ripuc.org/eventsactions/docket/4780-NGrid-PSC-Book1of3.pdf).

The Alliance does not oppose the shared-investment framework contained in the Settlement, which seeks to mitigate perceived competition with the private sector by limiting utility ownership to certain particularly challenging use-cases such as apartment buildings. We believe this is a modest and reasonable start to address the "market failures" in these particular categories of charging. But we also urge the Commission to consider reserving the option to revisit the various ownership limits on Level 2 and DC fast charging and allow National Grid to make these investments if the private sector does not step up within a specified period of time. We ask the Commission to consider the quite different time horizons for capital investments in EVSE as a grid-edge asset: namely, while non-utility competitors often take a shorter term (less than five years) to achieve the ROI (return on investment) demanded by their equity investors, the utility as regulated by this Commission takes a much longer view toward investments in utility assets in the distribution grid (often in the 10 to 40 year timeframe).

The Alliance also strongly urges the Commission to mitigate the risk of vendor lock of utility-owned chargers (Level 2 or DC fast) by procuring only hardware that is both technically and contractually capable of operating on multiple networks. The term "open standards" is most certainly an important principle, but the phrase lacks the specificity necessary to ensure that charging hardware can feasibly operate on more than one network. In this regard, the Commission may wish to look to the experiences of other utilities who have selected network-specific hardware, as well as seek to ensure that final contract language provides suitable protection. For example, one widely-held best practice is that charging hardware meet the open standards of Open Charge Point Protocol, or OCPP 2.0, which Electrify America did in its National ZEV Investment Plan. An extension of this

interoperability threshold is to set forth with specificity the terms and conditions that would take effect should the utility, Commission, or other user of hardware procured under a utility-funded program elect to move hardware to an alternative network.

General Principles

Transportation electrification is in the public interest

There is a clear policy case for transportation electrification, as it can offer operational savings to plug-in electric vehicle (PEV) drivers, support local industries in the state, reduce dependency on foreign oil, and provide significant environmental benefits to all Rhode Island residents through reduced tailpipe emissions;

There is also a clear regulatory case for transportation electrification, since increased PEV adoption puts downward pressure on rates. Currently, most analysts have concluded that over 80 percent of vehicle charging takes place overnight at home either through L1 or L2 charging, effectively utilizing excess distribution and generation capacity. Furthermore, given that PEVs can over time become intelligent storage assets, the electrification of transportation can build a resource for grid services over time.

Transportation electrification in Rhode Island is lagging and barriers need to be addressed

- As the advancement of battery technology is bringing PEVs closer to price parity with internal combustion engine vehicles, auto and truck manufacturers ("OEMs") are bringing additional PEVs to market, increasing consumer interest. However, consumer awareness and knowledge of PEVs, range anxiety, and charging infrastructure investment remain primary barriers to PEV adoption.

- Rhode Island can address range anxiety by supporting the accelerated deployment of residential, workplace, and public charging infrastructure that provides equitable, reliable, and consistent access to electric transportation for riders and drivers.
- It is in the public interest to ensure key consumer protection principles like transparent pricing for PEV charging services and the use of open standards for communications (e.g., OCPP as mentioned above) and payment to ensure universal access for PEV owners to publicly available charging stations (e.g., encouraging and allowing more seamless roaming among charging providers).
- The private investment committed to deploy charging equipment and services in Rhode Island is insufficient to close the infrastructure gap across the state (especially in underserved markets including multi-unit dwellings), so public and utility investments should be utilized to complement private funding sources to establish a foundational charging infrastructure in Rhode Island. In other words, utility investments in this EV infrastructure can play an important role in both transforming the overall EVSE market and catalyzing other investments in partnerships or targeted, strategic approaches.
- Rhode Island can improve customer understanding by empowering stakeholders (e.g., OEMs, utilities, and charging equipment manufacturers) to improve the customer journey - from initial consideration to ownership and operation – through education and outreach.

Utilities are uniquely suited to help

- As demonstrated across the country, utilities are uniquely suited to integrate PEV infrastructure in a manner that mediates system capabilities, costs, and future growth while maximizing system benefits for all customers. Utilities can afford to take "the long

view" in terms of returns on investment for longer-lived assets in the distribution grid, as regulated by this Commission.

- PEV load has unique characteristics, and utilities - particularly those with Advanced Metering Infrastructure ("AMI") - are well positioned to manage this flexible load with time-based rates, smart charging / demand response programs, and other innovative applications.
- Since utilities have an obligation to serve all customers under Rhode Island state law and regulations of the PUC, they have the ability to fashion EVSE tariffs and programs under a portfolio approach that can allocate costs and benefits across various rate classes in a manner that serves the public interest.
- To accelerate the deployment of infrastructure to enable adoption of electric transportation, it is critical to appropriately leverage multiple funding sources – including utility investment seeking reasonable cost recovery - in a manner that complements a robust PEV charging market.
- Utilities can leverage established customer relationships to develop an informed market and engage in education and outreach programs, in partnership with others in the EV ecosystem, to enhance customer confidence in PEV technology.

Conclusion

In conclusion, because the EV industry is in its early stages, regulators should maintain flexibility to enable utilities and other stakeholders to quickly respond to market developments. The pilots approved in this Agreement are well developed in the public interest, but it is important that pilot programs be allowed to iterate and grow from modest foundations. Hence, we applaud the Commission and the parties for reaching this

Settlement Agreement, and urge all parties to continue the hard work ahead to make even greater achievements in accelerating EV infrastructure deployment as the industry rapidly grows in to more of a "majority market" in the near future.

Respectfully submitted,

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