



**Acadia
Center**

144 Westminster Street
Suite 203
Providence, RI 02903-2216
401.276.0600
www.acadiacenter.org

ACADIA CENTER REPLY COMMENTS

Acadia Center submits the following comments in response to the Notice of Inquiry and Request for Responses to Stakeholder Comments Regarding a Utility's Role in Deploying Beneficial Electrification with Focus on Plug-in Electric Vehicles. Acadia Center is a non-profit, research and advocacy organization committed to advancing the clean energy future, and is at the forefront of efforts to build clean, low carbon, and consumer-friendly economies. Acadia Center's approach is characterized by reliable information, comprehensive advocacy, and problem solving through innovation and collaboration.

In our reply comments, we have sought to respond to stakeholders' comments that implicate our EnergyVision, EnergyVision 2030, Charging Up, and UtilityVision reports, which we described in our initial comments.¹ Specifically, Acadia Center offers comments and recommendations in response to the three key areas outlined in the original Notice of Inquiry dated June 14, 2017: (1) the role of the electric distribution system utility; (2) investments in PEVs; and (3) PEV program design.

Recommendations on the Role of the Electric Distribution System Utility

As stated in our initial comments, Acadia Center believes that electric utilities should prioritize (1) smart rate structures and other programs that incentivize plug-in electric vehicle ("PEV") purchases and reduce barriers to PEV charging, and (2) policies that allow utility investments to be optimized for a future with a smarter grid and widespread clean distributed energy resources. As such, we reiterate our support for time varying rates, managed charging, demand response, and vehicle-to-grid programs that maximize PEV benefits and minimize ratepayer costs. Smart electric rates, in particular, were cited in comments by several stakeholders as an important role for the electric utility,² including time varying rates for residences and commercial rates that do not have demand charges for public charging. We respectfully urge the Rhode Island Public Utilities Commission ("PUC") to require rate design reforms and demand management options going forward.

Beyond these two priorities, utilities should focus on addressing key market failures that are within the proper role of a distribution utility.³ We disagree with Greenlots that the role of the utility is that of "market accelerator" and that the utility should be allowed to select the role that motivates its involvement in the PEV market.⁴ While a benefit of the utility's involvement in PEV programs will be acceleration of the market, it is not reasonable to define the utility's role

¹ See Acadia Center at 1-2.

² See Sierra Club at 2, PP&L at 1, NECEC at 3, and ChargePoint at 4.

³ See Acadia Center at 4.

⁴ See Greenlots at 1-2.

this broadly. While National Grid does have a role in “increasing charging availability and affordability,”⁵ this should be defined as addressing key market failures and providing programs and incentives for PEV charging to maximize benefits. This should not supplant the important roles to be played by other entities, such as charger rebates or strategic planning for charger placement.

To help define the utility role in PEV deployment, Acadia Center recommends that the Rhode Island PUC establish regulatory limits for utility involvement in PEV investments similar to those established by the Massachusetts Department of Public Utilities. MA D.P.U. 13-182-A requires that a distribution company proposal be approved only if it “is in the public interest, meets a need regarding the advancement of electric vehicles in the commonwealth and does not hinder the development of the competitive electric vehicle charging market.”

In addition to ruling on the limits of utility PEV investments, Acadia Center recommends the PUC officially rule on the regulatory status of third party electric vehicle supply equipment (“EVSE”) owners and operators, as noted by ChargePoint in their initial comments.⁶ As these third party entities are selling PEV charging services to customers, not participating in the generation, transmission, distribution, or sale of electricity, these service providers should not be regulated as a utility.

As noted in our initial comments, the distribution companies are not the answer for every public policy issue.⁷ While utility engagement in PEV deployment can help address current market failures, any utility involvement should be coupled with a range of robust policies across the state. One such policy that will be critical in sustaining PEV infrastructure deployment beyond a limited utility program is the establishment of PEV-Ready building codes, as noted by ChargePoint and the Northeast Clean Energy Council (“NECEC”).⁸ These building codes would require that new residential and commercial construction include the electrical circuits to support PEV charging in garages or parking lots to minimize the costs for installation later.

Finally, Acadia Center agrees with Sierra Club that some utility involvement to stimulate the switching of inefficient heating units to heat pumps is warranted, particularly where electric savings could be achieved. However, we disagree with the assertion that heat pumps are only economical when switching from electric resistance or heating oil systems. The report Sierra Club cites for this information used highly optimistic assumptions for fossil fuel heating system efficiency and only considered whole house conversions to heat pumps, ignoring that there are significant savings opportunities in installing heat pumps for partial heating loads, which is currently the primary deployment model. Partial heating options are more economical than most incumbent systems, even compared to natural gas in some instances,⁹ and these installations substantially reduce greenhouse gas emissions by minimizing fossil fuel consumption.¹⁰ The emissions savings will only grow as the region’s electric grid becomes cleaner. Connecticut’s

⁵ See National Grid at 6.

⁶ See ChargePoint at 10.

⁷ See Acadia Center at 2.

⁸ See ChargePoint at 3 and NECEC at 10.

⁹ See <http://ma-eeac.org/wordpress/wp-content/uploads/Ductless-Mini-Split-Heat-Pump-Impact-Evaluation.pdf>.

¹⁰ See Acadia Center EnergyVision 2030 Buildings Companion Brief, available here: <http://2030.acadiacenter.org/wp-content/uploads/2017/05/Acadia-Center-EnergyVision-2030-Buildings.pdf>

Department of Energy and Environmental Protection, an advisor to the report Sierra Club cites, acknowledges the limitation of only considering whole-house heating in their recently released draft Comprehensive Energy Strategy.¹¹

It is important to note that utilities that own both gas and electric distribution companies face an inherent conflict regarding heat pump adoption. Converting a significant number of natural gas customers to electric heat decreases the gas company's rate base, and decreasing the number of new potential gas customers limits the gas company's ability to build new infrastructure on which they would earn a return. Policies to support heat pump adoption need to acknowledge this conflict and ensure utilities have the business incentive to support lower-carbon electric heating.

Recommendations on Investments in PEVs

As Acadia Center noted in our initial comments, two sources of funding not listed in the original NOI are Volkswagen Settlement funds and revenues from market based transportation policy.¹² Several commenters note that National Grid could provide EVSE rebates or own EVSE to help cover the expenses associated with EVSE ownership;¹³ however, other sources of funding are better suited to these investments. For example, 15 percent of the funds Rhode Island will receive from the Federal Volkswagen Settlement—over \$2 million—can be specifically used to develop EVSE infrastructure to support PEV charging.¹⁴ This funding should be dedicated by Rhode Island's Beneficiary for this purpose, which would be complementary to a utility "make-ready" program, as described in our initial comments and others'.¹⁵ Funds from the separate multi-state settlement with Volkswagen can be used for PEV rebates, unlike the Federal settlement funds, and should be targeted for this purpose.¹⁶ This would inject up to \$4.1 million into the Drive Rhode Island to Vehicle Electrification ("DRIVE") program to support PEV rebates for consumers.

While these Volkswagen Settlement funds are a finite resource, revenues from a market-based transportation climate policy would be a stable funding source once a program is established. Rhode Island should continue to lead through the Transportation Climate Initiative, and support the region in making meaningful commitments to institute a policy that would cap emissions and add revenue to fund zero-emission transportation options.

One funding source for PEV and EVSE rebates that Acadia Center has reservations with is revenues from the Regional Greenhouse Gas Initiative ("RGGI"), as highlighted by ChargePoint and People's Power and Light ("PP&L").¹⁷ RGGI funds are currently used to fund critical energy efficiency programs, which help compliance with the emissions cap

¹¹ See Connecticut Department of Energy and Environmental Protection Draft 2017 Comprehensive Energy Strategy, page 130, available here http://www.ct.gov/deep/lib/deep/energy/ces/2017_draft_comprehensiveenergystrategy.pdf.

¹² See Acadia Center at 5-6.

¹³ See ChargePoint at 3, Sierra Club at 1, and National Grid at 14.

¹⁴ See The 2.0 Liter Partial Consent Decree and the 3.0 Liter Partial Consent Decree, available here: <https://www.epa.gov/enforcement/third-partial-and-30l-second-partial-and-20l-partial-and-amended-consent-decree>.

¹⁵ See Acadia Center at 9 and ChargePoint at 9.

¹⁶ See The Section 177 States' Second Partial Settlement Agreement, available here: http://www.ct.gov/ag/lib/ag/press_releases/2017/20170330_vwsettlement_environmentalclaims.pdf.

¹⁷ See ChargePoint at 7 and PP&L at 3.

set by the program. Revenues raised through a market-based transportation climate policy modeled on RGGI would be much more appropriate to reinvest in PEVs and EVSE rebates, as these investments would help compliance with this type of program. While we agree with NECEC that modest ratepayer surcharges also could be appropriate for some EVSE investments,¹⁸ they would have to be carefully screened by the PUC and subject to the appropriate analysis of benefits and costs.

Two areas for which the utility could seek cost recovery for future PEV programs are EVSE rebates and grid modernization investments.¹⁹ Acadia Center recommends that any rebates offered by the utility are subject to benefit-cost screening and are not duplicative of other programs (e.g. DRIVE or Volkswagen Settlement EVSE investments). Since many PEV electrical infrastructure investments, such as those made through a “make-ready” program, would qualify as a form of grid modernization, they should be subject to the same regulatory requirements. The traditional regulatory framework for utilities should be sufficient for investments that will primarily enhance reliability, and these investments should be made as a part of the utility’s normal business practices. However, as investments that create new values for consumers and society by enhancing consumer choice and improving environmental performance or affordability are not incentivized by the historic regulatory model, new regulatory frameworks are needed that incentivize utilities to provide these crucial values. These new regulatory frameworks can include more favorable cost recovery rules, but must come with additional public interest protections, such as benefit-cost analysis, a robust stakeholder process, and performance metrics that hold utilities accountable. Newly proposed investments also must be within the proper role of the utility as a distribution company.

Recommendations on PEV Program Design

While there are many variations proposed in the stakeholder comments on PEV program design, one theme is generally consistent across most comments—National Grid should not own charging stations that are not used for the utility’s fleet or the company’s employees.²⁰ Utility ownership of charging stations would inhibit the competitive market, and as a result, potentially counter natural EVSE market growth. A “make ready” program, as proposed by National Grid in Massachusetts,²¹ in which the utility would build only the infrastructure needed to support EVSEs, is better suited to the role of overcoming market barriers, as it would remove the prohibitive cost of electric upgrades and address market failures in multi-family dwellings. By addressing these barriers, the utility would help incentivize EVSE purchases and installation, while maintaining customer choice and growing the EVSE marketplace.

Acadia Center appreciates the opportunity to provide this additional feedback on Stakeholder Comments in the Power Sector Transformation’s Beneficial Electrification workstream, and looks forward to continued collaboration with all parties.

¹⁸ See NECEC at 9.

¹⁹ See ChargePoint at 9, National Grid at 12, and Acadia Center at 8.

²⁰ See Newport Solar at 2, Acadia Center at 9, NECEC at 4, and PP&L at 1.

²¹ See MA D.P.U. Docket No. 17-13.