



March 19, 2019

Maine State Legislature  
Sen. Mark Lawrence, Senate Chair  
Rep. Seth Berry, House Chair  
Committee on Energy, Utilities and Technology  
100 State House Station  
Augusta, ME 04333-0100

RE: Proposed LD 347 Bill "AN ACT TO FACILITATE MAINE'S CLIMATE GOALS BY ENCOURAGING THE USE OF ELECTRIC VEHICLES" Presented by Representative Grohoski of Ellsworth).

Dear Sen. Lawrence, Rep. Berry and Members of the Committee:

Thank you for the opportunity to submit these written comments to the Committee regarding Representative Grohoski's Bill, L.D. 347, requiring each transmission and distribution utility to submit to the Public Utilities Commission a proposed incentive rate schedule to promote the installation and operation of electric vehicle charging stations and that such proposals must be designed to align with and support relevant strategies of the State's climate action plan adopted. ReVision Energy is here to speak in favor of this the bill, but also recommend additional related issues the committee should consider including in the bill's scope.

The Maine Climate Council's four year plan, entitled Maine Won't Wait, challenges us to decrease greenhouse gas emissions by 45% by 2030 and 80% by 2050. It recognizes that transportation is now the single largest source of CO2 of any sector in our economy. It contributes more than to 54% of all Greenhouse Gas (GHG) emissions in Maine and is also 99% reliant on oil. Any impact that can be made on the transportation sector has profound long-term implications on manmade climate change and the health of our citizens. Among the many levers to achieve these reductions, the Council places embracing the future of transportation front and center. Stating, "our state must pivot to the future by pursuing aggressive transition strategies and innovative solutions within [the transportation] sector". We have goals to increase the number of electric vehicles to 41,000 by 2025 and 219,000 by 2030. These are massive increases over the current 5000 we estimate that are on the road in Maine. In addition we must grow our public charging infrastructure in parallel with these efforts, especially the network of DC Fast Charging stations along our major travel corridors and the urban areas of Southern Maine. Creating policies that help deploy plug in vehicles from light duty to heavy duty types, and providing supporting charging infrastructure, will be the cornerstones of our efforts to meet the climate challenges we face.

Yet Maine has made tremendous progress in promoting transportation electrification and was recently ranked ninth out of all 50 states in supporting EV policies.

<https://pluginamerica.org/policy/top-25-states-supporting-the-ev-driver/>



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Our progress is in no small part due to our willingness to direct resources toward providing rebates for purchasing plug in vehicles and building out public charging infrastructure, both through programs administered by the Efficiency Maine Trust. As the number of plug in vehicles increases, we must be prepared to leverage their benefits and avoid taxing our existing electric grid. This is the unspoken crux of the issues raised in Representative Grohoski's bill. The Representative recognizes that incentivizing off-peak charging through rate design is a critical tool that can be applied to prevent overloading the grid during busy daytime or peak use periods. As the largest electrical load in a typical household, these vehicles charge on average 6-10 kWh per day, every day, given normal driving behavior. The next largest load is typically one's electric dryer, that comes in at 4-5 kWh and is used, at most, a few times a week. While the amount of electrical consumption is great, thankfully so is the vehicle's ability to charge flexibly and take advantage of the long periods of non-use, overnight and during the day. Rate design that takes advantage of this load flexibility minimizes any negative impact from an increasing number of electric vehicles and actually makes the grid more efficient during traditionally low use periods, such as late at night.

The time to begin planning for the impact of electric vehicles is now. While rate design is a necessary and productive tool, we also urge this committee to consider directing the Public Utility Commission to engage in a more comprehensive EV Docket, which specifically addresses a number of critical issues at once, all related to the grid implications of large numbers of plug in vehicles. Many states have done and are doing this. We believe the legislature should offer guidance to the PUC with respect to the intended goals of this docket and be concrete and specific about its intentions. There is little room for error or delay. The Maine Climate Council has determined that transportation emissions must be dealt with through electrification if we are to meet the larger climate action goals we have set. These goals cannot be achieved unless the expectations for agency action, whether at the PUC or elsewhere, are crystal clear, unambiguous and urgent.

Accordingly, besides urging the legislature to direct the PUC to engage in time of use rate design for plug in electric vehicles incentivizing off-peak charging, we recommend that it direct the PUC to create a broader docket tasked with solving the following issues:

- the commission should consider alternatives to demand charge based rates for L2 clusters and DC fast chargers;
- the commission should recognize that providing affordable public charging is in the rate payers interest (even if subsidized) because it encourages electrification which broadens the rate base which saves everyone money;
- the commission should consider the cost/value of avoided pollution when considering ratepayer impacts of EV rate design;





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-the commission should be willing to allow a wide range of pilots designed to explore the application of vehicle-to-grid (“V2G”) and vehicle-to-building (“V2B”) technologies as forms of Distributed Energy Resources (“DERs”); and

-the commission should direct utilities to undertake a review of existing three phase resources along major travel corridors and plan for medium and heavy duty truck-related high voltage charging infrastructure.

This list is not exclusive but offers some insight into the scope of the policy development needed to address this new intersection between clean energy and clean transportation.

Only by electrifying our transportation system will we achieve solutions to the climate crisis and meet our responsibilities to future generations. The Maine Climate Council has constructed a roadmap forward and transportation must be electric in order to meet its critical goals. Thank you for not only considering the benefits of electrification but also taking firm leadership to make it a reality in Maine.

For all these reasons, we urge this committee to approve LD 347 and to go farther and direct the opening of an EV docket at the Public Utilities Commission.

Respectfully Submitted on behalf of ReVision Energy,

Barry T. Woods  
Director of Electric Vehicle Innovation  
ReVision Energy