

March 9, 2023

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

RE: Proposed LD 524 An Act "Requiring the Installation of Electric Vehicle Charging Stations in New Commercial and Multifamily Parking Lot Construction" (Presented by Representative Runte of York).

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

Thank you for the opportunity to submit these written comments to the Committee regarding Representative Runte's Bill, L.D. 524, an Act to require proactive installation of some level of electric vehicle charging preparedness for new commercial and multifamily parking lots. 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-based fuels. 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 8000 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 pilots that collect data on how the batteries of such vehicles could benefit the grid, by creating resilience and lowering the costs of energy, is something that every Mainer should be excited about. Transportation is no longer about getting from point A to point B. It is about creating a new energy system that not only provides cleaner and lower cost forms of transportation but also enables those same batteries to feed the built environment and become "portable" storage devices for renewable energy.

Make no mistake, 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/



Our progress is in no small part due to our willingness to direct resources toward programs administered by the Efficiency Maine Trust. These programs involve using outside funding to incentivize adoption of plug in vehicles through rebates and provide public-private investments in necessary public charging infrastructure. Efficiency Maine Trust has also been testing new technologies designed to better structure residential charging during times when the grid is off peak or most heavily drawing from renewable energy resources. See RFP EM-006-2022- Onboard EV Charging Management. By these efforts, Efficiency Maine continues to position Maine at the forefront of our country's historic transition to transportation electrification.

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 Runte's bill. The Representative recognizes that electric school buses offer perhaps the best existing heavy duty fleet application for harnessing exceptionally large batteries for grid-based applications. School buses follow predictable routes and have predictable charging needs. They are off-duty for prolonged periods, particularly in the summer. They are beneficiaries of the current emergence of bidirectional charging technology such that it is currently available for practical application. Electric school buses provide our children cleaner air and exposure to the future of transportation. Unfortunately, they are still expensive compared to their diesel counterparts. However, by learning how to harness the power of their batteries, school districts have the opportunity to create an asset hitherto unavailable. We strongly urge the committee to also explore transactive utility rate designs, such as those adopted by the New Hampshire Electric Coop, in order to create a financial vehicle that allows host sites to better capture the financial benefits of feeding the grid at opportune times. Rate design that takes advantage of this load flexibility minimizes any negative impact from an increasing number of buses and other electric vehicles and actually makes the grid more efficient during traditionally low and high use periods.

Accordingly, besides urging the legislature to promote this two year V2G pilot with Efficiency Maine Trust, 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 Level 2 multi-port clusters and DC fast chargers which can cripple the business model for public charging, particularly in the first few years of low utilization;
- -the commission should consider allowing utilities to provide rate based investment in new three phase service, which is required for DCFC'ing and any substantial level two charging services;
- -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 519 and begin consideration of the other issues enumerated above.

Respectfully Submitted on behalf of ReVision Energy, Inc.,

Barry T. Woods

Senior Director of eMobility

ReVision Energy

Barry Woods ReVision Energy LD 519

Dear Committee Members:
ReVision Energy has attached its written comments in support of Rep. Runte's bill, LD 519.
Thank you for the opportunity to provide this information to the committee,
Sincerely,
Barry Woods
Senior Director of eMobility
ReVision Energy, Inc.