rve

3480 boul. Industriel
Laval, QC H7L 4R9
Canada

info@rve.ca
rve.ca

450 902-1355

Secretary of the Board
Board of Public Utilities
44 South Clinton Ave., 1st Floor
PO Box 350
Trenton, NJ 08625-0350

DOCKET NO. QO23100733
IN THE MATTER OF IMPLEMENTATION OF FEDERAL INFLATION REDUCTION ACT - HOMES HEEHR PROGRAM

Friday, May 17th, 2024

SUBJECT : REQUEST FOR INFORMATION

Dear Ms. Golden,

Thank you for the opportunity to provide comments regarding the Inflation Reduction Act Home Efficiency Rebate program (HOMES) and the Home Electrification and Appliance Rebate program (HEAR). I am writing to bring to your attention the significant obstacles encountered in the installation of electric vehicle (EV) charging infrastructure, specifically related to the challenges posed by necessary electrical infrastructure upgrades. I also wish to propose load management equipment as a viable solution to these challenges.

As New Jersey continues to promote the adoption of electric vehicles to reduce carbon emissions and improve air quality, the demand for EV charging infrastructure has increased substantially. However, the process of installing these charging stations often requires extensive electrical infrastructure upgrades, which can be prohibitively expensive and complex. These upgrades typically involve enhancing the capacity of electrical panels, upgrading utility owned transformers, and sometimes even installing new underground or overhead power lines. Such requirements not only drive up the cost but also extend the timeline for installation, thereby creating significant barriers for businesses, municipalities, and individuals looking to support EV adoption.

On behalf of RVE, a stakeholder in the electrification of transportation and the retrofitting of homes throughout New Jersey and the United States. Our experience in providing energy management solutions to residential property, specializing in multi-unit dwellings, gives way to our support and recognition of the critical needs outlined in the HOMES program and HEEHRA program.

The Case for Load Management Devices in place of Electrical Panel Upgrades
How well does this approach align with the goals of HER, HEAR, and the IRA more broadly?

The HEAR program currently dedicates a portion of the rebate to electrical panel upgrades and yet many households will have functioning electrical panels. The problem lies in whether the electrical panel provides sufficient capacity for the future electrical needs of the consumer, as well as particular field conditions preventing or limiting electrical service upgrades which entail massive costs. This has certainly become a problem with the introduction and adoption of electrical transportation.

The DCC by RVE is the most affordable and safe alternative to an electrical panel upgrade on the market, with sales of over 35,000 units across North America. Electrical panel upgrades impose a domino effect when they in turn require the need to expand utility or energy provider resources as mass amounts of consumers upgrade from 60-100 amp panels to 200 amp panels and more. The DCC by RVE is a load management device that can eliminate or minimize the need to upgrade a utility power source, while providing a safe way to control and monitor electrical loads that draw a significant amount of power, such as an electric vehicle.

In this sense, the DCC by RVE, and other load management devices in this category, are an excellent and needed addition to the criteria of the electrical panel rebate, as well as wiring and home electrification rebates of the HEAR and HEEHRA program, because load management devices are capable of providing additional bandwidth to the electrical capacity of a home, while economizing on costs and widespread impacts.

Extending this approach to the multi family building context
What would be the best analytical approach for calculating energy savings in multifamily buildings?

As previously stated, energy capacity is the greatest factor when determining energy needs and efficiency. Upgrades to HVAC, heat pumps and appliances will have a positive and significant impact on this measure, but multi-family homes will hit a hard roadblock if electrification efforts extend to transportation.

For this reason, the DCC by RVE is also a good approach for reducing and sometimes removing the energy load that large-scale electric vehicle (EV) adoption would require in multi-unit dwellings. Furthermore, this load management technology by RVE is uniquely EVSE agnostic, (compatible with various charging models), does not require an internet connection (which can impose additional costs to the consideration of transportation electrification), and privatizes charging configurations, ensuring dedicated, equitable, reliable and a user-centric approach.

Additionally, the DCC by RVE has the potential to save on EV energy consumption costs because it reroutes peak-hour charging to overnight hours, when there is power availability on the grid as well as lower rates for consumption. Use of the DCC in Canada and the US since 2017 has demonstrated savings **of up to 100%** from the grid peak level when EV charging hours are moved to charge on off-peak hours.

Documented Success in the United States with the DCC
Does this approach address the unique needs of our state in terms of the need for efficiency and electrification upgrades?

The DCC by RVE was conceived to be an economical and practical solution to issues with energy capacity, conserving what capacity we do have and using energy management and control techniques to use energy when it is available without having to overhaul still-functioning electrical infrastructure.

It is a product that is favored by electricians and professionals in the domain of electricity for being easy to install, widely available across North America, and certified and engineered in the highest of North American standards.

We invite you to contact:
Jason Gumbaz, a New Jersey representative for the company with extensive expertise in buildings energy efficiency and electrical technology. A licensed master electrician and state certified electrical instructor, he can further speak to his experiences using the DCC for residential electrification upgrades in both single-family homes and multi-unit dwellings.

Or please refer to our website to see successful deployments, the versatility of our products, and the all needed information about the DCC product:

https://rve-usa.com/case-studies/

https://murbly.com/en/case-studies/

Thank you for considering this proposal. We are available to engage in further discussions and provide any clarifications needed.

David Corbeil
CEO, RVE
3480 boul. industriel,
Laval QC H7L 4R9

Jason Gumbaz
609 384-5514
Director of EMobility & Infrastructure Development
Encore Energy Group
jgumbaz@encoreenergygroup.com