

EV Coalition Principles on Electrification and Grid Modernization

The Electric Vehicle Coalition of CT has sent an open letter to the Public Utilities Regulatory Authority that communicates key principles with respect to EVs and grid modernization.

Bruce Becker, President of the EV Club of CT, stated, "A study by Natural Resources Defense Council (NRDC) indicates EV adoption will reduce utility bills for all CT customers by \$500 million by 2050 while reducing vehicle operating costs for EV owners by \$1.9 billion. Therefore, PURA must incentivize EV adoption to make energy cheaper and cleaner for CT residents."

The full text of the letter is below:

September 26, 2018

Jeffrey R. Gaudiosi, Esq. Executive Secretary

Public Utilities Regulatory Authority

10 Franklin Square

New Britain, CT 06051

Re: Docket No. 17-12-03: PURA Investigation into Distribution System Planning of the Electric Distribution Companies, Electric Vehicle Coalition Principles on Grid Modernization and Electric Vehicles

Dear Mr. Gaudiosi:

The CT Electric Vehicle Coalition, a diverse group of clean energy advocates, organized labor, and environmental justice groups, commends PURA for including electric vehicles in its scope of the Grid Modernization proceeding. Electric vehicles (EVs), which encompass not just passenger vehicles, but medium-and heavy-duty vehicles, are critical technologies Connecticut must deploy to meet its greenhouse gas (GHG) reduction requirements and Zero Emission Vehicle Memorandum of Understanding commitments. EVs have zero tailpipe emissions, and even with New England's electricity mix today, these vehicles cut GHG emissions as much as 75% compared to conventional vehicles.(1) These emissions savings will only increase as the region continues to clean and modernize the electric system. Importantly, EVs also reduce harmful air pollution, create economic development opportunities, and reduce reliance on imported petroleum fuels. Recognizing these benefits, the state has committed with other Northeast and West Coast states to put 3.3 million of these vehicles on the road by 2025.

Utilities could help spur the advancement of EVs through a range of new policies and programs. Smart integration of EVs into the grid can help maximize GHG emissions reductions by optimizing grid utilization. Through appropriate customer signals, the flexible load of EVs can better integrate renewable resources or shift load by charging at periods of low demand. These changes improve the efficiency of the grid and reduce costs for all ratepayers, while at the same time improving the economics of operating an EV. Broad deployment of EVs also hinges on widely available charging infrastructure, which utilities have a role in supporting. Utility investment in make-ready infrastructure, for example, can complement the competitive market, address coordination problems, and help to overcome barriers to entry in important market segments, including low-income communities and multi-family housing.

Utility programs and investments to support EVs must align with broader principles of utility regulation, including grid modernization and rate design. As such, the CT EV Coalition requests PURA to consider the following principles, particularly how they impact EV deployment, within the Grid Modernization docket.

(1) Acadia Center, Energy Vision 2030, available here: <http://2030.acadiacenter.org/>

PRINCIPLES ON GRID MODERNIZATION AND ELECTRIC VEHICLES IN CONNECTICUT

- Rate design must be improved. Granular, efficient, and technology-neutral pricing must be developed to support new technologies and promote Connecticut's public policy goals. Demand charges are a major barrier for several EV charging applications, and Connecticut has a beneficial pilot that eliminates demand charges for certain types of EV charging stations. Further reforms to rate design, including broader adoption of time of use rates without

demand charges, can simultaneously accelerate EV adoption and incentivize EV charging at optimal times.

- Equity and access should be incorporated into a wide range of EV programs. This includes rate design and programs to increase access to electric transportation and EV charging stations in underserved and marginalized communities.
- Education and outreach strategies are needed to support well-designed programs. Consumer awareness and understanding are crucial to adoption rates and achievement of program goals.
- Distribution system planning must be improved to include local clean energy alternatives to traditional infrastructure. Methods must be developed for a stronger consideration of clean, local resources, including EVs as flexible load and distributed storage.
- Promotion of interoperability and data disclosure should be conditions of participation in utility investment programs. Connecticut should generally apply consumer-friendly regulations to all public EV charging stations, notably pricing disclosure, measurement accuracy, and open access. In addition, key charging station objectives can be included conditions of participation in utility investment programs, such as interoperability of charging connectors and data disclosure.
- The utility business model must be changed to incentivize policy-driven outcomes. Utilities must shift their business model to rely less on return on capital investment and more on performance incentives for consumer and environmental outcomes.
- Utility benefit-cost calculations must be updated to reflect the public interest. These calculations should be applied to all types of new utility investments, including those that facilitate EVs. Through this proceeding, PURA could explore options for including GHG reductions and petroleum fuel savings in benefit-cost calculations.

- Robust stakeholder input and processes are needed to inform any utility programs.

The Connecticut EV Coalition respectfully requests that this multi-phase grid modernization proceeding include a track to carefully evaluate regulatory mechanisms to ensure smart integration of EVs into the grid, which takes into consideration the grid modernization principles above, and addresses the appropriate roles for utilities with respect to EV acceleration and deployment of EV charging infrastructure. We look forward to engaging with PURA on these important topics.

Respectfully submitted,

The Connecticut Electric Vehicle Coalition

- Acadia Center*†
- Connecticut Fund for the Environment*
- Connecticut Nurses Association
- Connecticut Roundtable on Climate & Jobs*
- Connecticut Citizen Action Group
- ConnPIRG
- Conservation Law Foundation
- ChargePoint*
- Chispa-CT*
- Clean Water Action*
- CT League of Conservation Voters
- Drive Electric Cars New England
- Eastern CT GreenAction
- Electric Vehicle Club of Connecticut*
- Energy Solutions, LLC
- Environment Connecticut*

- Greater New Haven Clean Cities Coalition, Inc.
- Hamden Land Conservation Trust
- Hartford Climate Stewardship Council
- International Brotherhood of Electrical Workers*
- Interreligious Eco-Justice Network
- New Haven Climate Movement
- Northeast Clean Energy Council
- People's Action for Clean Energy
- Proton On Site
- Plug In America
- RENEW Northeast
- Sierra Club*
- Solar Connecticut, Inc.
- Tesla, Inc.
- Union of Concerned Scientists

* Connecticut EV Coalition Steering Committee Membership