

State EV Infrastructure Virtual Workshop: Electric System Considerations and Rate Design Options for EV Charging

October 27, 2021 1:00 p.m. - 4:00 p.m. ET Agenda

The Electric System Considerations and Rate Design Options for EV Charging virtual workshop will invite utilities, the U.S. Department of Energy, private sector experts, and representatives from various state agencies to explore grid and local distribution system impacts of widespread EV charging, rate design options to encourage EV charging investment while enabling utilities to recover costs, and EV planning needs of the states. The event will be structured as a virtual roundtable, with a small group of utilities, federal agencies, private-sector experts, and state agencies offering remarks followed by interactive discussion. Additional state agencies and utility partners have been invited to participate as webinar attendees in "listen-only" mode, and are encouraged to ask questions in the webinar "chat" and "Q&A."

This workshop is a follow-up event to the State EV Infrastructure Summit, and is part of NASEO's larger initiative with U.S. DOE and NREL to explore what states need to build-out EV infrastructure in a strategic, efficient, and equitable manner. Please contact Cassie Powers (cpowers@naseo.org) or Dylan Tucker (dtucker@naseo.org) with any questions.

Agenda

1:00 p.m. - 1:05 p.m. ET: Welcome and Introductions

- Cassie Powers, Senior Managing Director, NASEO
- Mark Smith, Vehicle Technologies Deployment Manager, U.S. Department of Energy

1:05 p.m. – 2:20 p.m. ET: Grid Impacts and Electric System Considerations for EV Charging This session will explore anticipated impacts on the grid and local distribution system from EV charging, and will examine ways individual utilities are grappling with these challenges. Roundtable participants will be invited to ask question of the panelists, share challenges individual states are facing, and identify potential models or best practices in the electric system planning/EV nexus.

Presenters:

- Christopher Irwin, Program Analyst, Office of Electricity Delivery and Energy Reliability, U.S. Department of Energy
- Husaninder Singh, Manager, Grid Modernization, DTE Energy
- Christina Alston, Transmission Development Manager, Georgia Transmission Corporation
- Scott Briasco, Power Engineering Manager, Electric Transportation and Solar Engineering, Los Angeles Department of Water and Power

Discussion questions:

- What distribution-system challenges have states and utilities encountered when installing EV chargers?
- How can off-grid or grid-edge charging solutions support EV charging in areas where there is inadequate electric service? Is this a long-term solution?
- How can states and utilities enhance resilience of EV chargers and the supporting electric system?
- What tools or resources are available to assist states and utilities with modeling or anticipating potential impacts of EV charging to the grid?
- The Infrastructure Investment and Jobs Act may provide billions of dollars for EV charging, and billions more for grid and electric system upgrades over the next five years. What steps can states and utilities take to ensure coordinated, strategic investment in both EV and electric system infrastructure?

2:20 p.m. – 2:30 p.m. ET: Break

2:30 p.m. – 3:50 p.m. ET: Rate Design Options for EV Charging

Electric rates, particularly in commercial settings, can make or break the business case for EV charging. During this session, speakers will share information on rate design options to encourage EV charging investment while enabling utilities to recover costs, with a particular focus on demand charges. Roundtable participants will then explore EV rate design challenges states are facing, impacts to site hosts, and potential solutions.

Presenters:

- Paul Allen, Senior Vice President, MJ Bradley and Associates
- Phil Jones, Elecutive Director, Alliance for Transportation Electrification
- Chris Budzynski, Director, Utility Policy, Exelon

Discussion questions:

- What rate options are states currently considering to enable EV charging investment?
- What challenges are station hosts experiencing when it comes to demand charges and rates? Are any demand charge "best practices" emerging?

- How can off-grid or storage solutions mitigate demand charges? Is this a viable longterm solution?
- To what extent can EV rate design ensure enhanced and equitable access for disadvantaged and underserved populations?
- As we prepare for significant investment in EV charging and electric system upgrades, what "must have" EV rates should be in place?

3:50pm - 4:00pm: Recap and Next Steps

NASEO is partnering with ICF and Atlas Public Policy to host the State EV Infrastructure
Workshop Series and to build-out supporting materials for state agencies as they prepare for EV
infrastructure investment. The project team is grateful to the U.S. Department of Energy and
National Renewable Energy Laboratory for their support, and is proud to partner with the
following organizations: American Association of State Highway and Transportation Officials;
National Association of Clean Air Agencies; National Association of Regulatory Utility
Commissioners; National Governor's Association; American Public Power Association; Edison
Electric Institute; National Rural Electric Cooperative Assocation.