Utility Roles in Providing EVSE & Infrastructure Ownership Models

NY PSC Technical Conference
Key Terms

Open Standards/Protocols

• Communications methodologies without intellectual property or that are otherwise free of royalties or costs to utilize

Open Access

• Umbrella of accessibility and usability considerations for drivers to be able to use public charging stations, including: ADA, payment methods, driver roaming or network interoperability, signage, parking configurations, etc.

Interoperability

• The ability to communicate between and switch in and out multiple charging hardware options and software systems or networks, or support multiple vehicle types at a charger
Open Standards Enable a Smart Charging Ecosystem

Open Charge Point Protocol (OCPP) allows communication between charging stations, a central network system, and helps facilitate communication and data transfer to utilities’ IT infrastructure.

- With this protocol it is possible to connect any central system with any charging station regardless of the vendor.

- OCPP 2.0 introduces new features to improve grid integration, smart charging signals and support for displaying tariffs & costs.

- Open standards can facilitate a seamless driver experience, minimize infrastructure investment risks, and allow for the efficient integration of EVs into the electrical grid.

OCPP & Open Standards
Managed Charging

Managed electric vehicle charging is an incredibly flexible grid resource with inherent but not fully defined value
- From demand response to demand charge mitigation
- From generation sinks to distribution system upgrade deferrals and overall system efficiency

Project Overview & Key Benefits

In 2016, the California Energy Commission announced grant funding for Advanced Vehicle-Grid Integration Research and Demonstration. The project will evaluate the benefits and potential of integrating energy storage and EV fast charging for the following applications:
- Site demand-charge reduction
- Demand response
- Renewable integration
- Fleet scheduling
- Second-life battery evaluation
Many possibilities ahead...

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