DR17.13: Vehicle Grid Integration (VGI) Working Group Summary Report

OPPORTUNITY

Managing EVs to be deployed by IOUs.

Create a working group to standardize the method of managing electric vehicles (EVs) to be deployed by the IOUs. The group will review how and whether the adoption of a communications protocol is necessary to enable Plug-In Electric VGI resources to more economically participate in electricity markets at scale.

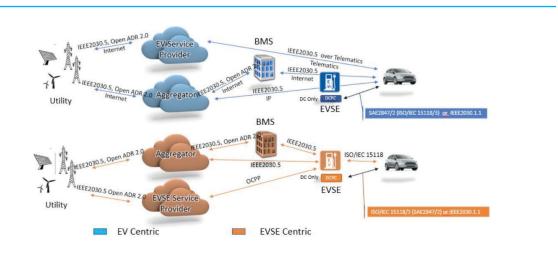
TECHNOLOGY

Where did Measurement and Verification occur?

How do EV loads get integrating into the transmission grid?

M&V

VGI denotes the optimal integration of large and flexible electric vehicle (EV) loads onto the distribution and transmission grid. At minimum, VGI includes the decision to deploy lower-power chargers or distributed generation to support charging costs.



RESULTS

VGIWG Workplan originally outlined three Deliverables

Map Existing Protocols

Determine which protocols are necessary or can be used to meet VGI use cases and requirements. The determination of these protocols was based on use-case identification, architectures development and requirements derivation process.

Cost -Benefit

Identify costs and benefits of use cases and protocols from multiple perspectives. The outcome of this task was meant to be a matrix of costs and benefits associated with the use cases and protocols.

Policy Recommendation

Recommendation of either one or protocol(s) to the CPUC if there was consensus outcome from Deliverables 1 and 2, further actions related to the utility TE proposals should there not be consensus.

DEPLOYMENT

Benefits and Value provided by VGI

VGI Value Study

It is possible that the VGI standard space will remain fractured. It is also possible that, as is often the case, the protocol that is first to market will corner the market. The group recommended a VGI Value Study to examine the benefits and value streams provided by VGI and Large Scale Demonstrations that can further support the determination of valuable and desired pathways and protocols that should be implemented.

