FEDERAL UTILITY PARTNERSHIP WORKING GROUP SEMINAR

November 2-3, 2016
Bellevue, WA

Electric Vehicle Charging and Transportation Electrification
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Hosted by:

Federal Energy Management Program

Puget Sound Energy
Plug In Electric Vehicles

- Plug-in electric vehicle technology represents a major impact to electric utilities
  - Utilities will become the main source of “fuel” for these cars in the future
  - While national sales of EVs have reached an impressive scale, California leads the way especially San Francisco and Los Angeles
  - We are estimating that about 18,000 EV’s (about 10% of national sales) are currently registered in SCE's service
- SCE offers multiple rate plans to charge EVs, including time-of-use options with lower costs for charging during off-peak (usually nighttime or morning) hours.
- We are upgrading the grid to accept DER’s as well as EV’s
- SCE has been a leading supporter of plug-in EVs.
- Our nationally recognized EV Technical Center oversaw the successful deployment of one of the nation’s earliest private fleet of EV’s which logged over 21 million miles
- In 2009, with the market reintroduction of EVs, SCE launched a readiness effort to support the new wave of EV customers
We’re Revving Up “Charge Ready”

• SCE’s program to help increase the availability of electric vehicle (EV) charging stations where cars are typically parked for four hours or more

• We are working with local government agencies, employers, multi-unit dwellings, and charging equipment manufacturers to implement the program

• The program provides infrastructure needed to serve qualified charging stations at participating locations

• Some customers may also qualify for a rebate to cover some or all of the costs of procuring and installing charging stations that they own, operate, and maintain
Participation Guidelines

• Qualify as a non-residential customer (including bundled service, direct access, community aggregator, and community choice aggregator customers)
• Meet the program’s guidelines for existing and future EV adoption
• Own, lease, or operate a site that provides long dwell-time parking (including workplaces, fleet, multi-unit dwellings, and other destination centers, such as sports venues or hotels)
• Provide an easement granted to SCE by the property owner
• Deliver proof of purchase of qualified charging equipment
Infrastructure Electrification

• Policymakers in California are focused on carbon reduction
• The transportation sector represents a significant opportunity for reduction through electrification
  – Ports
  – Heavy-duty trucks
  – Commuter vehicles
  – Will result in load growth
• Water-Energy Nexus accounts for approximately 19% of the electricity consumed in California
  – Recurring scarcity has resulted in greater investment in the treatment and storage of water
  – Will result in load growth
• Since infrastructure is difficult to build we must
  – Store electricity
  – Improve system efficiency

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Questions

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