

EV Charging Station Funding and Cost Recovery

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Overview

- Basis for governmental entities to provide incentives or other assistance for Electric Vehicle Charging Stations ("EVCS").
- Utility-owned EVCS
 - Funding
 - Cost Recovery Sources
 - Rates paid by users
 - Rates paid by 'home base' users
 - Rates paid by all customers
- Non-utility-owned EVCS
 - Potential for third-party ownership over time
 - Certain issues would need to be examined
 - Resale of electricity
 - Comparison of benefits
 - Existing facility extension policies



Utility-owned EV Charging Stations

Funding-

Utility Shareholders fund the necessary capital to deploy.

Cost Recovery Sources-

- Rates paid for use of EV Charging Stations ("EVCS")
 - Essential element of cost recovery;
 - Must send appropriate price signals;
 - Must not be set at prohibitive 'out-of-market' level that would impede use;
 - May be paid by EV user and/or host site; and
 - Costs recovered from revenues for the use of EVCS should increase over time as EV adoption increases.



Utility-owned EV Charging Stations (continued)

Cost Recovery Sources (continued)-

- Rates paid for charging at a 'home base' (typically a residence)
 - 75-80% of EV electricity charging occurs at a 'home base';
 - 'Home base' EV charging creates electricity usage that would not otherwise exist but for EV adoption and thus it is reasonable to recover some EVCS costs from that revenue;
 - Increased 'Home base' charging could lead to time-of-use rates and better infrastructure utilization.
- Rates paid by all customers if some EVCS costs must be spread among customer classes
 - In light of:
 - Substantial public benefits of EV usage;
 - Emerging state of EV adoption; and
 - The imperative not to set EVCS usage rates at prohibitive 'out-of-market' levels that would impede EV adoption.



Non-Utility-owned EV Charging Stations

Non-utility owned EVCS may be a good idea at the right time and under the right conditions. A number of issues would need to be examined, including:

- The current prohibition of the resale of electricity;
- The difference in benefit levels provided by non-utility owned EVCS compared to utility owned EVCS which are integrated with operation of the grid; and
- Whether existing facilities extension policies are suitable for nonutility owned EVCS.

Resolution of these and other issues would likely be assisted by data obtained through operation of utility-owned EVCS.



Summary

EV Adoption

- New opportunity to provide benefits for many interests.
- Providing and paying for infrastructure must be done right and may differ from tradition, convention and custom.
- There may exist a perception of uncomfortable risks but issues will become familiar as dialog continues.

At KCP&L, we firmly believe that the EV status quo is not the right path and hope you agree that the potential benefits of broader EV adoption justify both the time to address and understand issues and the acceptance of measured risks to broaden EV adoption.



