Utility Role in Promoting Vehicle Electrification: Ownership Considerations

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Utility Role to Support and Promote EVs

Barriers to EV Adoption:
(1) Up-front vehicle cost and vehicle availability;
(2) Lack of awareness of electric vehicle options and benefits of electrified transportation; and
(3) Lack of access to convenient charging

*Utilities can help address the latter two barriers*

Robust utility programs should address three elements:
(1) Access to EV charging infrastructure;
(2) EV education and outreach; and
(3) Management of EV load
• **Strawman suite of goals**: To accelerate deployment of EV charging infrastructure in a manner that:
  
  - (a) is equitable—reaching presently underserved market segments;
  - (b) is complementary to a competitive EV charging market;
  - (c) ensures that new EV load is robustly managed;
  - (d) leverages limited shareholder dollars as far as possible;
  - (e) properly incentivizes utilities to make effective investments; and
  - (f) delivers a positive experience to site hosts and drivers.
GOAL: Expanding access to electrified transportation to reach presently underserved market segments should be a core function of utility EV programs.

RECOMMENDATION: The case for utility ownership is particularly strong in underserved markets, such as MUDs and low- and moderate- income communities where the convenience of a turn-key approach is most critical to station deployment.
GOAL: Utility investments in EV charging infrastructure must support the long-term development of a competitive charging market.

RECOMMENDATION: Utility ownership is not inherently in conflict with promoting competition. Determining appropriate pricing at utility-owned and operated fast charging stations becomes an important issue, requiring consideration of multiple countervailing considerations.
Consideration #3: Load Management

GOAL: Effective load management is critical to ensuring that utility investments in EVs provide direct benefits to all ratepayers, including reducing grid strain, facilitating renewable integration, and driving down rates by promoting off-peak charging.

RECOMMENDATION: Utility ownership can facilitate EV load management, but is not the only approach to ensuring effective management of new EV load; regardless of ownership model load management strategies should be incorporated into utility programs.
Consideration #4: Cost-Efficacy

GOAL: Given limited ratepayer dollars, it is important to maximize their impact on accelerating EV deployment.

RECOMMENDATION: Ownership model by itself does not dictate cost, but utility ownership has largely correlated with higher expected cost per station than the make-ready model in proposals to date in the East (with the exception of National Grid’s proposal in Rhode Island). Additional implementation data from these and other programs will be helpful in evaluating the role of cost in ownership model.
Consideration #5 : Utility Incentives

GOAL: Sierra Club supports utility incentives to develop appropriate and effective EV charging infrastructure proposals.

RECOMMENDATION: Allowing for utility ownership may be helpful but is not essential to incentivizing utilities to develop effective EV programs. Focus should increasingly be placed on developing appropriate performance incentive metrics to connect utility financial incentives to tangible outcomes rather than capital expenditures.
Consideration #6: User Experience

GOAL: To effectively accelerate long-term deployment of EVs, utility programs must produce a positive experience for drivers and site hosts.

RECOMMENDATION: The desire to promote a positive site host and driver experience does not dictate the use of a single ownership model. However, because non-utility site hosts are not directly subject to regulation by the PSC, the mechanism to establish minimum standards for non-utility site hosts is through contracts with the utilities supporting the stations.
• Sierra Club strongly endorses a proactive role for utilities in accelerating deployment of EV charging infrastructure, particularly in underserved markets.

• In designing and evaluating utility programs, the primary focus should be on whether the program will achieve its broad suite of goals.

• As programs in other jurisdictions are approved and implemented, we are learning that different ownership models lend themselves well to supporting different program goals. Ownership model should not be limited at the outset, but should be one of the factors considered in designing programs targeted to achieve all relevant goals.