Preparing for Mass Deployment of EVs

Executive Summary

About This Report

The Ready, Set Charge, Fleets! – Addendum - Preparing for Mass Deployment of EVs is a resource to guide fleet managers as they transition their fleets beyond the first few electric vehicles (EVs). It introduces fleet managers to the world of energy management and helps them think about and tackle challenges related to the cost of charging many electric vehicles. It also provides guidance around employee adoption of EVs, programs, incentives and tools for EV procurement and management, and strategies to future proof operations and prepare for mass-adoption of EVs. This report draws on research by experts at Prospect Silicon Valley and real-world experience from Alameda County General Service Agency’s fleet.

Key Lessons for Fleet Managers

- **Find out who is responsible for your facility’s energy bill & know your rate tariff**
  The first step to solving a problem is knowing there is one. If you are not responsible for the energy bill of the facility where fleet charging takes place, find out who in your organization is and what utility rate tariff the facility is on. This is the first step to coordinate any long-term charging strategies or cost minimization efforts.

- **Charge vehicles during favorable Time-Of-Use (TOU) rates**
  Create a charging strategy or schedule that prioritizes the most favorable times of day for vehicle charging.

- **Mitigate demand charges**
  Incurring additional demand charges is the costliest aspect of fueling electric vehicles and can pose a challenge to fleet electrification. By utilizing strategies such as those laid out in this guide (scheduled charging, demand management, throttling, etc.), the impact of EV charging on demand charges can be mitigated or avoided.

- **Increase employee confidence and knowledge of EVs**
  Get the most out of your investment. Activities such as ride and drives can accelerate EV adoption and best practices with your organization’s employees.

- **Be sure to consider the full impact of new, rapidly changing, technology when planning what your charging needs are and scaling electrical capacity**
  While bigger batteries and faster chargers mean your fleet vehicles will be able to go farther with less of a wait, the electrical infrastructure of your facility will need to be scaled accordingly. Retrofitting facilities to include charging is expensive so put policies in place to ensure that new fleet facilities are built with the necessary infrastructure.