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Blueprint Models Reliable Network Growth

Context

A large Southern fleet needed a clear blueprint for future proofing their charging system while converting more of their fleet to EVs. With the current fleet already using 10 chargers from four different vendors, some of which were open to the public for private vehicle use, the fleet couldn't risk overloading the charging system by onboarding new fleet EVs. The repair costs and public relations ill will of a power outage would be astronomical.

To mitigate the risk, fleet managers asked **Panasonic** Smart Mobility Office for load modeling to analyze the multiple "what ifs" of converting various numbers of their fleet's diesel vehicles to EVs, and how that could impact charge demand.

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Approach

Panasonic Smart Fleet Transition Solutions provided extensive load modeling analysis to future proof the system. The modeling explored potential scenarios including what would happen to demand and costs if the fleet converted a certain number of diesels to electric.

The blueprint explored future transition stages to reveal the demand on system from energy perspective,

Modeling revealed a working forecast that included options for demand and costs, creating a clear blueprint for various options. With the blueprint, this fleet can build resilience into their system, and they know how to optimize energy usage during the entire transition.

State of the Operation

10 EVSEs

4 different vendors

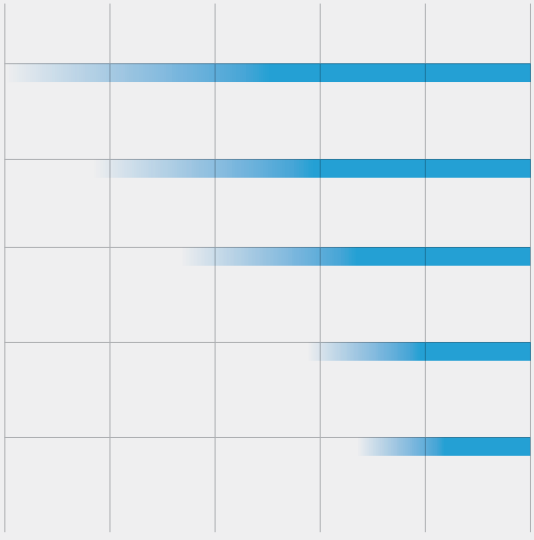
\+ Private fleet and countless public vehicles

Results

A comprehensive blueprint for energy resource management is highly effective for launching a multi-vendor, decentralized decarbonization initiative. Not only does it help unite teams to reach their goals, but it will identify optimization tactics along the way.

Deliverables for this blueprint included:

+ Holistic launch plan effectively communicated strategy to all stakeholders
+ Aligning multiple vendors and partners
+ Load modeling and forecasting plan with hourly load profiles based on EV types, depot behavior and charging constraint
+ Time of Use (TOU) tariff alignment plan with modeled TOU and demand charge impact scenarios
+ DERMS compatibility study with a framework for future grid interactive charging signals using IEEE2030.5



Learn more about Panasonic Smart Fleet Transition Solutions: *email* DL_SMO_Sales@us.panasonic.com *or visit* SmartFleetTransition.com