

Multifamily residential:

EV Charging Load Simulation and Demand Reduction with Battery

CHALLENGE

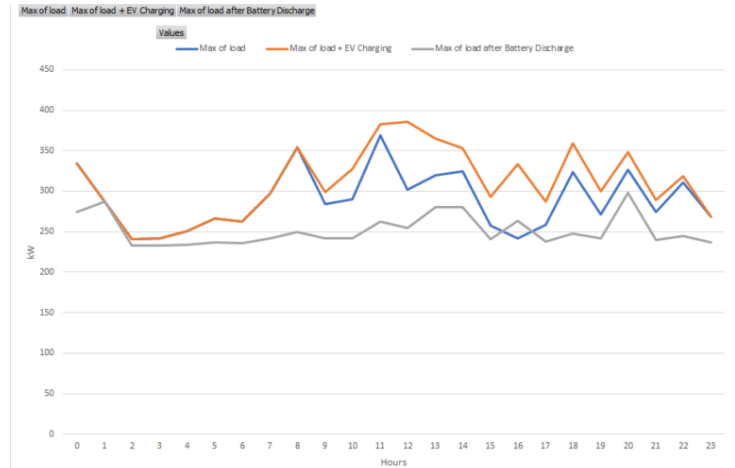
Our client was interested in installing Level 2 and DC Fast Chargers at each of their tenant parking lots in a multifamily residential community in NY. They wanted to determine the impact that would have on their load and determine how batteries could help reduce the demand from EV charging.

APPROACH / SOLUTION

Vybe simulated the load curve resulting from the different utilization rates of the EV chargers and then ran an optimization model to arrive at the right size battery that would yield the highest NPV for the client. The load curve on the right shows one the load before EV charging (in blue), after EV charging (in orange) and impact of batteries (in gray).

EXPECTED BENEFITS

- Greater understanding of the impact of EV chargers on the utility bill
- More information for decision-making and planning as well as on offsetting additional costs



AT A GLANCE

CHALLENGE

- Increased utility bills and costs associated with EV charging

EXPECTED BENEFITS

- Batteries can be discharged strategically to reduce peak demand charges.
- Additional revenues can be earned from providing solutions to tenants.

