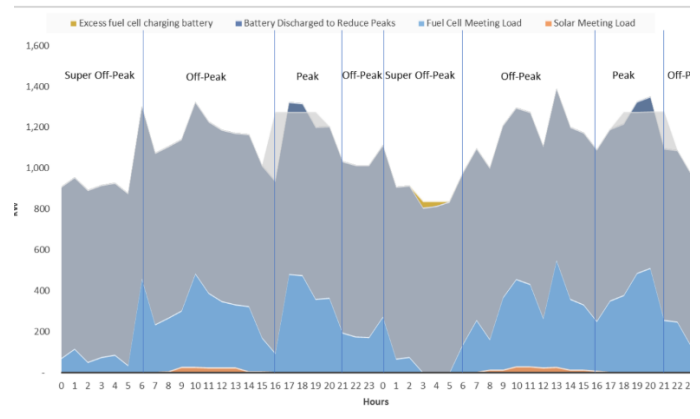


San Diego Hotel:

Demand Reduction with Solar and Battery

CHALLENGE

Our client wanted Vybe to help determine the potential to reduce demand charges at hotel through the use of behind-the-meter energy storage. The hotel had a fuel cell providing base load power but still faced high demand (kW) charges during “Peak” time-of-use (TOU) periods.



APPROACH / SOLUTION

Vybe ran an optimization model to arrive at the right size solar and battery combination that would yield the highest NPV for the client. We recommended an 80kW system paired with a 190kWh battery. We modeled an hourly battery charge and discharge cycle to perform energy arbitrage by using solar or fuel cell to charge the battery during Off-Peak time periods and discharge the battery to reduce building demand during Peak time periods.

EXPECTED BENEFITS

- Estimated demand savings of \$24,000 per year
- Project yields return of 14.2%

AT A GLANCE

CHALLENGE

- High demand charges during Summer months

EXPECTED BENEFITS

- Batteries can be discharged strategically to reduce peak demand charges.

