

case study

Shopping Mall

Acumen EMS™ and Socomec Battery System Installed at Shopping Mall to Provide Critical Backup to Tenants During Blackouts

THE CHALLENGE

Blue Sky Utility, a California-based clean energy developer, collaborated with a client to address the challenge of reducing net load and ensuring critical load backup at a sizable shopping mall. This 328,878-square-foot mall boasts one of the largest solar systems among shopping malls in the state, generating 1.5 Megawatts (MW) of power. However, despite this impressive solar setup, the mall faced significant demand charges throughout the day that needed mitigation. In addition to cost reduction, the client aimed to align with California's renewable energy target of achieving 100% renewable energy by 2045. To achieve this, they sought to integrate their solar PV system with an energy storage system (ESS). Blue Sky was searching for a system that could supply the value stacking option, combining demand charge management, while also providing critical load backup.

THE SOLUTION

Having previously collaborated with Energy Toolbase (ETB) to deploy Acumen EMS™-equipped energy storage systems, Blue Sky once again sought ETB's expertise for the shopping mall project. The Acumen EMS, seamlessly integrated with Socomec, offered the precise functionalities required for demand charge management and islanding mode value stacking. BPi, a Napa-based solar energy contractor, installed two 250kW/1186kWh, 4-hour SUNSYS HES L energy storage systems at the mall. The primary control application focused on value stacking, prioritizing peak shaving and arbitrage when peak shaving wasn't anticipated. Each energy storage system was designed to seamlessly transition into islanding mode, providing critical load backup during utility outages. Energy Toolbase's asset monitoring software, ETB Monitor, is additionally integrated, offering the end customer full transparency of the energy storage system's performance and savings.

PROJECT SUMMARY



LOCATION

Hanford, California



DEPLOYMENT DATE

January 2024



ESS PROVIDER

Socomec



COMBINED SYSTEM SIZE

500kW/2372kWh
(2) Sites



FACILITY TYPE

Shopping Mall



EMS APPLICATIONS

Value Stacking (Demand Charge Management, Resiliency)



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