

case study

HOSPITALITY FACILITY

**Rate Switch Enabled by Solar + Storage
Dramatically Reduces Demand Charges for
Lodge in San Bernardino**

THE CHALLENGE

EcoForce Solutions, a Santa Ana-based project developer, was eager to find a solution for a hospitality facility wishing to address the increasing expenses caused by skyrocketing electric rates. Located in San Bernardino, Budget Lodge, a budget motel near the University of California Riverside, faces exorbitantly high demand charges under SCE TOU-GS-2 Option D (at \$34/kW summer on-peak and \$22/kW noncoincident max). The customer was interested in switching to the Option E electric rate to reduce the facility's max annual peak demand, meaning they would need to acquire qualifying technologies like solar + storage to make the switch. EcoForce Solutions was prepared to find a solution by procuring tier-one ESS equipment and an energy management system to pair with the facility's existing 405 kW solar array.

THE SOLUTION

Energy Toolbase's Acumen EMSTM software was installed alongside a BYD CHESS unit in addition to the facility's 405 kW solar array. The primary control applications are demand charge management and time-of-use arbitrage. With Energy Toolbase, EcoForce Solutions swiftly secured a BYD Chess 120 kW 2-hour unit fully integrated with Energy Toolbase's Acumen EMS™ controls software, ready to start scheduling dispatch commands. By pairing storage with solar, the customer was able to reduce demand charges and qualify for the TOU-GS-2 Option E rate tariff. The rate switch was enabled by Acumen's industry-leading machine learning algorithms that utilize historical interval data to forecast load and shave peaks.

PROJECT SUMMARY



LOCATION

San Bernardino, California



DEPLOYMENT DATE

November 2022



ESS PROVIDER

BYD



COMBINED SYSTEM SIZE

120 kW/266 kWh
(1) site



FACILITY TYPE

Hotel



EMS APPLICATIONS

Demand Charge Management &
TOU Arbitrage