



case study



MANUFACTURING FACILITY

Manufacturing Company Deploys Acumen EMS™ Controls at New 500,000 Square-Foot Facility in Missouri



THE CHALLENGE

A Little Rock-based solar development company was searching for a solution to reduce energy consumption and shave demand peaks at a manufacturing facility committed to sustainability and energy efficiency. The new 500,000-square-foot manufacturing facility, which includes an 800kW solar system, needed a solution to alleviate the high demand for the whole facility. The customer wanted to pair its solar PV system with an energy storage system without charging restrictions to reduce their carbon footprint and deliver substantial savings. Valuing sustainability, the customer ensured their facility was built for carbon reduction and to maximize energy efficiency. Additionally, the customer is pursuing LEED Platinum certification, an internationally recognized symbol of exceptional sustainability achievement.

THE SOLUTION

The solar development company looked to Energy Toolbase for an integrated solution to manage both the hardware and software components necessary for a smooth and organized installation. Leveraging Energy Toolbase's direct hardware partnership with BYD, they had a BYD system ready for timely delivery and implemented a 120kW, 2-hour BYD Chess energy storage system, paired with Acumen EMS, at the manufacturing facility. The primary controls application employed was PV Self-Consumption—a straightforward form of arbitrage wherein Acumen EMS™ charges the battery during daylight hours when PV production is high and discharges the battery at night. Furthermore, the ETB Monitor provides comprehensive visibility into the energy storage system's performance, allowing the solar development company, the customer, and key stakeholders to assess operations and savings.

PROJECT SUMMARY



LOCATIONSikeston, Missouri



DEPLOYMENT DATEJune 2023



ESS PROVIDERBYD



SYSTEM SIZE 120kW/266kWh



FACILITY TYPE

Manufacturing Facility



EMS APPLICATIONSPV Self-Consumption



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