

case study

MANUFACTURING FACILITY

Mexico Metal Manufacturer Installs Energy Toolbase's ETB Controller with Acumen AI™

THE CHALLENGE

RER Energy Group was tasked with reducing electricity costs and optimizing energy consumption for a Cuautitlán Izcalli, Mexico manufacturing facility. The facility, which was already equipped with a 550-kW solar PV system, struggled with high peak demand charges and suboptimal battery dispatching, which prevented it from fully realizing potential savings. Complicating matters, the local utility's approach to averaging demand differed from typical practices in other countries, requiring a solution capable of adapting to these unique requirements. To address these issues, the facility needed an energy storage system (ESS) paired with advanced control software to manage energy usage during peak demand periods effectively.

THE SOLUTION

RER Energy Group partnered with Energy Toolbase to deploy an ESS integrated with ETB Controller and Acumen AI, implementing a manual scheduled dispatch strategy. The project involved installing a 1,290 kW/2,064 kWh 2-hour Hoy Power unit alongside the existing PV system. This setup enables the customer to schedule battery charging and discharging based on the site's needs, while also providing the flexibility to manually dispatch the battery system on-demand using a constant set-point control mode. Energy Toolbase adapted the system to accommodate the local demand averaging methodology, ensuring accurate and effective management.

To provide a consistent approach to modeling bill savings, Energy Toolbase implemented a strategy that aligns the monthly demand reduction with the ESS's maximum power output capacity. This approach simplifies customer expectations by providing predictable reductions each month. Additionally, real-time performance monitoring through ETB Monitor ensures the system operates efficiently and allows for adjustments to maximize savings and performance.

PROJECT SUMMARY



LOCATION

Cuautitlán Izcalli, Mexico



DEPLOYMENT DATE

September 2024



ESS PROVIDER

Hoy Power



SYSTEM SIZE

1290kW/2064kWh



FACILITY TYPE

Manufacturing Facility



EMS APPLICATIONS

Manual Scheduled Dispatch



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