energy toolbase

case study

MANUFACTURING FACILITY

SOLAR PAIRED SYSTEM PROVIDING DEMAND CHARGE MANAGEMENT TO REDUCE PEAKS

THE CHALLENGE

The office supply manufacturer with a 400,000+ square foot manufacturing facility and warehouse wanted to pair energy storage with their roof mounted solar PV system to shave peak demand, which result in high demand charges and electric bills. The state-of-the-art manufacturing facility includes onsite fabrication, welding, paint, and forming, which results in a spikey load profile and high demand charges. The system was sold as a long-term hedge against continued increases in demand charges and was primarily motivated by savings and project economics. The project developer required a provider and solution that could deliver on-time and provide support throughout the project life cycle.

THE SOLUTION

Energy Toolbase's Acumen EMS™ integrated with a Chint Power Systems (CPS) energy storage system was deployed to optimally shave peak and reduce the customer's demand charges. Acumen's machine learning algorithms were initially trained to predict the customer's demand spikes using historical meter data and are continually re-forecasting and re-optimized as the meter logs site data. The successful commissioning and operation of the project has led the customer to purchase more ESS solutions utilizing Acumen EMS™ controls on their other manufacturing facilities in Tennessee.

PROJECT SUMMARY

LOCATION
Dickson, Tennessee

DEPLOYEMENT DATE
May 2020

ESS PROVIDER
Chint Power Systems

COMBINED SYSTEM SIZE
180 kW/390kWh
4 systems

FACILITY TYPE
Manufacturing facility

EMS APPLICATIONS
Demand Charge Management

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