TURN ENERGY DATA INTO ACTION.™

NEXTera 360°™

Maximize battery storage returns with optimizing software

A community choice aggregator (CCA) that provides electricity for communities in California entered into a power purchase agreement for solar energy and energy storage capacity from NextEra Energy Resources in 2022. The low-cost, zero-carbon energy purchased is generated at the Yellow Pine II Solar Energy Center in Nevada.

With this project now operational, the CCA was looking for a system to optimize returns from the new solar and battery storage installation. By gaining better insight about the optimal timing for charging the batteries and bidding into the California energy market, the CCA aimed to pass savings to its customers in the form of lower energy bills.

53 MW
added battery storage capacity

20-30%
expected average increase in value*

> **"**Working with NextEra Analytics Inc. so far has been great as we are turning energy data into actionable insights. NextEra 360's services are tailored to meet our CCA's specific business objectives in optimizing energy management. **"**
>
> **- Utility Leader**

Challenge

The CCA added 53 megawatts (MW) of battery storage to its Yellow Pine II solar site. The CCA believed that by optimizing the charging and discharging of the battery system, it could generate more revenue when bidding into the California energy market. However, in order to automate the process, the provider would require:

» In-house traders

» A software system that could forecast offers on at least an hourly basis

» Developers to integrate with its scheduling coordinator (SC)

Solution

Instead of investing time and money developing its own system, the CCA opted to use the NextEra 360™ energy management software. NextEra 360 automates the bidding and offering processes by utilizing day-ahead and real-time algorithmic trading strategies, which can help battery owners minimize costs.

Since the CCA works with a SC, NextEra 360 will integrate with both the aggregator and its SC. After the integration is complete, the CCA will benefit from customized strategies that consider local tariffs, on-site conditions, and historical and near-real-time data. NextEra 360's algorithm also considers the rules and regulations surrounding the federal investment tax credit and California's tax credits for the installation of renewable energy resources, ensuring that the CCA can maximize returns.

Result

The CCA could potentially increase revenue from its battery project by an average of 20-30% above the projected baseline by choosing NextEra 360. This revenue growth will not only benefit the aggregator but will also translate into lower energy bills for customers in the California energy market. In addition, the CCA will be able to increase operational efficiency, resource utilization, and cost-reduction efforts, ensuring that energy is stored and dispatched at the most opportune times.

About Us

NextEra Analytics, Inc. (NEA), a subsidiary of NextEra Energy Resources, was built on 15+ years of experience in energy optimization, data science, forecasting, and analytics. The company developed NextEra 360™, a comprehensive energy management software package designed to increase operational efficiency, reduce cost, and accelerate decarbonization no matter where you are in your clean energy journey. Swift and agile, NextEra 360 can be tailored to your site-specific operations and business objectives.

NextEra Energy Resources LLC, together with its affiliated entities, is the world's largest generator of renewable energy from the wind and sun and a world leader in battery storage. NextEra Energy Resources offers a wide range of clean energy solutions to help businesses and customers across the country meet their emissions-reduction goals.

For more information, visit www.NextEra360.com.