

ETB Controller

Maximize the Value of Your Storage Assets.

The ETB Controller energy management system enables the simple deployment of energy storage, while Acumen AI enhances optimization and delivers unparalleled project economics.

Manage your Assets with ETB Controller

Achieve maximum economic benefits for your solar and storage assets with automatic AI-enabled value stream and cost management.

✔ One-Stop Shop

Energy Toolbase enables modeling, purchasing, procuring, commissioning, and monitoring for your energy storage systems.

✔ Standardized

ETB Controller is designed to support all of the widely recognized industry-standard communication protocols.

✔ Transparent Controls

Take direct control of several aspects of your storage assets using Operating Schedules.

✔ Flexible

Choose BESS hardware from a wide range of integrated Tier 1 energy storage partners that best suits your site's configuration.

✔ Proven Track Record

ETB Controller has a history of successful deployments and is a dependable brand for your projects.

✔ ETB Monitor Integration

ETB Controller comes with a robust monitoring system for complete transparency into asset performance.

120+

Project Sites

100+

MWh ESS Capacity

20+

States / Provinces

4+

Countries

etb developer

Dashboards

Leads

Proposals

Utility Rates

More

Season 1
Jan 1 - May 31

Season 2
June 1 - Dec 31

General Info

Name

Season 2

Abbreviation

S2

Include Acumen AI

☒

Start Date

Month

June

Day

1

+

Sun

Mon

Tues

Wed

Thu

Fri

Sat

0

1

2

3

4

5

6

7

8

9

10

11

12

+ Add Time Inter

Clear Cells

Charge Modes

Charge at Max Power

Charge from PV only

Charge from Exports

Charge from Clipped Power

Discharge Modes

Discharge at Max Power

Discharge against Imports

Other Modes

Fixed Peak Shaving Threshold

PV Self Consumption

Do Nothing

Acumen AI Modes

Demand Charge Management (DCM)

Energy Arbitrage (EA)

Stacking (DCM & EA)

Select your Season, Charge, and Discharge Modes.

Prescribe events on your own with Operating Modes.

Optimize Your Storage System with Acumen AI



✓ Optimized

Receive maximal economic benefit from a variety of value streams that target electric bill savings and grid services revenues.

✓ Forward-Looking

Participate in emerging economic opportunities with optimized battery controls.

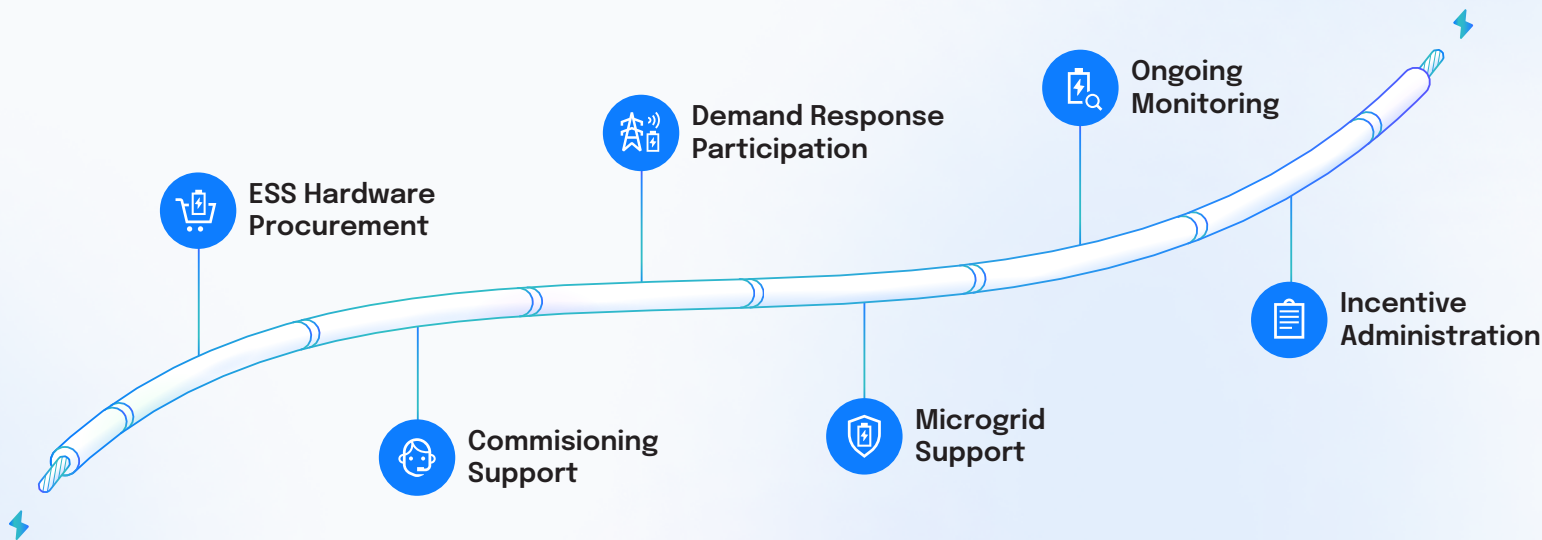
✓ Compliance

Operations compliant with OEM warranty and incentive programs (e.g., ITC, SGIP).

✓ Adaptable

Acumen AI adapts to changes in site load, rate schedules, and value opportunities without user input by continuously generating a new optimal plan.

Domain Experts at Your Service



✓ Technical Proficiency

Domain experts with deep technical knowledge of solar photovoltaic systems, energy storage technologies, and grid integration methods.

✓ Regulatory Awareness

We are well-versed in regulatory frameworks governing energy markets, utility rates, and policies that impact renewable energy.

✓ Financial Acumen

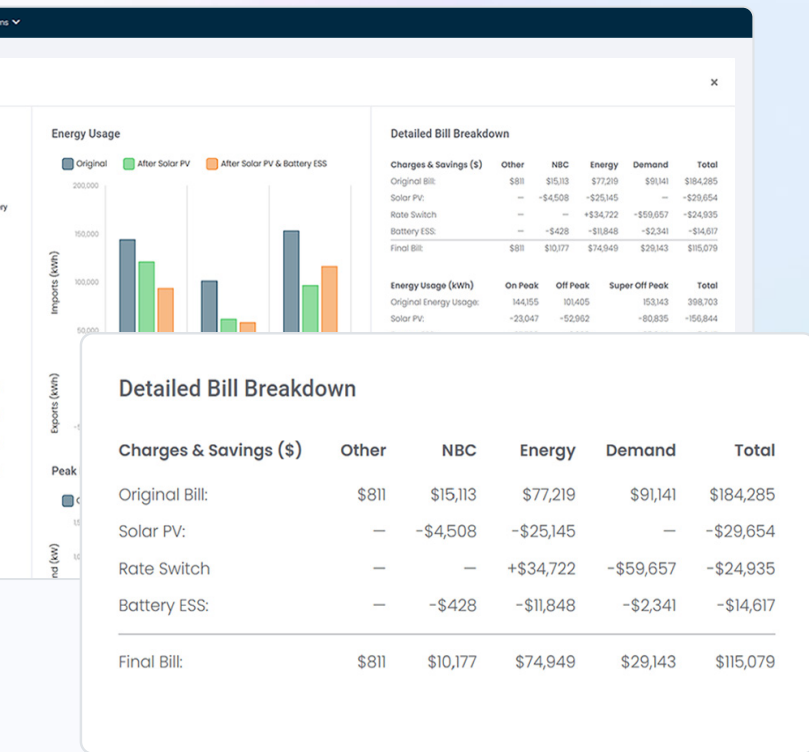
We can help you understand the financial aspects of solar and storage projects including cost analysis, ROI calculations, and much more.

✓ Market Insight

Get insights about market trends, emerging technologies, and industry innovations.

Charges After PV/ESS (\$)				
Other	NBC	Energy	Demand	Total
\$211	\$789	\$2,204	\$4,866	\$8,071
\$211	\$509	\$1,010	\$3,925	\$5,654
\$211	\$471	\$476	\$2,891	\$4,049
\$211	\$440	\$62	\$2,820	\$3,532
\$211	\$570	\$546	\$3,612	\$4,939
\$211	\$529	\$787	\$4,370	\$5,896
\$211	\$560	\$776	\$4,472	\$6,020





View a transparent breakdown of avoided costs for your operational systems in the field for each billing period.

Integration with ETB Monitor

- ✓ **Savings Simplified**

Transparent breakdown of utility bill costs and savings by charge type, before and after the impact of solar and storage.
- ✓ **Analytics & Visualization**

View site, solar, and storage interval meter data using easy-to-read charts and graphs.
- ✓ **Demand Response**

Full control to schedule the dispatch of your storage assets and group them into virtual power plants for scalability.
- ✓ **Seamless Integration**

Easily toggle between applications to compare your system savings, solar generation, energy usage, and rate schedule against the original proposal.

Hardware Configurations

Sophisticated technology in a compact and easy-to-install enclosure.

Our turnkey, fully wired enclosure houses all necessary hardware components in a single unit, ensuring a streamlined installation and commissioning process. Each enclosure is pre-configured for your specific project and application.



The Energy Toolbase Difference



The Only End-to-End Software Solution

There has never been a solution on the market that lets developers and project managers model, control, and monitor their projects entirely from one platform, with one company. Our solution empowers developers to efficiently model and deploy more projects.



Industry-Leading Customer Service & Support

Our team provides personalized training and support to tailor our products to fit your needs. We also provide access to our expert rates team, proposal auditing, performance reviews, and more. You will be fully supported by our team, from modeling, to commissioning, and beyond.



Gold Standard Electric Bill & Savings Analysis

We are widely considered the market leader for utility rate and avoided cost analysis of solar and energy storage projects, translating through every step of your project. Easily track your actual savings versus your original modeled proposal.



Critical Water Facilities

3.7-Megawatt Hour Energy Storage Portfolio Deployed to Provide Emergency Water Supply for Ventura County.

The Result

99.95% Hardware Uptime

99.98% EMS Uptime

The Challenge

Ventura County needed a solution to keep water pumps running during emergencies for county residents. The 2017 Thomas Fire burned 281,000 acres and cut power to 250,000 residents, shutting off water from the county’s electric wells. Ventura Energy sought hardware, software, and an EMS to provide reliable backup capabilities at five critical water facilities and participate in California’s DRAM program.

Location Ventura County, CA	ESS Provider Tesla	Facility Type Critical Water Facilities
Date January 2024	System Size 3.7 MWh across 5 sites	Application Scheduled Dispatch + ESS Optimizer

The Solution

Ventura Energy and Energy Toolbase enabled grid participation at the sites, requiring more than standard savings to move forward. Using ETB Controller with Tesla Powerpacks and Megapacks, the systems joined DRAM via Energy Toolbase’s partnership with Leap Energy. This pay-as-bid program supports CAISO grid stability, while the performance-based revenue-share model maximizes revenue and bolsters the grid.



Public Library

Kentucky Public Library Installs Solar+Storage at New 45,000-square-foot Facility to Offset High Demand.

The Result

100% EMS Uptime

129.51% Modeled Savings Achieved

The Challenge

Bullitt County, Kentucky’s growth led to the need for a larger Central Library. The new 45,000-square-foot facility boasts environmentally friendly features, including geothermal heating, LED lighting, a 240 kW solar array, and a 110 kW ESS. Its size placed it on Louisville Gas & Electric’s TODS rate, which includes three demand charges totaling nearly \$21/kW, along with ratchets that raise monthly costs.

Location Shepherdsville, KY	ESS Provider Delta / LG Chem	Facility Type Public Library
Date July 2022	System Size 110 kW / 220 kWh	Application ESS Optimizer with Acumen AI

The Solution

A Delta LG Chem 110 kW ESS with ETB Controller controls software was installed to manage demand charges, using advanced machine learning algorithms to forecast load and shave demand peaks, improving over time as usage data accumulates. Once the building reaches full operation and energy patterns are established, the solar + storage system may support a rate switch to further reduce costs.



Get started today!

Scan here to schedule a call
with our energy storage professionals!

www.energytoolbase.com
(866) 303-7786