# **Energy Storage Practice**



# Value Stack Assessments, Design, and Implementation Solutions

We partner with clients as a strategic adviser, specialty implementer—or both—to strategize, design, develop and execute energy storage projects that maximize clients' interest first and foremost.

#### BATTERY ENERGY STORAGE ASSESSMENT

> Cut through the headlines and hype to learn exactly where and how a Battery Energy Storage System (BESS) will help meet your energy goals. We provide feasibility analyses that prioritize storage goals across portfolios and determine optimal potential value stack configurations down to the facility level with associated profitability metrics.

# ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE)

> When a client is adding an EVSE fleet to a facility, we assess benefits of coordinating a managed EV battery charging strategy complemented with a stationary storage system to reduce reliance on peak utility power rates while increasing utilization of existing electrical infrastructure.

#### SITE READINESS EVALUATION

> Take ownership of a BESS, EVSE, microgrid or other sets of Distributed Energy Resources (DERs)' impact to your specific facility. We evaluate the viability of sites' ability to host the storage system of choice and identify various upgrade or control strategies to accommodate the chosen technology. This service can be used to develop initial mechanical and electrical designs for use in a feasibility study or as a basis of design initiating the permitting and interconnection phase of the project.

#### MULTI-DER MICROGRID ASSESSMENTS

 We develop an overall optimal energy resource mix with energy storage being considered among other complementary or supplementary assets.
 This holistic analysis avoids optimizing for a single technology and places a focus on balancing clients' financial, risk and environmental preferences.

## RESILIENCY & GRID-INDEPENDENCE DESIGN

Energy storage systems can serve as the technical backbone of your resiliency strategy. We determine the various resiliency levels possible for clients' facilities from partial or full grid islanding capability to grid-connected power quality improvement potential enabling the selection of a strategic design best for the client.

#### ENERGY STORAGE PROJECT DEVELOPMENT

- Whether the project involves a standalone storage system or is paired with several other DERs – solar, CHP, EV Chargers, etc. – we support clients in navigating difficult technical and financial challenges. Our results focus on developing storage solutions that maximize clients' return on investment, environmental footprint benefits, and resiliency capabilities. We solve challenges throughout your storage project development with solutions such as:
  - Market Analyses
  - Portfolio Optimization and Master Planning
  - Feasibility and Due-Diligence
  - Conceptual Design and Development
  - Interconnection Design
  - Owners Advocate / Agent
  - Performance Testing and Verification
  - Project / Construction Management

- Design Build
- Total System
  Commissioning
- EV Charger Infrastructure
- Complete Turnkey
  Installation
- Repowering / Augmentation Studies
- Sustainability Goals and GHG reduction Enablement

# **Key Differentiators**

Our multi-disciplinary team's integrated offering uniquely enables us to deliver solutions customized to meet the requirements of your storage project – whether it's a small part of a complex behind-the-meter (BTM) microgrid system or a large standalone front-of-the-meter (FTM) storage system. We have a comprehensive set of insights, tools and know-how to ensure you don't leave any value on the table.

#### INDEPENDENCE

> We're a third-party advisor that can look across the entire landscape of technology suppliers, developers, and interconnection options to make fully independent assessments that optimize your company's goals. Unlike some of our competitors, we do not charge developers to be a part of our network nor do we have potential conflicts of interest to sell any technology solutions. Our entire business is sitting on the client side of the table delivering the best solutions for your company's needs.

#### **CONSTRUCTION KNOW-HOW**

Our Energy Storage Practice brings a wealth of practical hands-on implementation know-how rather than being based on a purely academic or theoretical advisory offering. We feature a full-service construction oversight and implementation practice balancing our market commercial intelligence with commitment to long-term performance.

### ADVANCED ANALYTICS

Through Edison's internal technology platform and our mastery of industry standard design tools, we provide thorough and defensible storage techno-economic analyses, enabling our clients to understand the longterm, multi-factor cost-benefits of various storage design options. Our analyses run thousands of market scenarios for all possible technology options and operating plans, ensuring optimal decision-making, risk management and financial valuations are made when selecting a storage strategy and accompanying technology and financing partners.

#### CROSS-FUNCTIONAL MARKET EXPERTISE

 We bring conventional supply expertise and demand side engineering under one roof taking a holistic approach to your storage system strategy. This is especially critical given energy storage value drivers are a complex combination of utility, ISO/RTO programs and wholesale participation opportunities. Our energy storage practice ensures clients can quantify and minimize merchant risk while driving them to the most favorable contract terms.

Edison Energy provides independent, expert advice and solutions to help large corporate, industrial, and institutional clients better understand and navigate the choices and risks of managing energy. Through a comprehensive portfolio approach, Edison works with our clients to help them resolve the key challenges of cost, carbon, and the increasingly complex choices in energy.

Energy storage is just one of the many solutions Edison Energy offers to benefit your organization.

Contact us today at **848-208-1950** or send an email to Jon Carbajal at Jon.Carbajal@EdisonEnergy.com.

#### CASE STUDIES

## **NEW JERSEY RESOURCES**

 Evaluation and design of on and off-grid systems with an analysis optimizing combination of probabilistic EVSE fleet charging, stationary BESS design and onsite solar generation.

#### HOME DEPOT

 Portfolio wide evaluation of hybrid solar plus storage BTM and FTM design and technical solutions. Oversaw a competitive procurement process securing competitive onsite solar plus storage solutions.

## NEW YORK CITY DEPARTMENT OF CITYWIDE ADMINISTRATIVE SERVICES

 Site-level evaluation, RFP development and implementation oversight of a solar plus storage system in a complex regulatory environment.

