LBA Realty Upgrades Park Place Corporate Complex with AI-Powered Energy Storage

LBA Realty manages 39 million square feet of commercial and industrial complexes, including Park Place, a distinctive, 1.8 million square foot corporate complex situated within a thriving 105-acre mixed-use development of office, residential, and retail amenities.

LBA Realty recently completed an ambitious redevelopment project, which included sustainability and energy saving initiatives. Committed to reducing tenants' costs and supporting local communities, LBA activated Stem's energy storage service, deploying 1.3 MW of battery capacity - the largest indoor energy storage system in the world - at Park Place. The Artificial Intelligence (AI)-powered system reduces operating expenses while also providing on-call demand reduction to help strengthen the grid during peak times.

Over the years, a commitment to innovation and sustainability has saved LBA millions in operating costs. But prior to deploying Stem, Park Place was still exposed to expensive time-based costs like demand charges and peak time-of-use rates.

Unlike traditional efficiency methods, Stem's AI-powered storage directly targets these time-based costs, giving LBA the flexibility to automatically draw energy from the grid at the most cost-effective times, without requiring any change to operations.

Using Stem to optimize the timing of energy use has already lowered electricity bills at Park Place by more than $100,000.

Location
Irvine, California

Building Type
Commercial Office Complex

Activation Date
December 2016

System Size
1.3 MW

Applications
Reduce peak demand and strengthen local grid

Annual Net Savings
$45,000+

10-year Estimated Savings
$450,000

LBA Park Place

"The installation of Stem's cutting-edge technology is the most recent demonstration of our commitment to increase sustainability, strengthen the local power grid, and reduce costs for our tenants."

Perry Schonfeld
Principal and COO

Optimizing the timing of energy use for automated savings

The energy landscape is transforming rapidly. The shift to renewable, decentralized resources brings reduced emissions and increased customer choice, but also dramatic reform to commercial energy rates, which significantly impacts large firms like LBA Realty.

Nowhere is this change more noticeable than in California, where renewable generation now makes up 30 percent of the energy mix. In the modernized grid, *when* you use electricity is just important as how much you use. At Park Place, more than 50 percent of the utility bill is connected to the timing of energy use.

> "Sustainability, managing energy, and driving down costs are all key pillars of our operating framework. Stem checked all the boxes for us."
>
> **Melanie Colbert**
> Principal, Operations

LBA Realty proactively responded to changing rates by integrating a solution that leverages artificial intelligence to automatically adapt. Stem's AI, Athena, stores and deploys energy at optimal times, responding to every fluctuation in energy use and rates. It lowers demand charges and interacts with the grid to support the transition to cleaner energy. Without a minute of staff time or training, it reacts to every change presented by the volatile energy landscape.

Supporting local communities through grid stewardship

LBA Realty has made impressive efforts to reduce the carbon footprint of Park Place. Now, Stem enables the company to play a role in reducing the carbon footprint of the large electric grid serving the broader Orange County community.

The system provides on-call demand reduction to help Southern California Edison balance the grid during critical peak times, supporting reliable electricity supply and eliminating the need to build new carbon emitting "peaker" power plants.

The project is part of an 85 MW virtual power plant – the largest distributed energy storage network in the country – that Stem is building and operating to provide grid relief in the West Los Angeles Basin.

Delivering savings and grid support

The ability to capture bill savings and deliver grid support using a single storage asset is possible only through the use of artificial intelligence. Stem's AI, Athena, leverages machine learning and predictive analytics to optimize the system for multiple applications, maximizing the total project value for LBA Realty and the grid.

> "The process to install and implement was seamless, and the realized energy savings with no capital outlay was a big selling point for us. We have seen significant energy savings at our building, more than initially anticipated."
>
> **Michelle German**
> Operations Director

By automating energy savings, Stem supports LBA's goal of continued excellence in every aspect of property operation. It has lowered monthly peak demand charges by as much as 13 percent, saving more than $100,000 in 2017. That is 120 percent more than the savings Stem initially projected for Park Place.

Plus, by contributing to Stem's virtual power plant, Park Place has helped keep the lights on in its community. In 2017, it delivered between 600kW and 1300kW of clean, reliable electricity supply during multiple summer heat waves.


1.3 MW Stem system at Park Place