



# Case Study: Intercontinental Hotels Group Stem's Learning Software and Storage Counter Rising Electricity Costs



**IHG** HOTELS & RESORTS

After exhausting more traditional energy efficiency measures and manual load shifting, InterContinental Hotels Group turned to Stem to reduce energy costs without affecting guest comfort. Stem's proprietary combination of real-time data analytics, energy storage, and actionable insights had an immediate impact, helping the hotels halt rising energy costs. The modestly sized systems store and deploy automatically to deliver bill reductions every month, and powerful software tools have helped the hotels' engineering teams to more than double the savings.

IHG is one of the world's leading hotel companies, with 4,700 hotels and almost 700,000 rooms in 100 countries around the world. Located in the heart of San Francisco, the InterContinental San Francisco (ICSF) is a celebrated luxury hotel that prioritizes sustainability and efficiency.

“ I love the batteries, but I love the software even more, I've increased my ROI by about 300% using the data. I like doing something that's good for the grid, but this is good economics too. It's the real-time data that is the real differentiator here. Most systems use the utility meter data, which is collected on a 15-minute basis. But that's too late. By then, I may have a major peak that could dictate my demand charges for the entire month. ”

**Harry Hobbs**  
Area Director of Engineering, IHG

#### Location

San Francisco, CA

#### Facility Type

Hotel

#### Solutions

Energy Storage, Utility Bill Optimization, Sustainability

#### Energy Storage System Size

54kW

#### 10-year Savings

\$84K

#### Commercial Operation Date

January 2014



#### Challenge

The hotel relies on energy-intensive systems including HVAC, elevators, and laundry equipment to meet guest needs. When running simultaneously, these systems produce large energy spikes that can dramatically increase monthly utility bills. Prior to installing Stem's system, demand charges amounted to 30-40% of electricity costs. Extensive energy efficiency measures could not address the hotel's rising peak demand charges.



#### Solution

Real-time energy use displayed through Stem's PowerScope software revealed multiple systems deploying simultaneously at especially costly times. Stem's energy storage automatically deploys to decrease expensive spikes, and the ICSF engineering team leverages PowerScope software to know precisely when to stagger the start-up of other devices.



#### Results

From Day 1, Stem's energy storage system began providing automated savings. The Director of Engineering estimates that operational changes enabled by Stem's software have reduced peak demand at ICSF by 75kW over time, which more than doubles the impact of the storage system's automated response. Over its lifetime, the energy storage system will provide \$84,000 in energy bill savings.

To learn more about Stem's solutions, contact [stem.com/contact-us](https://stem.com/contact-us).