

CASESTUDY

1450 Brickell | Miami Florida

Ease of Integration, Flexibility to Expand & Multi-Tenant Billing



1450 Brickell is a 35-storey, 582,000 square-foot office tower in Miami's Brickell Financial District and has received LEED-Gold certification by the U.S. Green Building Council (USGBC), becoming the first of its kind in Miami. The building contains both commercial office and retail space.

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01 582,000 square-foot
office tower in Miami

The building contains a significant number of sub electrical meters which are connected to the Schneider Building Automation System (BAS) and archived to an SQL database on the Tridium BAS Operator's Workstation

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“ABB Cylon® Active Energy seamlessly integrated with our current systems and meters and now provides us with the information to sub bill our tenants and manage our energy efficiently.”
Leo Amador, Chief Engineer

Active Energy Solution

ABB Cylon® Active Energy remotely installed a Data Collection Agent on the Tridium workstation.

The Data Collection Agent is configured to query the SQL database and push the meter data to the ABB Cylon® Active Energy Manager cloud based solution on a regular basis, providing real-time information on energy consumption to the facilities tea.

1450 Brickell required energy information to efficiently monitor and manage its central areas as well as issue cost reports for energy used by tenants within their offices.

Project Summary

- Applications: Active Energy Manager
- Type of Building : 35 Storey Office Tower
- Meters connected: 245 meters
- Use: Project Tracking
Tenant Billing

Flexibility To Expand

Additional meters and data points can be added to Active Energy Manager without having to connect to the Building Energy Management System Operators Workstation again. So whenever the onsite facilities team want to add new meters, they simply contact the ABB Cylon® Active Energy team to configure the additional meters on the Active Energy Manager and the newly connected meter data is live within minutes of connection.

The Active Energy Manager allows targets to be set on energy consumed by air conditioning in the building based on weather parameters such as temperature, humidity and wind speed collected from an online weather service providing local weather data. This enables more effective active management of air conditioning usage ensuring the building is only using air conditioning as required and energy drift is identified in real time.

Billing

With the Active Energy Manager solution, the facilities team now have the ability to charge tenants for their actual energy consumption rather than a blanket charge per square foot. This reflects a realistic charge particularly in situations where some tenants are being more proactive in energy management than others.

Solution Benefits

Flexibility:

Active Energy Manager solution provides flexibility to allow for additional meter connections as required and requires no additional hardware to be installed. As connectivity is conducted remotely, connections can be made faster with no engineer site visits.

Project Tracking:

The Active Energy Manager can also be used to track the performance of energy saving measures across the buildings in the campus, ensuring the return on investment can be accurately determined for the various energy reduction technologies deployed.

Tenant Cost Validation:

The Active Energy Manager allows the billing team to centrally monitor the energy consumed throughout the campus via the user friendly and intuitive interface and validate and substantiate energy costs for each tenant.

Time Period Comparison | May 2015 v May 2016



The time period comparison shows a drop in energy consumption of 32% from May 2016 compared to May 2015. This is due the implementation of energy saving measures across the building.

Spectral Analysis | 2015



This is the profile of the building for the whole year showing plant and equipment running 24/7 during some of the warmer summer months and improved energy performance towards the end of the year.