



SAN DIEGO
convention center



Reduce Energy Consumption While Providing Enhanced Lighting Controls

The San Diego Convention Center is an award-winning leader in the convention center industry. The prime location in the heart of downtown San Diego on beautiful San Diego Bay makes it a popular venue for a wide variety of events including the 2010 Auto Show. The convention center offers 615,701 square feet (57,200 square meters) to total exhibit space. As of 2009 it was the 24th largest convention facility in North America.

Energy Savings



The calculation shows the reduction in power usage as compared to a facility without LimeLight lighting control

1,299,041 Kwh

ANNUAL ENERGY SAVINGS

\$ 210,939

ANNUAL COST SAVINGS

1.7 YEARS

RETURN ON INVESTMENT

Ronald Barham

BUILDING SUPERINTENDENT
SAN DIEGO CONVENTION
CENTER CORPORATION

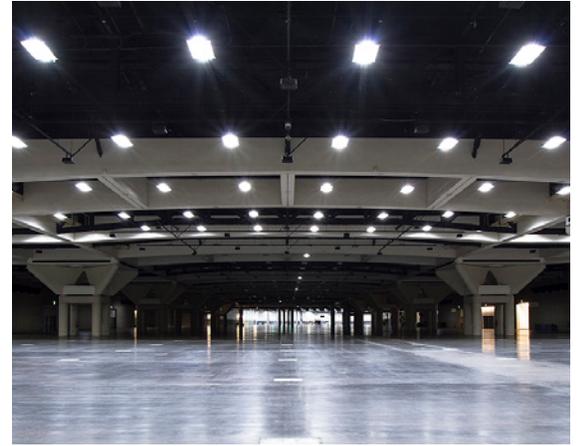
“ Please extend our sincere thanks to everyone for the fantastic job they did on delivering this project on time. Everything was mission critical on this nine day project (design, theoretical modeling, fixture & cable fabrication, deluxe shipping, failure and recovery testing), the long days and late nights have paid dividends as we will enjoy the energy savings for many years.”

CHALLENGES

To provide even lighting and energy reduction capabilities throughout the 525,701 gross sq. ft. of lower level exhibit space while maintaining the fixture quantity and spacing in accordance with California seismic rules and regulations. Optimize operating costs while reducing the carbon footprint. The air walls and concrete structures posed challenges in communication between nodes. Imperative to have efficient and speedy recovery of electrical power in the event of a power failure. Replace old HID fixtures with a wattage of 1065w and a startup time of 20 minutes with a 309w fluorescent instant start fixture.



Before LimeLight



After LimeLight

SOLUTION

Install a test cluster (6 fixtures) with LimeLight Energy Management Control System and energy-efficient fluorescent lighting in exhibit Hall H to measure and model the wireless performance and lighting output. The utility contract provided a loan at 0% financing with an estimated payback of 1.7 years. Sustainable Energy Advocates facilitated the audit and installation.

RESULTS

The installation of the LimeLight System and 1183 energy efficient fluorescent fixtures enabled the SDCC to reduce exhibit hall lighting energy consumption by approximately 44%. The new lighting has reduced our mercury inventory by 91%, extended lamp life, has low lumen depreciation, instant start-up and re-strike, as well as improved color rendering on the show floor. SDCC can now wirelessly access, monitor, control and manage the lighting system via computer. The light levels can be adjusted in each fixture to low, medium, high or completely off throughout the exhibit halls. The fixtures operate much cooler, reducing the cooling needs and background noise in exhibit halls. The LimeLight system was commissioned just in time for the 2010 Auto show. The system identified and offered a solution to the rising energy costs and reduced the carbon footprint through energy reduction. The energy savings during the Auto Show alone were 141,723 (Kwh). The estimated yearly energy savings is 1,299,041 (Kwh). The estimated yearly energy saving dollars is \$210,939. Configuring lighting queues became much easier with no down time. The wireless controls can track burn hours and report any node, light group or communication failure. This system has truly established SDCC as a leader in the industry.



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