LIGHTING AND CONTROLS UPGRADE REDUCES OPERATING COSTS

Relighting for Energy Conservation

THE ROCKEFELLER GROUP
500 International Drive North
Mount Olive, New Jersey
07828

FACILITY DESCRIPTION
Office Building

HOURS OF OPERATION
3,000-8,760 per year
(Variable)

TOTAL KW Reduction
82 KW

ANNUAL ENERGY SAVINGS
$28,333.00

RETROFIT DESCRIPTION
Lighting retrofit including lamps, ballasts, reflectors, occupancy sensors and exit signs.

The Rockefeller Group is an owner, developer and manager of prestigious commercial real estate properties. When it came to their corporate headquarters building, they turned to O.K. Electric Supply Company to provide a turnkey retrofit at 500 International Drive in Mount Olive, New Jersey.

THE AUDIT

The first step in determining the viability of an upgrade at this location was the execution of a detailed audit. The O.K. Electric survey team visited the site, and developed a comprehensive database of all of the existing light fixtures throughout the facility. This database listed all of the lighting in room by room detail. Information was gathered from management on operating hours, and this was verified with the occupants of the space. Electric bills were used to verify energy costs. The optimum lighting design was developed, and a final proposal was presented.

UTILITY REBATES

This project was eligible for a subsidy through a local utility rebate program. A detailed application based on watts per square foot was prepared and submitted to the utility. The project was inspected by the utility, the savings verified, and the rebate approved before any work commenced.

FLUORESCENT RETROFIT

Approximately (580) Recessed lay in 4 lamp 34 watt fixtures were retrofitted to two F32T8 lamps. A custom designed 95% reflective silver reflector was utilized, along with a second generation Ultra High Efficiency electronic ballast from Osram Sylvania. This combination provided maximum energy savings, and increased light levels from the existing conditions. (250) 2X2 fixtures with expensive U lamps were updated to F17T8 lamps, again with a special reflector and electronic ballast. In addition to energy savings, future lamp costs were reduced by 75%. Other fixtures received a ballast and lamp retrofit, using standard and reduced light output electronic ballasts and T8 lamps, as required. Incandescent lamps were updated using a combination of compact fluorescent and cold cathode technology, reducing energy costs 75%, while extending lamp life from 2000 hours to 10,000-25,000 hours.

OCCUPANCY SENSORS

A combination of wall switch and ceiling mounted occupancy sensors were installed, based on the application. Lights will now automatically turn off during periods of vacancy. A vending machine control was installed, reducing energy consumption 50%.

EXIT SIGNS

72 exit signs were retrofitted from incandescent lamps to LED technology, lowering annual operating costs 94%, and virtually eliminating maintenance.

THE ENVIRONMENT

All lamps and ballasts on this project were recycled, preventing the release of mercury and PCB's. Additionally, The Kwh savings of this project annually eliminates the release of 1,327,120 pounds of CO_2, the major cause of climate change, and saves 1,149 Barrels of oil per year, providing a benefit equivalent to removing 119 cars from the road.

WARRANTIES

Special attention was paid to maximizing warranties to reduce future maintenance risk. The combination of Westinghouse lamps with Osram Sylvania ballasts provided a 3 year extended lamp warranty, along with a five-year ballast warranty. Exit sign retrofits and occupancy sensors carried a 5 year warranty.