The New York Susquehanna & Western Railway operates more than 400 miles of train track in New York, New Jersey and Pennsylvania serving more than 85 customers. NYS&W transports a wide range of commodities like lumber, chemicals and feed ingredients to New York state, while delivering plastics, food and paper products and motor vehicles to New Jersey and Pennsylvania.

Pat Welsh, electrical contractor for New York Susquehanna & Western Railway and an ally contractor in the New York Energy Smart Small Commercial Lighting Program, asked Dunn Electric to conduct free lighting survey. After realizing the benefits of an energy efficient lighting upgrade, NYS&W gave the green light to Dunn Electric Supply to produce a lighting design that provided an overall improvement of the lighting quality. From the survey Dunn Electric found that the majority of light fixtures in the offices were 4 lamp T12 2x4 troffer fixtures. Dunn Electric’s recommendation to retrofit the fixtures with 2 lamp T8 troffer conversion kits with reflectors resulted in an increase in light levels while lowering the number of lamps and watts used per fixture. Additionally, wall switch occupancy sensors installed in all bathrooms lowered the number of hours the lights are used, thus increasing energy savings. NYS&W even went so far as to replace all existing incandescent bulbs with more efficient compact fluorescent flood lamps and spirals saving even more money and energy and making the building a “green” facility!
The drop in energy usage per fixture is reflected in the electricity bills, saving NYS&W more than $4,000 annually. By switching out all T12 fluorescent lamps and magnetic ballasts, NYS&W avoided the hassle of trying to replace these lamps and ballasts now that they are no longer in production and received $1,800 of incentive rebates through the New York Energy Smart Small Commercial Lighting Program. Replacing the T12 lamps also equals time and money saved on maintenance as noted by Tom Fries, engineer, “the old units would flicker and not really work if one lamp went bad.”

The Bottom Line
Through the simple process of converting old T12 fluorescent troffer fixtures into more efficient T8 troffers, installing wall switch occupancy sensors and replacing all incandescent bulbs throughout the facility, NYS&W achieved its goal of an overall improvement of the lighting and reducing energy costs at the same time. By providing a better lit work environment employees have expressed their satisfaction, allowing them to focus on their work and not the lighting. “They started changing out the fixtures and lamps and the other end of the office and when you stood down there and looked over this way it was like a cave. There really was a striking difference between the two sides,” said Nancy, accounting.

For More Information
Dunn Electric Supply, an ally distributor in the New York Energy Smart Small Commercial Lighting Program, offers businesses free lighting surveys in order to take advantage of the New York State Energy Research and Development Authority (NYSERDA) programs and energy-saving opportunities. Low interest rate financing may be available through the New York Energy Smart Loan Fund Program. For more info contact Dunn Electric Supply at: 1-800-698-DUNN (3866) or visit us at www.dunnelectricsupply.com

Wall switch occupancy sensors reduce bathroom light usage and increases energy savings.

Using 841 series (4100 Kelvin) T8 lamps provides warmer lighting compared to typical T12 lamps (5000K)

Tech Specs
• Retrofit 4 lamp T12 troffer fixtures with 2 lamp T8 conversion kits.
• Replacement of T12 lamps and magnetic ballasts with high lumen, long life T8 lamps and electronic ballasts
• T12 conversion kits use “Miro 4” 95% reflectors. Increase light output, decrease amount of energy used
• High T8 color rendering, quick and easy to install
• Replaced all incandescent bulbs with lower wattage compact fluorescent flood lamps and spiral bulbs
• Estimated Payback period: 10.2 months*
• Estimated Annual kilowatt hours saved compared to pre-existing system: 33,654 kWh*
• Estimated Annual Energy Savings compared to pre-existing system: $4,375*

*Savings based on 0.14 kWh and 2,880 annual hours of operation, excluding cost of labor.