



New York Energy SmartSM Small Commercial Lighting Program

March 2006

Newsletter Number 48



Reminder:

***The 1st Quarter
2006 Installation
Competition runs
from January
through March
31st, 2006. Good
luck to our Ally
Contractors and
Distributors!***

**SCLP Helps You
Bring Your Clients
and Customers
The Right LightSM
Effective, Energy-
Efficient Lighting.**

***Please pass this
newsletter along to
your colleagues or
customers who
might find the
contents valuable***

To: SCLP Ally

Program News and Highlights

* **A Little Help From My Friends.** The driving force behind SCLP is our desire to see our Allies succeed. We want to help you understand what effective, energy-efficient lighting design is, help you to use these concepts in your lighting design and implementation work, and aid you in selling your customers on the benefits of quality lighting design in their projects.

All of our Program Participants have gone through a two-hour training course or the self-qualification process. In addition to the basic training, we also know that other tools and resources are needed to support your efforts and we provide a variety to help you. The SCLP web site is the place to go for these. We thought it would be useful to remind you of what is available to you as an SCLP Ally – all free of charge and most available on the SCLP Lighting Design Tools web page.

A great refresher on quality lighting design is the series of ***DesignLightsTM Consortium knowhowTM Design Guides***. With individual guides available for a range of applications (including small retail, office, classroom, highway and lowbay industrial, and warehouse), the technology-neutral guides provide you with ideas for basic, better, and best designs, and can also be shared with your clients and customers to show them how the designs work and what their benefits are. These guides are a credible third-party source of information.

The ***Technical Guide for Effective, Energy-Efficient Lighting*** provides participants with more technical background and understanding related to effective, energy-efficient lighting design. We make the ***Guide*** available in two forms: as a downloadable text or an on-line training course.

SCLP successes are featured in a series of ***SCLP Demonstration Project Case Studies*** that showcase our Allies' work. Projects selected for these case studies represent real-world situations – demonstrating that effective, energy-efficient lighting designs can be cost-effectively implemented in a wide range of applications, and that the people using the spaces do notice the difference. Use these as a reference and as a selling tool.

More than a dozen SCLP Case Studies can be found on our Success Stories web page, covering such applications as a dentist's office, a house of worship, offices, retail stores, a hotel, a library, stairway lighting, and a bank. These are real projects, designed and constructed by our Allies. Each describes the needs of the end-user and how those needs were met by the design. Best of all, the qualifying projects selected by SCLP for Demonstration Project Case Study status resulted in a ***\$1,500 incentive*** for the Allies responsible for design and implementation.

What else is out there? Lots of resources, all from credible lighting experts who have no axe to grind and are not trying to sell you or your customers on a particular brand or product. Our resources have been prepared by such well-known lighting centers of excellence as the Lighting Research Center of Rensselaer Polytechnic Institute (Troy, NY), the Rocky Mountain Institute (Snowmass, CO), and the ***DesignLightsTM Consortium***. Visit the SCLP web site to download these resources, or call the SCLP hot line to request hard copy versions of any of the resources described on the web site. www.nyserda.org/sclp

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Small Commercial
Lighting Program

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We're on the Web!
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FLASH

Copies of SCLP's
The Right LightSM
brochures are
available from your
Account Manager
or by calling the
SCLP toll-free hot
line. This brochure
explains the
benefits of **The
Right LightSM** –
effective, energy
efficient lighting –
to your customers
in non-technical
terms. It can be a
valuable addition
to your portfolio of
sales tools.



Lighting Tip

The Case of The Missing Footcandles

The amount of light provided to the various surfaces of a lighted space (measured in footcandles) is an important consideration when designing a lighting system. For example, SCLP uses IESNA recommendations to set a 30 footcandle (fc) target for the work surfaces (tables and counters) of a break room. This light level is adequate for most of the tasks normally performed in a break room (eating, making coffee, or reading a newspaper) to be comfortably carried out. When the project is complete and light meter readings are taken, if the average footcandle level falls below target the lighting practitioner is left wondering, "Where did all the footcandles go?" This problem can occur even when using the most sophisticated lighting software.

The answer is often due to assuming incorrect reflectance levels for the various room surfaces. All surfaces absorb, reflect, or transmit light. Darker surfaces reflect less light than lighter surfaces. Rough surfaces, such as brick, reflect less than smooth surfaces. Room surface reflectance is usually stated as a percentage, representing the fraction of the light reflected from a particular surface. Many software tools have default reflectance settings, for instance 80% for ceilings, 50% for walls, and 20% for floors. Using these default settings instead of actual reflectance values can easily result in a 10% to 50% miscalculation of the light levels. In simple terms, if your floors, walls, or ceilings are darker than a basic off white, or rougher than a smooth painted surface, you will need more light to get the desired results. Sometimes the best advice you can give a customer to provide the proper light levels with least amount of energy use is to apply a fresh coat of light-colored paint.

To learn more about luminance, illuminance, and light levels see the Technical Guide for Effective, Energy-Efficient Lighting, now available on the SCLP web site at www.nyserda.org/sclp.

Allies in Action

✱ **Keep on Truckin'.** Kaiser Body Shop in Latham, NY has served the Capital Region for high quality truck collision repair since 1965. Needing larger facilities to accommodate their continued growth, Mike Kaiser discussed his lighting options with Karl Pedersen of **Wolberg Electric**. They decided that fluorescent T-5HO high bay fixtures would work best in the 18-foot high 7,000-square foot service bay addition. The task of rebuilding and refinishing trailer and cab bodies requires high color rendering illumination. With a CRI of 85 or better, T-5HO lamps were preferred over metal halide or pulse start HID equipment. The superior lumen maintenance of T-5HO lamps was also a factor, allowing the design to use 40% fewer watts than pulse start lamps, while producing the same maintained light level. As the new T-5HO equipment was installed, Kaiser and his staff found the new lighting to be significantly better than the lighting in the existing buildings. Consequently, Kaiser is replacing all the existing metal halide and fluorescent T-12HO equipment with T-5HO fixtures in the 12,000 square foot facility. As a result, **Wolberg Electric** submitted two projects for a total of **Qualifying Project Incentive of \$1,500**.

✱ **You Can Bank On It.** To improve branch appearance and reduce energy usage, TD Banknorth upgraded the existing lighting in three of their locations in northeastern New York. Dan Underwood of **Glens Falls Electric Supply** worked with two different Ally Contractors, **Brownell Electric** and **Sweet Electric** to provide **The Right LightSM** solutions for these projects. All three lighting projects replaced existing T-12 magnetic ballast technologies with new T-8 electronic equipment. The affected areas included customer lobbies and teller areas. The results: a 30% energy saving, and a more inviting atmosphere for the customer's banking experience due to the high color rendering lamps. As an added bonus, the three allies were able to take a total of **\$1,500 in Qualifying Project Incentives** to the bank!