



New York Energy SmartSM Small Commercial Lighting Program

September 2005

Newsletter Number 42



Reminder:

***The 3rd Quarter
2005 Installation
Competition runs
from July 1
through
September 30,
2005. Good luck
to our Ally
Contractors and
Distributors***

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

To: SCLP Ally

Program News and Highlights

* **So, You Think You Know Everything About Lighting?** SCLP is pleased to announce that ***The Technical Guide for Effective, Energy-Efficient Lighting*** is now available. This new free resource for SCLP Allies, provides advanced technical background and understanding related to effective, energy-efficient lighting design. Supplementing your initial SCLP training, the Guide discusses the important elements of lighting design that constitutes good lighting and provides a practical path toward developing and implementing effective, energy-efficient lighting designs.

- The first section of the Guide describes the now-familiar six design requirements for projects to receive incentives from the Program, and explains why these particular metrics were chosen.
- The second section of the Guide provides an overview of lighting terminology, to help you understand the jargon of lighting.
- The third section is a discussion of the important elements of lighting design that help constitute good lighting.
- The final section provides a practical path towards developing and implementing effective, energy-efficient lighting designs for any application.

You can download and view the Guide from the SCLP website at www.nyscrda.org/sclp. Go to "What is SCLP" then Technical Guide. Contact your Account Manager for additional information.

* **Don't Miss the SCLP Train(ing).** As an SCLP Ally you are invited to attend SCLP's ***Advanced Lighting Training*** this Fall, to be held in the Capital Region, New York City, and Buffalo. This valuable three-hour seminar will present detailed information on practical lighting design fundamentals and their application to supplement your initial SCLP training. Using the Technical Guide (described above) and interactive exercises, topics will include the science of lighting and visual perception, different types of lighting and luminaires in the market, the elements of lighting quality, and lighting quality design issues for specific small commercial applications. Each Program Participant attending this free seminar will also receive a printed copy of the accompanying Technical Guide for Effective, Energy-Efficient Lighting. Invitations will be sent out to all SCLP Allies and Participants in the near future.

Preliminary Schedule of Upcoming Advanced Lighting Training Events:

- Capital Region – October 18, 2005 at Rensselaer Polytechnic Institute
- New York City – October 20, 2005 at Con Edison headquarters
- Buffalo – date and venue to be announced

Note that Continuing Education Credits for AIA, PDH, and NCQLP (LC) will be available. Please stay tuned for more information and for specific times and locations of these training events. Please note that pre-registration is required. If you have any questions please feel free to contact the SCLP hotline, toll-free, at 1-866-698-8177 or email

sclp@icfconsulting.com.

Contacting the
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Energy SmartSM
Small Commercial
Lighting Program

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We're on the Web!
www.nyserda.org/sclp

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Tip: Light Levels and Energy Use

By definition, effective, energy-efficient lighting requires that the system provides light levels appropriate to the activity carried out in the lighted space. At the same time, the energy consumed to provide those light levels must be minimized. Meeting these two requirements is often a challenge for the lighting practitioner.

An office may need 50 foot-candles of light at the desk level, but a corridor does not need to have light levels as high as that. Too often though, the same type of fixture is used in both the office and the corridor. The result: more light than needed is provided in the corridor, and electricity is wasted. The same type of lighting equipment might not be needed in the two different types of spaces: a two or three-lamp F-32 T-8 fluorescent fixture might be appropriate for the office area, but an 18 watt compact fluorescent fixture might provide the proper light level in a corridor. The difference in the energy use can result in savings of more than 50%.

Another example: an industrial manufacturing facility may require 50 foot-candles at the work plane, but the warehouse area in the same building may only need 10 foot-candles. Again, using different fixtures or wattages in the two areas will not only provide the proper light levels for the different activities, and will significantly decrease energy costs.

The **Technical Guide for Effective, Energy-Efficient Lighting** contains more information on this subject. SCLP Allies can also find basic recommendations on the "Metric by Space" sheet that is included with the Project and Design Incentive Application Form.

High Performance T-8 Fixtures

According to lighting manufacturers, energy-guzzling T-12 fluorescent lamps are still prevalent in commercial buildings. In fact these account for about 50% of lighting applications that could be replaced with T-8 systems. For maximum energy savings, manufacturers now offer High Performance 32-Watt, T-8 lamp-ballast systems that also provide better quality light and longer lamp life. With only about 5% of commercial lighting systems now using high-performance lamp-ballast combinations, there is a huge opportunity to promote the use of these systems. Many of these products are eligible for financial incentives through **New York Energy SmartSM** programs such as Smart Equipment Choices. The Consortium for Energy Efficiency (CEE) has developed a performance specification for high performance T-8 systems (<http://www.cee1.org/com/com-lt/com-lt-specs.pdf>). Note that the performance specification addresses the performance of the lamp-ballast system, not the application. CEE also makes available a qualifying product list (<http://www.cee1.org/com/com-lt/com-lt-prod.pdf>). The product list is updated on a regular basis.

Ally in Action

From the design phase to installation is often a long road. Ivan McMillan of SCLP Ally Designer **Trautman Associates** designed and submitted the NCCC Health Education Center for the **Qualifying Lighting Project Phase 1 Design Incentive** back in June 2004. This complicated 10,000 square foot project includes nine different space types (reception, offices, classrooms, corridors, etc.) and 26 separate areas. All the spaces met the Program criteria for energy efficiency and proper light levels, and all of the fixtures specified met the glare control requirements for the application in which they were used, while providing uniform lighting. Now, a year later, the project is complete and was built as designed. Trautman Associates will now receive an additional **\$500 Qualifying Lighting Project Phase 2 Design Incentive**. We encourage all Ally Designers to review their Phase I projects and submit them for the Phase II incentives. Contact your Account Manager for more details.