



September 2007

The Lantern

The Newsletter of the Mother Lode Section of IESNA



Ambient Temperature Effects on Lighting Systems

Speaker: Dick Erdmann

Welcome back to another exciting year of IES. We kick off the 2007-2008 year with a presentation on the "Ambient Temperature Effects on Lighting Systems". Our speaker hails from Portland, Oregon, and has over 30 years experience in the electrical field.



Dick spent the first part of his career as a consulting engineer in New Zealand, the same country in which he obtained his electrical engineering degree. He has been with General Electric for 28 years and is currently a Specification Engineer specializing in lighting products in the Northwest where he is an active member in the IESNA.

DATE

Wednesday, September 19, 2007

TIME

Board Meeting: 5:00-6:00pm
Social: 6:00-6:30pm
Dinner Served: 6:30pm
Presentation: 7:00pm

ADMISSION

Member w/ Reservation: \$20
Member w/o Reservation: \$25
Non-Member w/ Reservation: \$25
Non-Member w/o Reservation: \$30
Full-Time Student: \$10

LOCATION

Cattlemens
12409 Folsom Blvd
Rancho Cordova, CA 95670
916-985-3030

Menu

Teriyaki Chicken, Prime Rib, Grilled Pacific Salmon, vegetarian available upon request.

When registering for this event, please let Chuck know what menu item you would prefer – thank you.

Please Note: Because we are charged, we must bill for reservations made but not kept.

Please make you reservations by 3:00pm Monday, September 17 Chuck Pasillas, Interface Engineering 916-288-6205 chuck_p@ieice.com

Please share this Newsletter in your office

Prez Sez

Greetings to all and welcome to the 2007-2008 season! I thank you for allowing me to serve as the Mother Lode President. I also thank the board for taking the time out of their lives to stay involved with our Section's activities.

We welcome this year's officers as:

Chuck Pasillas – Vice President
Melissa Blevins – Secretary
Meggan Kessler – Treasurer

Our Board of Managers as:

Owen Howlett
Doug Coleman
Steve Sheckells
Juan Jose Villatoro.

We have an exciting schedule ahead of us that is sure to keep the tradition of the Mother Lode Section of being on the leading edge of the industry.

Many thanks and praise to past officers and board members for your guidance and creativity for keeping the Mother Lode Section going for many years. You truly are the reason we have a method to share and explore our passion for the art and science of lighting.

For those of you who are new to the Mother Lode Section, or are returning from some time away, welcome. I encourage you to participate and contribute in the operation of the Section. It is people like you that we need as future Section officers and committee chairs. New ideas are never frowned upon, and are what gives the section new opportunities.

On a more personal level, thank you to Connie Buchan and Gary Flamm for your continued involvement and advice you share with me. Your service stretches far beyond what is considered reasonable and I cannot see myself being this motivated without seeing you two leading by example.

Miguel Castellanos, IESNA
Section President, 2007-2008

Five for Four Offer

The five for four offer is available again this season!

For those of you not familiar with the deal, here it is! The Mother Lode Section is offering admission to five regular meetings for the price of four meetings! (The Winter and Summer socials are excluded from this offer). The cost is \$100.00 for five meetings. Meetings do not have to be consecutive. Save the hassle of getting separate checks for your IES meetings. You may purchase your five for four tickets at any IES meeting through January, 2008.

Contact Miguel Castellanos to purchase your five for four tickets:

916-570-1576 mac@ecomeng.com

Just for Fun

A man was walking through the Olympic Village carrying a long pole. A reporter came up to him and asked, "Are you a pole vaulter?"

The surprised man answered, "No, I'm a German. But how did you know my name is Walter?"

Spring Education

We would like to put on an ED-50, an ED-100, and possibly an ED-150 class this upcoming Spring. To gauge the need for instructors and class space, we need to know how many people are interested.

The ED-50 course is designed as an introduction for people with little or no knowledge of lighting. The course covers basic lighting knowledge. This course will give a good base for people who want to take the ED-100 course. This course would probably be taught on a Saturday.

The ED-100 class is essential for anyone who is new to lighting. It is also designed for people who have practical experience of lighting and want to deepen their knowledge of fundamental issues. The ED-100 course provides much of the knowledge required for the Lighting Certified (LC) qualification from the NCQLP and for the lighting and daylighting calculations for LEED certification.

The new ED-150 course is designed as the next course for those who have already completed the ED-100 fundamentals program or have gained basic lighting knowledge in other educational programs. The course contains twelve modules and can be taught as a complete course or as individual modules.

In order for these classes to be a success and benefit the people who take them we need to know your preferences. Do you like one or two classes a week? Is weekend during the day or weekday evenings a better fit to your schedules?

Please email me with number of people who would like to attend, your preferences and

your interest ED-50, ED-100 and or ED150.
mac@ecomeng.com

SMUD Energy & Technology Course Announcement

Lighting for Profit: Finding Hidden Energy Savings

Alan Whitson will share forecasts for the electricity market and what to do to contain energy costs in buildings. Learn how to get to the financial bottom line, whether you are constructing a new building, planning a retrofit, or making decisions for everyday operations. In this fast-paced educational program, he will explain how to unlock hidden energy savings and create profits.

Date:
Thursday, September 20, 2007

Class Time:
8:30 a.m. - Noon (Pre-registration required)

Where:
SMUD Energy & Technology Center, 6301
S Street, Sacramento, California

Course Fee:
No charge (Continental breakfast included)

Register:
<http://www.squarefootage.net/register.htm>

Alternative transportation:
Such as carpooling and Sacramento Regional Transit Light Rail, is highly recommended. If taking Light Rail, please use the University/65th Street Exit.

Tid bits...

How do you light gold statues? I suppose that if you have money for gold statues you can illuminate them any way you wish. However due to the characteristics of polished gold the effects can be quite striking.



Cast in bronze the Prometheus Statue, was gilded by hand in 24K gold leaf. Prometheus is seen as he descends from Mount Olympus, encircled by the ring of the zodiac captures the stylized strength and gravity-defying element of Paul Manship's creative process. Cast in 1934, gilt bronze, its height 18 feet, and weight of 8 tons, It is undoubtedly a unique symbol of American art and American history. Currently the statue

is highlighted with a timed color-changing scheme, which cycles through the rainbow colors. There are at least 75 underwater fixtures, aimed to specific details within the fountain. It is interesting to note that the lights changes make the statue appear larger or smaller. The reflection of the water in the fountain below the statue almost gives the impression of a levitating statue.

Rockefeller center in one of the world's finest Art Deco commercial complexes and private urban renewal projects in the United States. Rockefeller Center abounds in good design and artisanship and its centerpiece is 30 Rockefeller Plaza, its tallest structure that looms over the famous sunken plaza. As centerpiece to the plaza is the gilded statue of Prometheus, by Paul Manship (1885 – 1966).



Paul Manship received the commission in January of 1933 from John D. Rockefeller. Every Christmas an illuminated giant spruce is erected on Rockefeller Plaza above the statue. In Greek mythology, Prometheus was a member of the earliest race of gods called titans. Prometheus, who had fashioned man out of clay, taught them agriculture and all the arts of civilization. He also stole fire from the gods and gave it to humans. Thus, Prometheus became a champion of humanity and the first "sculptor" of man.

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The Prometheus Statue at Rockefeller Center in New York City is one of the most famous sculptures in the world. After the Statue of Liberty, it is perhaps the most celebrated piece of sculptural artwork in America.

Juan José Villatoro, LC
Associate Project Manager
M. Neils Engineering Inc.

SMUD's Customer Service Center goes Platinum

Sustainable construction, operation and maintenance practices at the Customer Service Center (CSC) have made SMUD the first utility in the nation to win top honors for Leadership in Energy and Environmental Design (LEED).

The U.S. Green Building Council, which developed the LEED standards, informed the District in April that the CSC qualifies for platinum certification, which is the highest of four levels of excellence the council recognizes.

Completed in 1995, the CSC was designed to incorporate leading edge technology and to be 35 percent more energy efficient than required by California's Title 24 building standards. Water use is nearly 30 percent below baseline code requirements.

As part of the LEED certification effort, SMUD conducted a comprehensive evaluation of the building's operating systems and maintenance practices, including each component of the HVAC, lighting and water systems. For the past two years, SMUD has improved and documented that the CSC is designed,

constructed, operated, and maintained in an environmentally responsible way.

The LEED process produced 32 recommendations to reduce energy usage and maintenance costs while creating a healthier, more comfortable environment for building occupants. To date, SMUD has implemented 24 of the recommendations and is planning retrofit projects to accomplish the remaining recommendations.

Examples of improvements SMUD made in 2006 include:

- Installation of new devices to better control indoor humidity and temperature levels. SMUD installed carbon dioxide sensors in conference rooms, training rooms and other high-density areas to reduce air-conditioning needs when the rooms are unoccupied.
- Installation of water meters and data collection to eliminate unnecessary irrigation.
- Installation of BTU-monitoring equipment in each wing of the service center to pinpoint areas of high energy usage for potential energy reduction projects.

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- Adoption of new strategies to maximize the building's daylighting features. Exterior light shelves are being pressure-washed twice a year to maintain high reflectivity. All interior photocells were tested and defective ones are being replaced.

In addition, the District adopted new sustainability maintenance practices at the CSC and is committed to extending these to all of its buildings and facilities:

- The lighting control system was reprogrammed to include additional late night sweeps because occasionally, there are people in the building past midnight and their lights would remain on all night.
- A purchasing program was implemented to use only fluorescent lamps with standardized color temperature, high CRI and low mercury content.
- Annually, each department is surveyed to find out if their operating hours have changed. If any changes will result in reduced operating hours on the lighting system, the control program is changed.
- Plans are being made to integrate the lighting control system and the HVAC control system. This will give SMUD the capability to control the lighting and HVAC systems based on building occupancy.
- A switch to environmentally benign cleaning products, pest management and fertilizer solutions.
- Stocking restrooms with recycled paper for toilet tissue and paper towels.
- On-site mulching of all green waste.

- Committing to use only recyclable and low-VOC (volatile organic compounds) construction materials, including carpet and paint.

Title 24 2008 Update

The California Energy Commission is in the final phases of proposed changes to the Title 24 lighting energy efficiency Standards.

"Pre-45-Day Language" is now available for viewing on the following web link:

http://www.energy.ca.gov/title24/2008standards/documents/pre-45-day_language/index.html

Documents posted to this section are draft documents to allow the public to preview the development of the 2008 Building Energy Efficiency Standards 45-day language documents. These documents will be updated regularly. Reviewers are encouraged to visit this website frequently and pay attention the "rev number" of the documents; a change in the "rev number" indicates a change to the document. As more documents become available, they will be posted to this website.

45 Day Language will be posted on line around November. "45-Day Language" refers to a draft of the proposed Standards that is published for 45 days before being voted into law. The 2008 Standards are tentatively scheduled to go into affect around April 2009.

Please contact Gary Flamm if you have any comments about the proposed changes to the Standards at gflamm@energy.state.ca.us

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CJS Lighting	Robert O'Flaherty
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