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MAY 2009

Rocky Mountain Monthly

IESNA ROCKY MOUNTAIN SECTION

WWW.IESRMS.ORG

CODES, ORDINANCES, EPACT, & REBATES

For most businesses, lighting is a main driver of energy bills, accounting for up to 44 percent of monthly energy costs. Every step to lower your lighting use, from installing energy-efficient lighting to limiting lights to where and when you need them, can significantly lower your energy bills and earn substantial rebates.

Join us this month as we invite several power utility company speakers to discuss their energy rebate programs and how you can best utilize these money-saving opportunities on your designs and projects.

Also, discover how you can use the 2005 Energy Policy Act (EPAct) to earn federal tax incentives for your building owners and your own design firm. This portion of the program will highlight the structure of the 2005 EPAct and will help get you started on bringing in some financial

reward for providing energy conserving designs. We have a panel of representatives from several utilities to discuss their current rebate programs as well. Join us as Derek Sockley and Carla Hahn from Xcel Energy and Adam Perry from Platt River Power Authority present their programs at our May meeting.

Also, you've seen it... you know you have. It's the kind of outdoor lighting that makes you wonder "just what was the designer thinking?" You've also witnessed and appreciated a variety of good outdoor lighting designs.

Please join us for a unique look at what makes or breaks a lighting design and see how our local ordinances, or the lack of ordinances, affect our night environment. We will be taking a fun look at our night environment with lively discussions about where we are at with outdoor lighting, and where we might be headed.



Register for this meeting right now!



Click here to be automatically directed to the registration website.

CODES & REBATES MEETING DETAILS

Date: Tuesday, May 12, 2009

Location: Brooklyn's
2644 West Colfax, Denver

Time: 5:30pm

Cost: \$20 Members
\$30 Non-Members
FREE Students

Students attend free thanks to...



DIRECTIONS?
CLICK HERE



Wisdom,

Wonders,

and

Wit

Grand Central Goes Green

How many people does it take to change every light bulb in Grand Central Terminal? Six, it turns out. And it's a full-time job.

On Tuesday, those wiremen — their official title — unscrewed the last remaining incandescent bulbs in the building, replacing them with compact fluorescent bulbs and completing the greening of the lighting system at the bustling station. While the wiremen worked, photographers snapped pictures, and officials applauded the efforts, reminiscing about the days when both station and light bulb were young. The bulbs were on one of the 10 huge Beaux-Arts chandeliers in the main lobby. Adorned with gold detail and banded with 110 bulbs, the 96-year-old globe-shaped chandeliers hang above the main concourse balconies like luminescent Fabergé eggs.

They were first installed in the terminal in the mid-1980s, with tube-shaped fluorescents hung on the train platforms largely to brighten them, said Marjorie S. Anders, a spokeswoman for Metro North Railroad. About seven years ago, compact fluorescent, which can be screwed into standard light sockets, were installed in the cornice that rings the ceiling of the main concourse, 75 feet above the ground, largely because frequently replacing the old bulbs was a risky and labor-intensive chore.



And as the technology and aesthetics improved — fluorescents became less distinguishable from incandescent bulbs and could be dimmed — the bulbs were added everywhere from the departure board to the chandeliers. “If you see an incandescent bulb in this place, call me,” said Steve Stroh, the terminal’s electrical and mechanical superintendent, who has overseen the replacement effort. “We’ll have it changed, because we may have missed one or two.”

Replacing the roughly 4,000 bulbs in the public areas of the terminal — which doesn’t include the platforms, the train yards, or office space — will save an estimated \$200,000 a year, Ms. Anders said. Mr. Stroh would not even hazard a guess as to the number of bulbs throughout the terminal, which covers 48 acres, but he estimated that the annual light bulb budget was less than \$100,000. Excluding labor, it costs about \$1,100 to replace all the bulbs on a single chandelier, but the payback on that investment will take just months. However, with the bulbs burning 24 hours a day, the shift from incandescent bulbs will not be putting any of the six wiremen out of work, Mr. Stroh said. Even with the fluorescents, he said, “it’s a big job.”

This article is provided for informational purposes only, compliments of The New York Times, and does not necessarily represent the views or opinions of IESNA, its members, or affiliates.

See how light turns green... The Lighting Agency invites you to see what's new, innovative and exciting in architectural lighting at this year's LIGHTS in the City '09. Discover leading-edge lighting systems designed with you in mind while enjoying a day of exhibits, great cuisine, wine and beer bar in addition to music and door prizes. The show dates are Tuesday, July 14 and Wednesday, July 15 at the Hyatt Regency Denver at Colorado Convention Center. For more details on the show and to see which 60 manufacturers will be in attendance, please visit thelightingagency.com by clicking the logo below or call Charlene Bullock at 303-455-1012.



THE LIGHTING AGENCY

EDUCATION
INFORMATION

REGISTER NOW FOR ED-100

The ED-100 course is an introductory survey of the principal issues in lighting.

Vision, color, and the physiology of the eye are included, as well as basic illumination terminology. Sources, photometry, and calculations are discussed, and further information about economics and specific applications will be provided.

The course materials are included with the fee and will be available to early registrants for advance study. The *Ready Reference*, revised in 2006, and a great desktop book, is also included.

COURSE DETAILS

CLASS DATES Four Sessions, Saturdays;
May 16, 30
June 6, 13

CLASS TIME 8am – Noon

LOCATION GLS
1210 S. Jason
Denver, 80223

COST \$350 members
\$500 non-members

special discounts available for groups, and new IES memberships

Register Online NOW!



IES STREET AND AREA LIGHTING CONFERENCE



September 13–16, 2009

Philadelphia, PA Loews Philadelphia Hotel

Register Online NOW!

The premier forum for industry professionals to openly exchange information on outdoor lighting issues and promote excellence in the street and area lighting industry

Advanced Energy Design Guides Free Download from ASHRAE

The *Advanced Energy Design Guide* series provides a sensible approach to easily achieve advanced levels of energy savings without having to resort to detailed calculations or analysis. The four-color guides offer contractors and designers the tools, including recommendations for practical products and off-the-shelf technology, needed for achieving a 30% energy savings compared to buildings that meet the minimum requirements of ANSI/ASHRAE/IESNA Standard 90.1-1999. The energy savings target of 30% is the first step in the process toward achieving a net-zero energy building, which is defined as a building that, on an annual basis, draws from outside resources equal or less energy than it provides using on-site renewable energy sources.



These guides have been developed through the collaboration of ASHRAE, the American Institute of Architects (AIA), the Illuminating Engineering Society of North America (IESNA), and the U.S. Green Building Council (USGBC), with support from the Department of Energy (DOE), to help meet all of an owner's energy performance requirements. In an effort to promote building energy efficiency, ASHRAE and its partners have made these guides available for download (PDF) at no charge.

[Click here to begin your free download](#)

Get Your Intern Now!

The 2009 school year is coming to a close and CU's lighting juniors and seniors are looking for opportunities to put their knowledge to work as well as gain some professional experience. **Students are looking for summer internships and full-time jobs.** Their interests vary from lighting design, lighting applications, luminaire design, daylighting, energy and sustainability. Students are not limiting their search to the Denver-metro area or Boulder. If you are interested in recruiting our students please contact Sandra Vásconez, Senior Instructor, by phone at 303.492.7614 or via e-mail at sandra.vasconez@colorado.edu.

MEMBERSHIP DRIVE

Watch for our summer campaign with lots of incentives, activities, and reasons to become an IES member. Whether you are interested in reactivating your old membership or joining us as a new member, we want you to join the Illuminating Engineering Society. Stay tuned for more details on our summer membership campaign. You'll want to join IES by the time we're done!



WELCOME NEW SECTION MEMBERS

Derek J. Bauer,
University of Colorado
Boulder, Colorado

Amy J. Briej
Osram Sylvania
Denver, Colorado

Jessica L. Garcia,
University of Colorado
Boulder, Colorado

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Aurora, Colorado

Sam R. Koerbel,
University of Colorado
Boulder, Colorado

Jessica A. Rivas
University of Colorado
Boulder, Colorado

Jack L. Thorpe
University of Colorado
Boulder, Colorado

LIGHTFAIR 2009
New York City, New York May 5-7



2009
Upcoming
Section Events

Lamps & Ballasts Expo
Original Brooklyn's
September 8

We kick off the 2009-2010 season with our traditional Lamp & Ballast Expo, bringing you the latest technology and updates from the greatest manufacturers.

Rebates & Incentives
Original Brooklyn's
May 12



Join us for this informative meeting as utility representatives discuss local rebate programs, and industry experts review the pros and cons to government incentives.



Check out our website!

www.iesrms.org



Demand for Advanced Lighting Products will reach \$6.8 billion in 2013, forecasts New Report

Report Buyer, the online destination for business intelligence for major industry sectors, has added a new report which offers a detailed guide to the advanced lighting products market in the US.

The report "Advanced Lighting Products: US industry forecasts to 2011 & 2016", available at

<http://www.reportbuyer.com/go/FED00192>

forecasts US demand for advanced lighting products to grow eleven percent per annum to reach \$6.8 billion in 2013. Gains will be spurred by legislation aimed at reducing the energy consumed by lighting. Domestic shipments of advanced lighting products will proceed at a slower pace, as products with rapidly growing demand, such as compact fluorescent lamps (CFLs) and light emitting diodes (LEDs), are largely produced overseas.

CFL demand to register fastest growth CFLs are expected to enjoy the fastest demand growth through 2013. The Energy Independence and Security Act of 2007 banned the sale of general service incandescent lamps starting in 2012, and CFLs are expected to replace most of these lamps as they burn out. Demand for CFLs will surge more than 20 percent annually to



2013 as consumers transition to the new technology, but long-run demand will ultimately settle at a lower level because of reduced replacement demand, as CFLs last much longer than incandescent lamps. Nearly one half of additional advanced lighting demand generated between 2008 and 2013 will be accounted for by CFLs.

LEDs are also forecast to experience robust growth through 2013, benefiting from greater demand in consumer electronics, motor vehicles and non-residential buildings. Falling LED prices, increases in light output and improvements in energy efficiency will make LEDs more competitive with conventional lighting products over the forecast period.

The residential market is projected to experience the greatest gains through 2013, primarily due to a surge in demand for CFLs. Halogen lamps and LEDs will also benefit from the ban on general service incandescent lamps, as they outperform CFLs in certain respects (e.g., better color rendering, no mercury content). However, CFLs are a more economical lighting technology, and will dominate the residential market by 2013.

This article is provided for informational purposes only, compliments of TMCNews, and does not necessarily represent the views or opinions of IESNA, its members, or affiliates.

SECTION SPOTLIGHT

Be sure to check out the **Inland Empire** section of the IES.

The second largest metropolitan area in Southern California, the famed Route 66 runs through this section, and Riverside County hosts the *Route 66 Rendezvous*, an annual classic car show that draws half a million visitors each year.

With lots of great information, including significant links to California energy codes, just click this image to view the IES Inland Empire section website!



wind turbines in Palm Springs, part of the Inland Empire section

FACT

Electricity travels very fast (186,000 miles per second). If you could run that fast, you could travel around the world eight times in the time it takes to turn on a light switch.

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