



### QUICK LINKS TO FIND ENERGY INFO

#### **SCE Home Page**

Energy-Related Learning

- www.sce.com
- www.sce.com/ctac
- www.sce.com/agtac

## Statewide Transmission System Status – www.caiso.com

#### **Utility Regulation**

- www.cpuc.ca.gov
- www.energy.ca.gov

SOUTHERN CALIFORNIA EDISON

# POWER BULLETIN VOL. 11 No. 1 January 2011 GOVERNMENT & INSTITUTIONS

# Save Energy and Money With New SCE Learning Opportunities

The New Year brings a number of new learning opportunities at Southern California Edison's (SCE) Energy Centers to help you develop and implement energy management solutions that improve your bottom line.

In addition to its many existing free classes on lighting, HVAC, motors, refrigeration and other key energy topics, in 2011 Edison's Energy Center in Irwindale, the Customer Technology Application Center, introduces the following new free courses:

#### **2008 Nonresidential Standards Essentials for Energy Consultants:** Feb. 10, Event No. 27246

This intermediate-level seminar for energy consultants will explore the nonresidential building energy standards and the importance of staying up-to-date to effectively communicate energy efficiency compliance options and requirements to clients. Attendees will learn to identify key nonresidential building energy efficiency standards and compliance issues for new construction, alterations and additions; recognize the purpose of compliancerelated documents; communicate compliance options and requirements to builders and clients; and apply knowledge of the standards to typical job tasks. This seminar provides seven AIA/HSW Learning Units.

#### **California Advanced Lighting Controls Training Program Five-Day Workshop:** March 7, 8, 9, 10 and 11 (all from 8 a.m. to 7 p.m.), Event No. 27810

The California Advanced Lighting Controls Training Program (CALCTP) is a statewide initiative aimed at increasing the use of lighting controls in commercial buildings. CALCTP will educate, train and certify general electricians in the proper design, installation and commissioning of advanced lighting control systems, which typically include dimmers, occupancy sensors, photo-sensors, relay modules and communication-based control devices. The course will include a combination of lectures and hands-on lab sessions (attendees should bring basic tools) and conclude with a final exam.

For CALCTP enrollment, participants must be state-certified electricians and provide a certificate of completion for the Lighting Controls Association online program before beginning the CALCTP course. Mandatory prerequisites are EE101: Introduction to Lighting Controls, EE102: Switching Controls, EE103: Fluorescent Dimming and EE201: Daylight Harvesting. Find these courses at **www.aboutlightingcontrols.org/Education\_Express/accr\_orgs.php**.

Industrial Lighting Applications: March 24, Event No. 27016

This advanced-level workshop geared toward architects, engineers and designers will serve as a practical guide to designing energy-efficient lighting for industrial facilities. Attendees will receive an overview of industrial environments' special lighting requirements as well as an examination of design standards, energy and safety issues, controls and state-of-the-art equipment. Design charrettes will showcase solutions to specific industrial lighting challenges. Prerequisites for this workshop include The Lighting Design Process and its prerequisites. This workshop provides seven AIA/HSW Learning Units. For more information about how SCE's Energy Centers in Irwindale and Tulare can help you make smart energy choices, to review the complete list of course offerings (including those held offsite) and to register for a class, log onto **www.sce.com/energycenters**.

# Visit World Ag Expo for Energy Solutions From SCE

SCE will showcase a variety of energy management programs and services at the upcoming World Ag Expo—the world's largest agricultural exposition, taking place Feb. 8-10 in Tulare.

Stop by the SCE exhibits—spaces 6138-40 in the Dairy Center and booth L40 on North Greenbelt—to learn more about SCE's energy efficiency, Demand Response, solar and other programs that can help improve your bottom line. You also can view free pump tests and hybrid fleet truck demos, plus receive updated information about the new Smart Meter technology and plug-in vehicles.

In addition, SCE customers who bring a recent electric bill to SCE's booth area will receive a free gift (one per customer, while supplies last).

During the World Ag Expo, SCE's Energy Center, the Agricultural Technology Application Center (AGTAC), will offer the following free seminars/workshops:

- Feb. 8, 11 a.m.-12 p.m.: Pump Efficiency: Learn practical issues and choices available for efficient pumping systems and pumping efficiency maintenance. Dairy Center Booth 6138-40.
- Feb. 8, 12 p.m.-1 p.m.: Solar Energy Panel Discussion: Find out more about SCE's programs and solutions to harvest the sun's power and reap the savings. Dairy Center Booth 6138-40.
- Feb. 10, 9 a.m.-10 a.m.: Integrated Energy Solutions: Learn how to make the most of the kilowatts you use through SCE's energy efficiency and Demand Response programs, which can help you earn financial incentives and other benefits. Booth L40 North Greenbelt.
- Feb. 10, 10 a.m.-11 a.m.: Smart Meter and the Smart Grid: Explore SCE's leading Smart Meter and Smart Grid strategy and advancement efforts. Booth L40 North Greenbelt.
- Feb. 10, 11 a.m.-12 p.m.: Electrical Safety: Learn about electrical safety for agricultural workers through safety demonstrations, tips and practices. Booth L40 North Greenbelt.

If you're at the World Ag Expo, also visit SCE's AGTAC, located directly across the street. This state-of-the art educational resource center showcases technologies through interactive exhibits, demonstrations and classes to help customers save energy, money and the environment.

# SOUTHERN CALIFORNIA EDISON POWER BULLETIN

CONTINUED FROM FRONT

AGTAC classes and tours are free. For more information, visit **www.sce.com/** energycenters. Details on the World Ag Expo are available at **www.** worldagexpo.com, and the showgrounds map is located at www.worldagexpo.com/General-Info/Showground-Maps.htm.

# **GOVERNMENT & INSTITUTIONS SEGMENT FOCUS**

# **College of the Desert Follows Roadmap to Energy Savings**

The College of the Desert practices what it teaches.

One of California's 110 community colleges, the Palm Desert-based campus offers a wide array of certificate and degree programs for its approximately 13,000 students. Its offerings include the Desert Energy Enterprise Center, which houses energy-related professional development, workforce training and energy technology demonstration projects.

After the Desert Community College District's Board of Trustees adopted a Policy on Sustainability Stewardship, in 2010 the college took significant steps—with the support of SCE—to put into practice its own energy management solutions.

The college implemented a wide array of lighting and HVAC retrofits and upgrades on its campus for buildings not slated for major renovations. Combined, the projects earned an incentive of over \$393,000, with projected savings of more than 1.6 million kilowatt-hours and \$92,000 annually.

"As a district, we've made the statement that we're going to be a good steward of our resources, and energy is a big chunk of that," said Director, Facility Services Steve Renew. "This also equals a big reduction in expenditures. Year after year there will be avoided costs that will help with our operational budget."

# An Energy-Saving Roadmap

Renew said the district initiated its equipment upgrades with key support of the California Community College/Investor-Owned Utility (CCC/IOU) Partnership, a statewide program designed to achieve energy savings through four strategies: energy efficiency retrofits, monitoring-based commissioning, energy-efficient new construction, and training and education.

The CCC/IOU Partnership helped the college create a roadmap for energy savings, providing additional resources, such as engineering support, to bring the projects to fruition. The completed upgrades include:

- Replacing high-wattage metal-halide fixtures located in some buildings with high-efficiency T5 lamps, and upgrading lighting in classrooms and offices with T8 lamps featuring the newest-generation efficient ballasts;
- Adding dual-technology occupancy sensors to classrooms and offices;
- Converting constant volume multi-zone air handling units to variable air volume operation using variable frequency drives, and upgrading HVAC zone dampers;
- Connecting existing campus core buildings to the central plant for more efficient operation; and
- Expanding the energy management system to control all existing buildings.

Besides reducing energy costs, the upgrades will reduce maintenance requirements due to longer equipment life spans.

## Monitoring-Based Commissioning for Buildings

The campus also installed individual building meters that tie back to the energy management system to allow use of monitoring-based commissioning. This starts with gathering building data over several months as a baseline, and then moves onto making operational or design changes to maximize energy efficiency on an ongoing basis. "We want to bring every building up to its most efficient operational status," Renew noted.



College of the Desert Director, Facility Services Steve Renew (left) receives an incentive check from SCE account executive David Fanous (right) in front of the campus' central plant. The college received the incentive for implementing a wide array of energy-saving lighting and HVAC retrofits and upgrades.

In addition, Renew said the college is moving several projects into the planning and design stage using the Saving By Design Program, which provides design assistance, resources and incentives to encourage high-performance, nonresidential building design and construction. According to Renew, the college plans on having all new and renovated facilities meet the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED)<sup>®</sup> Gold or Silver certification levels.

# An "Instrumental" Partnership

For the college that continues to teach students interested in careers in energy efficiency and renewable energy, a strong partnership with its utility proves crucial to providing current and future energy savings.

Renew credited SCE's Lisa Hannaman, the CCC/IOU Partnership liaison, and account executive David Fanous with making the college's 2010 energy efficiency upgrades a reality.

"They started the ball rolling to think of what types of projects might be involved. Early on, I expressed some doubt that it was going to be well-coordinated. But they made it simple and stayed on top of it. They were really instrumental in getting us the incentive. They've just been great."

For more information on how you also can benefit from SCE's wide array of energy management programs and services, contact your account representative or visit **www.sce.com/solutions**. To learn more about CCC/IOU Partnership resources, contact your account representative or log onto **http://** *cccutilitypartnership.com/index.html*.

