



SOUTHERN CALIFORNIA
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IN THIS ISSUE ...

- » SCE Honors Flex Your Power Award Winners
- » Tips to Save Energy and Money With Electric Transportation Equipment
- » SCE Programs Help Power the Difference for Trojan Battery

SOUTHERN CALIFORNIA EDISON

POWER BULLETIN

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INDUSTRIAL SEGMENT EDITION

SCE Honors Flex Your Power Award Winners

Southern California Edison (SCE) recently held an event at its Customer Technology Application Center Energy Center to celebrate 20 local business customers' recognition as 2008 Flex Your Power award winners for outstanding results in the areas of energy efficiency and demand response.

Throughout the state, the 2008 Flex Your Power award winners have collectively saved more than \$227 million, 1.5 billion kilowatt hours (kWh) of energy and 122 billion gallons of water, plus have reduced greenhouse gas emissions by 1.3 billion pounds. One of SCE's most applauded winners is the University of California, Irvine, a Best Overall Award winner, which leads the way in energy efficiency with nearly 12 million kWh in savings from 2006 through 2008.

SCE President John Fielder and other top officials thanked customers for reducing strain on the electrical system at peak times, and for helping to ensure reliability in our communities. In addition, they recognized customers' success in energy efficiency and demand response programs as an essential contribution toward management of the state's energy load.

Initiated in 2001, Flex Your Power is a partnership of California's utilities, residents, businesses, government agencies and nonprofit organizations

working to creatively save energy. Visit www.fypower.org/feature/awards/6th/ to see all of the winners. Also contact your account representative and visit www.sce.com to learn how you can save energy and money and improve your bottom line.

SCE Customers: Flex Your Power Award Recipients

Congratulations to the following SCE industrial customers, all of which received 2008 Flex Your Power awards for saving energy and money:

- Baxter Healthcare Corporation Thousand Oaks Plant Services Energy Management Team
- The Boeing Company
- BP America
- CalPortland Company

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Tips to Save Energy and Money With Electric Transportation Equipment

With the number of electric-powered vehicles on the horizon and non-road equipment in Southern California continuing to grow, SCE is "leading the way" in developing and supporting energy-conserving, cost-effective electric-drive technology solutions for customers. These technologies can benefit customers and our region by lowering greenhouse gas and air pollution emissions, lessening dependence on unstable sources of foreign oil, and offering use of a domestically produced, lower-cost non-petroleum fuel.

Energy Savings for Non-Road Equipment

About 70,000 electric-powered non-road units already operate in SCE's service territory. These include forklifts, golf carts, airport ground support equipment and more, and require about 100 megawatts (MW) of on-peak battery charging.

In recent years, SCE has provided energy-saving solutions for more than 250 manufacturing, warehouse and golf course customers, identifying over 20 MW of load that could be shifted to off-peak hours, with minimal impact to business, based on each company's actual battery charging load profile measurements.

Customers with non-road electric-drive technologies can save by:

- Using time clocks or installing energy management systems (EMS) to delay charging until after 6 p.m. An EMS can also be used to lower costs for plant processes like lighting and HVAC;
- Using the same time clock or EMS to de-energize a charger when it's not in use, since idle chargers can still draw electrical current;
- Checking into new golf carts powered by AC electric motors – and battery chargers that together offer up to 40% better efficiency than today's models;
- Investing in sophisticated battery management systems to minimize power costs while maintaining fresh battery availability; and
- Signing up for one of SCE's Time-of-Use rates for electric-drive technology operators.

Innovations in On-Road Vehicles

SCE's ISO 9001 Registered Electric Vehicle Technical Center is one of only two U.S. test sites recognized by the Department of Energy (DOE) to evaluate electric vehicle baseline performance, vehicle and fleet operation.

Completing a major milestone late last year, the Center demonstrated plug-in hybrid-electric battery cycle-life performance equivalent to more than 180,000 miles in a commercial delivery van simulation with minimal battery deterioration. Based on these results, the DOE has asked SCE to test and evaluate a full-size lithium-ion battery for viability in a passenger car.

As a next step in its electric transportation work, SCE constructed a "garage of the future" test platform to evaluate the benefits of integrating renewable energy sources with mobile and stationary energy storage devices, on-site generation of renewable energy, and the next-generation of smart appliances and meters. SCE will use the test results to enhance the electric grid's quality, reliability and cost-effectiveness through the convergence of electricity and transportation.

To learn more about how you can benefit from SCE's electric transportation programs, contact your account representative or visit www.sce.com/ev/.

INDUSTRIAL SEGMENT FOCUS

SCE Programs Help Power the Difference for Trojan Battery

Showcasing long-term vision, Trojan Battery Company in Santa Fe Springs – the world's leading manufacturer of deep-cycle batteries, with more than 140 clean-energy battery products – took on energy challenges in recent years to reinvent its business and dramatically reduce electricity use.

Using help from SCE, Trojan now is saving a third of its annual energy consumption compared to 2005, and is seeing an electrical use efficiency improvement of more than 30%. The related gains are not just meaningful economically, but also demonstrate Trojan's continuing commitment to environmental responsibility and the smart use of resources.

"We earned our industry leadership with an unshakable commitment to quality and service," said Trojan Manufacturing Technologies Manager Chad Bentley, "but like many manufacturers, we've been confronted with rising costs in raw materials and power." He added, "We couldn't compromise on value, service or price, so we needed to find profitability in places where we'd never thought to look. Our collaboration with SCE was the key."

Incentives for Change

Trojan has embraced several SCE programs, including the Technical Assistance and Technology Incentives (TA&TI) and Industrial Energy Efficiency Programs (IEEP). TA&TI provides eligible SCE customers with demand response site assessments and financial incentives for the installation of qualifying technologies that can help them reduce electricity usage during periods of high demand, while providing increased flexibility to participate in demand response programs.

Through the IEEP, SCE industrial customers can receive substantial cash incentives for process modifications and equipment retrofits that result in electrical energy savings.

"The SCE representatives, including our account representative Ron Hall and the Electric Transportation Department team, immersed themselves into what we do," Bentley said. "Together, we examined every aspect of our operation. By the time we were done, I understood our plant's energy usage and our manufacturing processes better than I ever had before."

He continued, "We found opportunities to save that could make a huge difference, and then the financial incentives SCE offered for equipment upgrades permitted Trojan to capitalize on those opportunities. We invested in new hardware for lighting, battery charge computerization, and process dust control ventilation, and the savings started immediately."

Building on savings gained through TA&TI-incentivized upgrades, Trojan used the IEEP to achieve significant improvements in the process used to initially charge newly assembled batteries. Software in upgraded rectifiers accurately delivers the amount of amp-hours needed and employs step profiles to prevent energy loss, which allows Trojan to save an additional 11% to 15% on the energy required to charge batteries.

With all of its energy management initiatives, Trojan now can do in one shift what used to take two – meaning it can shut down during a demand response event with no production interference. And Trojan does take advantage of demand response programs like Critical Peak Pricing, the Time-of-Use Base Interruptible Program and the Demand Bidding Program, with Bentley able to turn off more than 75% of the company's typical power usage from his desk within just 15 minutes' notice.

Profits in the Process

"This has been revolutionary for us," Bentley continued. "With these upgrades, Trojan Battery is leaner, more efficient and more nimble. The savings lead to more savings" – up to 11.7 million kilowatt-hours annually including formation ventilation and air compression projects under way through SCE's Standard Performance Contract Program, which offers incentives to offset the costs of high-efficiency equipment or systems.

"Good manufacturing means building profits into the process, not adding them on at the end," Bentley said. "A lot of manufacturers haven't yet looked at energy management as a resource for profitability. Optimizing the use of electricity doesn't mean compromising or sacrificing; it means creating flexibility, optimizing in increments to get large results, and investing wisely to create new sources of revenue."

He concluded, "Evolving an operation into something better starts with asking questions. California presents challenges to manufacturers that you don't experience elsewhere. But those challenges are the ones that make you better, if you ask questions and look for ways to improve. SCE is ready and responsive with ideas and incentives."

For more information on all of SCE's energy management programs, contact your account representative or visit www.sce.com.



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