#### SOUTHERN CALIFORNIA EDISON

## POWER BULLETIN

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### **IT Leader Enhances Network Performance With Energy Management**

Providing your customers with innovative and sustainable technology solutions requires ensuring operational excellence in your own business.

That's exactly what CenturyLink – a renowned global information technology services provider – does, collaborating with SCE to achieve energy savings and maximize efficiency. ENERGY STAR<sup>®</sup> reports information technology (IT) as one of the industries with the fastest-growing energy usage nationwide. Especially with data centers' around-the-clock operations, our energy management programs can significantly help our IT customers cut energy costs.

"Energy efficiency is always top of mind for CenturyLink, especially in data centers, where power consumption can make or break our profit margin," said Kelly Sullivan, vice president of Global Data Operations. "And it's great that our business objectives go hand-in-hand with our global green initiatives," which also support CenturyLink customers' own carbon reduction goals.

#### Saving Over 2.7 Million kWh Annually

Over the last few years, CenturyLink has implemented projects to enhance energy savings and Power Usage Effectiveness (PUE, a ratio of the total site energy divided by the IT equipment energy).

The company's Los Angeles County and Orange County data centers include separate "environments" (caged or fenced-off

areas) for each of its more than 100 customers. CenturyLink uses a hot aisle/cold aisle containment system to manage airflow through the service rack configurations, with containment solutions specific to individual customer needs.

"We deliver cold air directly to the server inlet, take the hot air out from the back, and send that to the air conditioning system," said Steve Forbes, critical facilities manager for the Orange County center. "We're not blending the cold air with the hot air, which would increase energy needs."

Randy Atterbury, critical facilities manager for the Los Angeles County site, added, "A key focus is building on our progress to optimize data center air distribution. We're always looking at ways to improve efficiency so we can lower our energy costs for cooling."

CenturyLink received incentives of approximately \$200,000 to install airflow management controls with wireless temperature sensors at both data centers, resulting in annual savings of more than 2.1 million kilowatt-hours (kWh).

In addition, at the Orange County location, lighting retrofits with light-emitting diode (LED) fixtures earned a \$12,000

"SCE really took the reins in guiding us through the requirements of incentive eligibilities. This helped in the process of developing ROI projections, and made capital funding for the projects easier to justify," said Kelly Sullivan, vice president of Global Data Operations for CenturyLink, a leading global IT services provider.

incentive and achieved 101,000 kWh in annual savings. These measures combined to reduce CenturyLink's demand by 425 kW.

#### Making Capital Funding Easier to Justify

Incentive programs used for these improvements included our EE Customized Solutions program, which focuses on tailored equipment upgrades, and our third-party Data Centers EE Program.

CenturyLink also tapped into Savings By Design, a statewide utility program that offers incentives for high-performance nonresidential building design and construction. The company received a \$50,000 incentive for an expansion with measures that exceed California's Title 24 energy efficiency building standards, leading to annual savings of more than 493,000 kWh and 56 kW in demand reduction.

In addition, CenturyLink focused on other energy-saving measures, including an Energy Management System with occupancy sensors for lighting control, and Variable Frequency Drives to adjust supply fan speeds to use only the amount of energy needed.

#### Always Looking to the Future

CenturyLink continues to build on its energy management successes. The company installed a fuel cell (online since 2015) at its Orange County location, providing 500 kW of alternative generation.

In Orange County, resistance block pre-heaters on backup emergency diesel generators were replaced with more efficient recirculating block heaters. The company partnered with SCE to confirm the energy savings and help support a new incentive offering for this technology.

CenturyLink is not resting on its laurels when it comes to saving energy, reducing its carbon footprint, and improving operational efficiency. "We're always looking to the future – what's next in cooling, lighting, power distribution, and building envelope," Sullivan explained. "Reducing energy costs and using energy as efficiently as possible has always been a major focus for our company. It is a priority for us to seek out any and all opportunities to accomplish these goals."

To learn more about SCE energy management solutions, ways to reduce your energy usage, and manage your energy costs, visit us *online* or call your SCE Account Manager.

#### **CenturyLink**

**SCE Programs Utilized:** Energy Efficiency (EE) Customized Solutions, Savings By Design, and Data Centers EE Program (third party).

**Results:** Annual savings of more than 2.7 million kWh, demand reduction of 481 kW, and incentives of over \$263,000, for energy efficiency upgrades and new construction efficiency measures in the Los Angeles and Orange County data centers.

This case study is provided for your general information and is not intended to be a recommendation or endorsement of any particular product or company, or a representation of any actual or potential future energy or monetary savings for other customers.

These programs are funded by California Utility ratepayers and administered by SCE under the auspices of the California Public Utilities Commission (CPUC). Programs are offered on a first-come, first-served basis and are effective until funding is expended or the program is discontinued. Programs may be modified or terminated without prior notice.

The information contained herein does not replace pricing information contained in any CPUC-approved tariff. Please refer to the tariffs for the programs described for a complete listing of terms and conditions of service, which can be viewed online at <a href="https://www.sce.com/regulatoru">www.sce.com/regulatoru</a>.

#### **Mobile Outage Center Available on My SCE App**

With the new My SCE app, available on Android and iOS mobile devices, you now can review maintenance and repair outages. The app provides an at-a-glance view of any outages in SCE's service territory, and one-click access for outage-related details.

Specifically, through the app, you can:

- · Report a power or streetlight outage;
- Search outage locations by address, city, or ZIP code;
- Find out the outage start time and estimated restoration time;
- Learn the outage cause and status of repairs; and
- Obtain contact phone numbers.

The My SCE app also provides information on energy use and costs. Learn more about the app *here*, and get more details on outages and resources at our *online Outage Center*.

# My Account Outage Maps Feport Cutage Street Light Welcome to SCE Mobile Easily manager poor account, energy wager and report an outage of air your frequence. If 2014 Southern California Edward.

#### Free Outage Communication School

To help you learn why power outages occur and how we work with customers to minimize impacts, we encourage you and your employees to attend one of SCE's upcoming free, 1.5-hour outage communications courses:

- Nov. 10, 12 p.m. to 1:30 p.m., Long Beach
- Dec. 14, 12 p.m. to 1:30 p.m., Goleta

Visit **here** to sign up today for this valuable course.



The new My SCE app provides one-click access for details on outages in our service territory, including the status of repairs.

#### **Hispanic Heritage Month: Honoring Businesses and Community Partners**

SCE recently marked Hispanic Heritage Month by honoring energy efficiency and other community and business partner champions that are making a difference in their communities. The events took place at our Energy Education Centers in Irwindale and Tulare.

"Edison International and Southern California Edison have a proud history of giving back to communities in our diverse service territory," said Pedro Pizarro, president and CEO of Edison International.

He added, "As one of the largest philanthropic contributors in Southern California, we are committed to investing in our communities through our support of our employees, suppliers, community outreach partners, and energy efficiency champions. Through these meaningful partnerships, we are able to have a long-lasting impact on those we serve."

Congratulations to the highly deserving 2016 SCE Hispanic Heritage Month award recipients:

#### Energy Efficiency Participation Award:

IHOP: A well-known family restaurant chain, IHOP began energy efficiency initiatives even before SCE starting tracking incentive projects. Today the company participates in numerous SCE energy efficiency programs at three Orange County area locations, leading it to reduce energy use by approximately 265,000 kilowatt-hours (kWh) annually and receive nearly \$136,400 in incentives. One restaurant alone saves approximately \$1,900 each year.



Stu Hemphill, senior vice president, SCE Customer & Operational Services (far left); Jose Ruiz, president of three IHOP franchises in Orange County (center); and Mike Marelli, vice president, SCE Business Customer Division (far right). Joining Ruiz in receiving the award are his brother, Benjamin, and his wife, Diana.



#### Energy Efficiency Participation Award:

Northgate Markets: Northgate Markets, founded by an immigrant family headed by Don Miguel González Jimenez, today employs more than 4,500 people – with two generations of family members working in stores and corporate offices. The company has used SCE energy efficiency programs in 13 of its stores, and reduced nearly 126,700 kWh and shed 533 kW of load through our Automated Demand Response program. Project incentives totaled over \$164,600, with annual savings of more than \$10,600.

(Left to right) Stu Hemphill, SCE senior vice president, Customer & Operational Services; Elizabeth Resendiz, Northgate Markets project manager; Marco Arzola, Northgate Markets director of Facilities Maintenance; and Mike Marelli, vice president, SCE Business Customer Division.

#### Energy Efficiency Participation Award:

City of Hanford: The City of Hanford performed a pump bowl retrofit that yielded annual energy savings of approximately 372,000 kWh and 64 kW, plus cost savings of more than \$27,700. This project also earned the city an SCE incentive of \$22,600, allowing it to recoup 80 percent of the project cost. In addition, Hanford participates in SCE's Valley Innovative Energy Watch (VIEW) partnership, enabling the city to receive even more incentives for energy efficiency measures and further stretch local tax dollars.



(Left to right) Jessica Mack, principal manager, SCE Business Customer Division; John Doyel, City of Hanford deputy director of Public Works; Darrel Pyle, city manager, City of Hanford; and Mike Marelli, vice president, SCE Business Customer Division.



#### Energy Efficiency Participation Award:

**Palace Food Depot:** Palace Food Depot, a Chinese-owned and -operated grocery store, installed energy efficiency technology that includes smart refrigeration system controls, allowing the store's refrigeration system to optimize energy use. It also installed new high-efficiency, low-temperature reach-in display cases and light-emitting diode (LED) display case door lights. These and other energy efficiency projects have earned Palace Food Depot approximately \$72,100 in incentives through SCE, with more than 785,700 kWh in annual savings.

(Left to right) Omar Faris, SCE Business Customer Division account manager; Steve Gong, Palace Food Depot owner; and Mike Marelli, vice president, SCE Business Customer Division.

#### ${\it Community Partner ship Award:}$

Southeast Community Development Corporation (SCDC): SCDC operates on the belief that community problems must be solved by the community itself, and is committed to utilizing resources within the southeastern portion of the L.A. region. Examples of its work include administering a federally funded house renovation project and a business assistance center; forming a Southeast Health Coalition; and co-sponsoring a college scholarship program and conference fair for area students.



(Left to right) Gaddi Vasquez, senior vice president, Government Affairs, Edison International; Edison International President and CEO Pedro Pizarro; SCDC Executive Director Cesar Zaldivar-Motts; Tami Bui, principal manager, SCE Corporate Philanthropy; and SCE President R.O. Nichols.



#### Community Partnership Award:

#### Tulare County Symphony Association (TCSA):

The mission of the TCSA is to provide a symphony orchestra to Tulare County and foster appreciation of symphonic music, while promoting the education and development of young musicians. Through its master works, pop, holiday, youth, and movie night concerts, TCSA advances symphonic music education county-wide and offers an important cultural resource to Tulare County residents.

(Left to right) Mike Marelli, vice president, SCE Business Customer Division; Juliette de Campos, executive director, Tulare County Symphony; and Chris Abel, manager, SCE Local Public Affairs.

#### Diverse Business Enterprise Award:

California Fuels & Lubricants: California Fuels & Lubricants is one of the largest certified minority-owned fuel and lubricant distributors in the greater Southern California area. It is the only Latino-owned company in California that operates all of its equipment and delivers these types of products. The company employs more than 55 full-time employees while giving back to the communities in which they live.



(Left to right) Doug Bauder, vice president, SCE Operational Services; California Fuels & Lubricants CEO Efrain Davalos; California Fuels & Lubricants President Jaime Duenas; and Eric Fisher, principal manager, SCE Supplier Diversity.



(Left to right) Skillplex Instructor Alain Spalard; Skillplex Owner Margarita Rodriguez Spalard; and Mike Marelli, vice president, SCE Business Customer Division.

#### Diverse Business Enterprise Award:

Skillplex: Skillplex designs and manufactures industrial training equipment, which it primarily sells to educational institutions to support student development in the fields of industrial, mechanical, and electrical engineering. In addition, the company collaborates alongside SCE with the Automation Academy to provide training on industrial automation equipment. This helps the local workforce expand its skill sets, offering the potential for career advancement.

If you are interested in future customer signature events – such as Black History Month in February and Asian American Pacific Islander Heritage Month in May – including potential opportunities for recognition, contact your SCE Account Manager for details.

Also follow us on Twitter @SCE\_Business and @SCE\_Communities, and join our Business and Community Partnerships Facebook page, to learn more about our business programs and community initiatives. For additional details on SCE's diversity, cultural awareness, and outreach, visit sce.com/diversity.