



The Irvine Company



Rich Bluth and Erron Williams,
The Irvine Company

The Irvine Company Achieves Dramatic Energy Savings for Commercial Real Estate with SCE

Energy Efficiency and Demand Response Offerings Work Together to Save Today and Preserve the Legacy

The Irvine Company has grown with California for a century and a half. Founded in 1864, its leadership in commercial and residential real estate is built on balancing today's bottom line with its long-term interests. Both the company's continual transformation and its unchanging values are evident in its success as a manager of energy.

Rich Bluth, P.E., Vice President of Energy Management, and Erron Williams, Director of Engineering, have inherited a proud legacy of stewardship and sound business at the Irvine Company. In a challenging energy environment, they practice them both every day with Energy Efficiency and Demand Response offerings from Southern California Edison (SCE).

SCE Energy Efficiency Offerings Lay the Foundation

The Irvine Company participates in multiple energy efficiency incentive offerings for its Office Properties portfolio, which includes more than 400 premier properties in the Silicon Valley, as well as Los Angeles, Orange and San Diego counties.

"Energy has always been one of the largest operating costs for a building," Erron says. "We're more capable than ever at seeing how we use it, where we can make improvements, and how to turn energy usage into an asset instead of treating it simply as overhead. We want to reduce operating expenses, create better efficiencies and use systems that provide comfort to our tenants at all times. Energy management is a competitive opportunity for us."

Estimated Savings by Managing Energy

- **Industry:** Commercial Real Estate
- **SCE Programs Utilized:** Customized Solutions, Express Solutions, Retrocommissioning, Technical Assistance and Technology Incentives (TA&TI), Demand Bidding Program (DBP)
- **Direct electricity savings:** 8 million kWh in annual savings by participating in multiple SCE energy efficiency offerings
- **Direct annual energy efficiency savings:** \$1.2 million based on estimated per kWh costs
- **Results:** Technical Assistance and Technology Incentives (TA&TI) to pay for Demand Response (DR) enabling technology and an estimated annual bill savings of \$130,000 in DBP credits

ESTIMATED ANNUAL SAVINGS

\$1.3 million

Energy Management Success Story

The Irvine Company Achieves Dramatic Energy Savings with SCE

The Irvine Company's first step is to upgrade hardware for better performance. "We're always looking for new technologies and new ways to save energy and operating costs," says Rich. "We apply SCE offerings continuously across the 24 million square feet of our office portfolio [in SCE's service territory] to audit for opportunities. Additionally, we use our proprietary energy management system to get detailed real-time feedback on our enterprise-wide performance. Applying the most effective equipment and information gives us the best possible return on every kilowatt we use."

For example, the Irvine Company has tapped into SCE offerings for energy-saving enhancements such as:

- Optimizing control strategies for air handlers, packaged air conditioning units and central plants;
- Using retro-commissioning to assess building energy performance, identify improvement opportunities and maximize optimization strategies;
- Implementing a thermal energy storage system upgrade through an SCE pilot program;
- Upgrading to higher-efficiency HVAC equipment and lighting (lamps, ballasts and fixtures); and
- Retrofitting exterior lighting and elevator cabs with light-emitting diode (LED) and compact fluorescent lamps.

SCE business customers of all sizes are eligible to participate in SCE's portfolio of energy efficiency offerings, which provide incentives for purchasing and installing qualified equipment that improves a building's or facility's energy performance. These offerings help identify solutions to optimize your building's energy management and lower electricity bills.

Demand Response Offerings Leverage the Opportunities

The Irvine Company builds on its energy efficiency initiatives by utilizing a sophisticated portfolio-wide control system for SCE demand response participation. The Irvine Company used a demand response site assessment and obtained more than \$1.7 million in incentives through SCE's Technical Assistance and Technology Incentives (TA&TI) to upgrade its existing energy management system with new hardware that allows access to every individual property's control system through a single interface.

Advanced tools, including a proprietary energy data wide area network, also enable the company to access direct real-time energy-use feedback to select, monitor and modify multiple demand response portfolio strategies across its properties.

"Our job is to find ways to save energy for our tenants, and for us, without ever compromising their operations or their comfort. All the little improvements and hardware upgrades create savings across our portfolio and lower our demand. This fine-tuning carries forward into more savings."

*Erron Williams
Director of Engineering
The Irvine Company*



Energy Management Success Story

The Irvine Company Achieves Dramatic Energy Savings with SCE

Rich explains, "With our centralized system, we can manage our usage in a more timely and agile way than doing it piecemeal, and these equipment upgrades give us flexibility for tactical energy management. Together they offer us an advanced capability for taking part in SCE Demand Response offerings."

"With the audits and upgrades through TA&TI, we captured over 5 megawatts of new flexibility," Erron says. "We'll leverage that with SCE Demand Response offerings such as the Demand Bidding Program, which we participate in now to reduce electrical load during events. We are partnering with our tenants to be part of California's energy solution through our participation in these offerings. With the help of SCE, we've implemented a very 'smart' Demand Response platform that receives real-time energy performance and occupant comfort conditions to ensure no negative impact to our tenants."

"Our energy management infrastructure permits us to access the control systems in every individual property," Rich explains. "We can measure the individual performances of the locations, manage their aggregate performance and spread load-shedding efforts throughout the entire portfolio. Cumulatively, we can make significant demand response efforts."

Effective Communications Help the Irvine Company Share the Message

There's one more essential component to the Irvine Company's energy management success. "Ongoing open

communication with the tenants is vital," says Erron. "We're partnering with our tenants on all of these efforts, and to share our commitment. We actively outreach to them by explaining the savings measures we take and the benefits we all create by making better use of energy. We want their buy-in. If the team effort works, then they get the advantages too."

He continues, "We send emails, post flyers and put bulletin boards in the lobbies of our buildings when there's a Demand Response event. We emphasize the paybacks of energy management — averting power interruptions, offsetting costs, avoiding needless output of greenhouse gases...everybody knows when they come in to their building that we'll be powering down to take part in the event. It's the right solution being applied in the right ways, and our tenants respond enthusiastically. They see these measures as constructive and proactive advantages to them. It doesn't look like sacrifice. It looks like people working to do the right thing for everybody."

"We're working at scale and at a level of sophistication that's probably unique," Rich concludes, "but the basic actions we take are available to just about anyone. Promoting energy efficiency, energy-smart behaviors, and communicating to customers — any business can benefit from these practices, and prove that by taking the long-term outlook, you can succeed today."

Earn Even More Savings with Other SCE Programs

SCE offers a range of solutions such as cash incentives, energy surveys and payment options to help you better manage your electricity costs.

- **Energy Efficiency** projects lead to permanent reductions in energy usage, usually by upgrading equipment and optimizing building system design.
(800) 736-4777
www.sce.com/express_solutions
www.sce.com/customized_solutions
- **Demand Response** programs offer low cost ways to reduce electrical bill for agreeing to temporarily reduce electricity usage during peak hours.
(866) 334-7827
www.sce.com/drp

For More Information

www.sce.com

Contact your SCE Account Representative

This case study is provided for your general information and is not intended as a recommendation or endorsement of any particular product or company. Funding for this case study is provided by California utility customers and administered by SCE under the auspices of the California Public Utilities Commission. The information contained in this case study does not replace CPUC-approved tariffs. Please refer to the individual rate schedule of interest for a complete listing of terms and conditions of service, which can be viewed online at www.sce.com.

© 2011 Southern California Edison. All rights reserved.
NR-746-V2-0211

