

## Pump Test Results Get to Heart of Energy Savings for Tulare Farm

In 2011, SCE will mark 100 years of offering pump testing services to customers through one of the largest and longest-running pump-related energy efficiency programs in the nation. Benefits of SCE's pump testing services may include:

- Increased energy efficiency;
- Reduced costs; and
- Improved system efficiency.

Over the years, SCE's services have evolved to incorporate the latest in fluid flow and electronic measurement instrumentation to test thousands of pumps annually in conformance with pumping standards established by the American Water Works Association.

### Pump Testing: A Money-Saving Solution

"Our pumps are as important to our farm as a heart is to a person. How we measure and monitor those is obviously very important. When you get a single pump test, it's one snapshot. What's essential is to test over time to see trends. That's helpful in diagnosing what might be wrong and how to fix it."

Mark Watte, owner/partner of the George Watte & Sons farm, speaks of the value of Southern California Edison's (SCE) free pump testing services. George Watte & Sons dates to the late 1950s, when Mark's father and uncle bought their first properties and began farming. In the mid-1980s, Mark, his brother, Brian, and their father formed a partnership to operate the farm together. A few years later, their father retired and the brothers took over the business.

Today the brothers own, lease and farm about 4,000 acres, plus harvest approximately 300 acres of trees, and milk about 1,800 cows in the farm's dairy. On average, Mark says, canal water meets about half of the crops' water needs, with the rest depending on water pumped from below ground. For those crops, the farm relies on 42 pumps, which Mark says probably account for about 90 percent of its energy use.

The farm uses SCE's pump testing services to check the efficiency of each of its pumps every other year. Though some utilities outsource this function, Mark values the availability of SCE's in-house services.

"I feel like SCE employees are much more thorough and caring about having it done right," he says. "It's expensive to pull pumps, and there's no opportunity for visual inspection. It's all about the measurements. When I get the results of an SCE pump test, I feel it's absolutely done right."

### Energy Savings of 30 Percent to 40 Percent

Mark points to an example of a pump tested in 2006. The results showed an overall plant efficiency of 41.1 percent, with a kilowatt per acre-foot requirement of 309 and a gallons-per-minute production of 583. Based on the results, Mark discovered that the pump's bowl was worn out, so he replaced it.

SCE came back the following month to recheck the pump, and its efficiency had gone to 65.2 percent – generally in the range for a new, highly efficient pump – with a kilowatt per acre-foot requirement of 207. The pump's gallons-per-minute production had almost doubled to 1,117.

Mark estimates that the energy savings added up to about \$17 per acre-foot, or 30 percent to 40 percent. "The payback was right away," he says.

SCE's free pump testing services determine the overall "wire-to-water" efficiency of a pumping plant by analyzing the water level in a well during pumping, discharge flow rates, and power input to the pump motor. These measurements of pump performance in progress allow customers to track pumping plant efficiency and determine when maintenance or overhaul will be cost-effective.

To learn more about SCE's hydraulic pump test products and services, as well as other energy management solutions for agricultural properties, visit [www.sce.com/emsagriculture](http://www.sce.com/emsagriculture), contact your account representative or call one of the phone numbers below:

San Joaquin Valley – (800) 634-9175  
Ventura/Antelope Valley – (800) 338-8502  
Los Angeles – (909) 820-5333

To schedule a pump test, log onto [www.sce.com/pumptest](http://www.sce.com/pumptest).

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. Funding for this case study is provided by California utility customers and administered by SCE under the auspices of the California Public Utilities Commission.

*Para solicitar una copia de esta notificación en español por favor escriba a la atención de Corporate Communications*

Southern California Edison Company  
2244 Walnut Grove Avenue  
Rosemead, CA 91770

### NOTICE OF SOUTHERN CALIFORNIA EDISON (SCE) COMPANY PROPOSED GENERAL RATE CASE APPLICATION FILING IMPORTANT INFORMATION ABOUT SCE'S PROPOSED RATE INCREASE Application (A.) 10-11-015

On November 23, 2010, Southern California Edison Company (SCE) filed a proposed General Rate Case (GRC) Application with the California Public Utilities Commission (CPUC) requesting authority to collect base rate (non-fuel) revenues of \$6.285 billion. The proposed application seeks authority to have the rates become effective January 1, 2012. Every three years, SCE is required to file a GRC in which the CPUC sets annual revenue levels. Annual revenue is the total amount of money a utility collects through rates in a given year for specific purposes. Base rate revenues pay for the costs of owning and operating electric distribution and generation facilities (excluding fuel and purchased power).

#### THE KEY REASONS FOR SCE'S PROPOSED INCREASE

SCE has made this request to continue providing safe and reliable service to its customers. The primary reasons for the requested revenue increase are:

1. To connect new customers to the system and respond to customer requests, such as undergrounding projects.
2. To reinforce and upgrade the electric system to accommodate load growth.
3. To continue SCE's multi-year capital investment program to replace aging distribution infrastructure and business systems.
4. To meet increased costs for Information Technology (IT) systems such as protection from cyber security threats to electric system assets.
5. To make a substantial contribution to the employee and retiree pension fund to address the losses in financial markets over the past few years.

(Continued on next page)

(Continued from previous page)

### WHAT THIS PROPOSED GRC APPLICATION MEANS TO YOU

If the CPUC approves the application, SCE's request would result in a \$866 million, or 7.55 percent, increase over currently authorized total revenues (or a 16.19 percent increase in base rate revenues). SCE's application also proposes estimated base rate revenue increases of \$246 million in 2013 and \$527 million in 2014. The actual increases in 2013 and 2014 will be determined by the CPUC prior to the beginning of each year. SCE is making this request now because the CPUC requires utilities to file a GRC Application approximately one year before the effective date of the proposed rate change.

If SCE allocates this proposed increase in 2012 revenues based upon the most recent approved methodology, the impact on each customer group would be as shown in Table 1, below:

Customer/Rate Group	2010 Generation Allocator	2010 Distribution Allocator	PRR Total Revenue (\$000) w/2012 Sales Forecast	2011 Base Rate Revenues	2012 GRC Gen Rev. Change (\$000)	2012 GRC Dist Rev. Change (\$000)	2012 GRC Total Rev. Change (\$000)	Total 2012 Revenues (\$000)	% Increase over Total Revenues
Domestic	38.0%	49.6%	4,452,554	2,076,631	120,071	273,075	393,146	4,845,700	8.83%
Light-Small & Medium Pwr	36.3%	35.3%	4,276,459	1,994,502	114,461	194,202	308,663	4,585,122	7.22%
Large Power	21.6%	11.6%	2,195,789	1,024,096	68,248	63,693	131,941	2,327,730	6.01%
Agricultural & Pumping	3.5%	3.2%	398,103	185,672	11,054	17,730	28,785	426,887	7.23%
Street and Area Lighting	0.6%	0.3%	141,727	66,100	1,874	1,482	3,356	145,083	2.37%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>11,464,632</b>	<b>5,347,000</b>	<b>315,708</b>	<b>550,182</b>	<b>865,890</b>	<b>12,330,522</b>	<b>7.55%</b>

Customer Service	Average Monthly Usage	Current Monthly Bill	Proposed Monthly Bill	Change in Bill	Percent Change
Non-CARE	652 kWh	\$ 120.14	\$ 132.64	\$ 12.50	10.04%
CARE	513 kWh	\$ 58.52	\$ 61.20	\$ 2.69	4.6%
<b>Total Residential</b>	<b>612 kWh</b>	<b>\$ 102.35</b>	<b>\$ 112.02</b>	<b>\$ 9.67</b>	<b>9.4%</b>

### FOR FURTHER INFORMATION FROM SCE

You may also view a copy of the application at SCE's website: [www.sce.com/grc](http://www.sce.com/grc), or by writing to SCE at the Rosemead mailing address below. You may also review a copy of this Application and related exhibits at SCE's corporate headquarters (2244 Walnut Grove Avenue, Rosemead, CA 91770), at the Los Angeles Office of the CPUC at the address shown above, or at the following SCE business offices:

1 Pebbly Beach Rd. Avalon, CA 90704	30553 Rimrock Rd. Barstow, CA 92311	374 Lagoon St. Bishop, CA 93514
505 W. 14th Ave. Blythe, CA 92225	3001 Chateau Rd. Mammoth Lakes, CA 93546	510 S. China Lake Blvd. Ridgecrest, CA 93555
26364 Pine Ave. Rimforest, CA 92378	41694 Dinkey Creek Rd. Shaver Lake, CA 93664	421 W. J St. Tehachapi, CA 93561
120 Woodland Dr. Wofford Heights, CA 93285	6999 Old Woman Springs Rd. Yucca Valley, CA 92284	

For further information from SCE regarding this Application, please write to:  
Southern California Edison Company  
2244 Walnut Grove Avenue  
Rosemead, CA 91770  
Attention: Russell G. Worden  
General Rate Case Project Manager

### THE CPUC PROCESS

The CPUC's Division of Ratepayer Advocates (DRA) will review this application. The DRA is an independent arm of the CPUC, created by the Legislature to represent the interests of all utility customers throughout the state and obtain the lowest possible rate for service consistent with reliable and safe service levels. The DRA has a multi-disciplinary staff with expertise in economics, finance, accounting and engineering. The DRA's views do not necessarily reflect those of the CPUC. Other parties of record will also participate.

The CPUC may hold evidentiary hearings whereby parties of record present their proposals in testimony and are subject to cross-examination before a CPUC Administrative Law Judge (ALJ). These hearings are open to the public, but only those who are parties of record may present evidence or cross-examine witnesses during evidentiary hearings. Members of the public may attend, but not participate in these hearings.

After considering all proposals and evidence presented during the hearing process, the ALJ will issue a draft decision. When the CPUC acts on this application, it may adopt all or part of SCE's request, amend or modify it, or deny the application. The CPUC's final decision may be different from SCE's proposed application.

### PUBLIC COMMENTS AND OPINIONS ARE IMPORTANT TO THE CPUC

As part of its decision-making process, the CPUC is interested in your public comments or opinions on any aspect of the company's operations, including proposed rates, service quality or any other issue of concern. If you are writing a letter or sending an e-mail to the Public Advisor's Office regarding this proposed application, please refer to the application number. All comments will be circulated to the Commissioners, the assigned ALJ, and other line Divisions working on this GRC. Please send all e-mails or written correspondence regarding your comments and opinions to the address listed below:

The Public Advisor's Office  
California Public Utilities Commission  
320 West Fourth Street, Suite 500  
Los Angeles, CA 90013  
E-mail: [Public.Advisor.la@cpuc.ca.gov](mailto:Public.Advisor.la@cpuc.ca.gov)

All written correspondence and e-mails are provided to the assigned Administrative Law Judge, Commissioners, and other appropriate CPUC staff. All public comments are also provided to the CPUC's Formal Files Office as part of the formal public comment file for this proceeding.