

TAKE **5** FOR ENERGY CONSERVATION!

KERN
energy
watch

ENERGY EFFICIENCY:

Making it Happen in California City

Driving the nine miles from Highway 395 to California City, one becomes familiar with the desert surroundings and temperatures that range from 33° Fahrenheit to about 118° Fahrenheit. California City sits below the Eastern Sierra Nevada Mountain Range on 200 square miles of the Mojave Desert. When you consider just the square miles, California City is the third largest city in California. With the city's large territory and 14,000 residents you can imagine the cost of maintaining infrastructure. Not to mention on an average weekend the population increases by 2,000 - 5,000 as off-highway vehicles (OHVs), their owners and everything from tents to Class A motorhomes flock to designated OHV areas for fun and camaraderie.

When Tom Weil started working as city manager a few years ago, he realized the importance of trimming the budget to keep California City moving forward. Weil worked with the city council to develop a strategy that would cut costs wherever possible. About that time, Southern California Edison (SCE) came knocking with opportunities to save energy, including performing energy audits in various city departments to see where energy expenditures could be trimmed.

This easily fit with California City's strategy of saving money to improve the desert landmark and conserving resources. Weil realized some of the six water well pumps were old and might need maintenance work, if not replacement. SCE provided the audit through Layne Christensen Company, Water Resources Division, and engineers. The audit concluded five pumps were performing satisfactorily but Water Well Pump 15A was not; in fact, it was an energy hog running at 57.2% efficiency. The pump needed a retrofit. Further, it qualified for two SCE assistance programs.



The SCE Incentive Funds Program offers monetary inducements to businesses and cities when installing equipment that reduces electricity usage during peak demand. Water Well Pump 15A qualified because the energy reduction would be great enough to warrant a financial incentive of approximately \$27,000. Although the incentive was substantial, it was clearly not enough to retrofit a tired water-drawing behemoth like Well Pump 15A.

SCE's On-Bill Financing Program, a zero percent interest, no fee loan program for energy efficient projects was the answer for covering 82% of the remaining retrofit investment. With loan parameters up to \$250,000, California City received \$72,943 from SCE. The loan payment appears as a line item each month on the SCE bill. As the project progressed, it appeared the retrofit would cost less than projected. The actual on-bill financing loan is estimated to be \$57,351. The loan will be repaid with the savings achieved by Water Well 15A running more efficiently.

Company-wide SCE has invested a total of \$16 million in on-bill financing. The SCE On-Bill Financing Program works as a revolving fund. As money is paid back into the program, it is loaned out for other energy efficiency projects. It was



This program is funded by California utility customers and administered by PG&E, Southern California Edison and Southern California Gas Company under the auspices of the California Public Utilities Commission. Program services and benefits are offered on a first-come, first-served basis until December 15, 2014 or until program funds are spent, whichever comes first.

www.kernenergywatch.com

TAKE **5** FOR ENERGY CONSERVATION!

KERN
energy
watch

projected that Water Well Pump 15A would save 208,163 kWhs per year, saving \$15,961 annually. A post-test revealed that the pump actually saves 300,000 kWhs per year, providing the city even more savings. California City is the first municipality in Kern County to take advantage of the SCE On-Bill Financing Program. It's estimated the loan will be paid back in just three and a half years, and the pump will continue to run efficiently and save money for years after.

So what is the next energy-saving project for California City? There are several energy saving projects under consideration. For example, two wastewater pumps need to be refurbished. Also, plug load occupancy sensors will be placed at every work station to cut power consumption when personal computers are not in use. Lastly, lights and ballast replacements are on the list.

California City has a goal to cut overall electricity costs by 7% -a goal set by SCE in the Energy Leader Partnership Program (Kern Energy Watch). This partnership allows participating cities and counties to receive funds for marketing, education, and technical assistance toward upgrading their facilities. The result: a greater awareness by citizens and city personnel to develop energy-cutting habits, which translates into financial savings. When goals are met, the city will receive a predetermined rebate on their monthly energy bills. California City has met the criteria to receive the first tier of rebates. There are three tiers left to climb and with each one the rebates increase. To survive in the Mojave Desert one must pull all resources together, which is exactly the strategy Weil and California City have in mind. "Make friends with your energy provider. Continue to ask, 'What can you do for us?'" is Weil's advice. Southern California Edison has proven they could do a great deal to help California City and its citizens conserve resources, improve efficiency and save money.



Retrofitted Water Well Pump 15A

**Here's how to get your Kern Energy Watch advantage:
Visit: www.kernenergywatch.com**



This program is funded by California utility customers and administered by PG&E, Southern California Edison and Southern California Gas Company under the auspices of the California Public Utilities Commission. Program services and benefits are offered on a first-come, first-served basis until December 15, 2014 or until program funds are spent, whichever comes first.

www.kernenergywatch.com