Business Partners

Fall 2004 | A newsletter to inform the customers of Roseville Electric

Commercial New Construction Program Debuts

Roseville Electric is pleased to introduce an incentive program that rewards designers and owners for including energy efficiency measures in new construction, major remodeling projects, and new additions. Designed to beat Title 24 requirements by at least 10 percent, the program is available for lighting, mechanical, envelope or whole-building measures. The incentive program is available on a first-come, first-served basis until all allocated funds are reserved through the application process.

Surpassing Title 24

Incentives are based on kilowatts saved after measures beat current Title 24 baseline levels by at least 10 percent. With the new 2005 Title 24 standards set to take effect in October 2005, the program hopes to persuade owners to act early by adding better efficiency measures to their projects now. "The program provides an additional benefit to owners," according to Kris Blair, Roseville Electric's major commercial account representative. "Building more efficient facilities now will help keep buildings competitive with those built after October 2005."

Encouraging design-phase planning

"The program is designed to promote early planning for energy efficiency, which is the best time to make the greatest difference," says Blair. "It features tiered incentives that encourage owners and builders to include measures that conserve energy during the project's design phase."

If the application is submitted prior to or during the entitlement stage, owners can earn $300 per kilowatt (kW) saved and designers can earn $100 per kW saved. If the application is submitted after entitlement but prior to construction, designers are no longer eligible for the rebates and owner incentives drop to $250 per kW saved. If application is submitted once construction begins, owner incentives drop to $200 per kW saved.

Providing flexibility

Owners can apply for rebates under four methods: lighting, envelope, mechanical systems, and whole building. Each requires energy savings that exceed Title 24 requirements by 10 percent or more. Applicants must provide Title 24 compliance forms, equipment or materials specifications, schedules and plans, and completion of a Roseville Electric worksheet for the method.

Find out more

More detailed information on the program is available at www.RosevilleElectric.org. You can also contact Major Accounts Representative Kris Blair at (916) 774-5581 or kblair@roseville.ca.us or Key Accounts Representative Martin Bailey at (916) 774-5617 or mbailey@roseville.ca.us.

What's New?

RE Named Most Reliable for Fourth Year

For the fourth consecutive year, Roseville Electric has received PA Consulting Group's ReliabililtyOne™ Award. The award recognizes Roseville Electric as the best municipal power provider in the country for utilities that serve less than 100,000 customers.

"Employees throughout our organization focus on reliability as our most critical measure of success," said Utility Director Tom Habashi. "This award recognizes the day-in, day-out effort that it takes to provide our customers with the level of excellence they desire and deserve."

The prestigious award follows an in-depth benchmarking process that includes an external, independent review of the processes, systems and procedures in place to capture, analyze and report outage performance data. The assessment process for the award is designed to recognize utilities that have taken an extra step to ensure their reliability reporting processes are accurate.

Roseville Electric

Reliable Energy · Dependable Service

When is the Best Time to Think About Energy

Commercial New Construction

With the introduction of our new construction incentive program, we spoke with three customers involved in new construction projects to find out how and when they address energy efficiency.

1

Stephen L. Des Jardins of Diamond Creek Partners, LTD. is building a multi-use project featuring a French restaurant and wine cellar, retail shops, and office space.

How does Diamond Creek Partners address energy efficiency as part of the design process?

Energy efficiency is such an integral part of our projects that we start thinking about it in the very initial design phase. How the buildings will be used, the sun's angles and movement, and location of trees, for example, are important to how the building will be situated and what materials we'll use. We also built this project with 8-inch walls, which gave us a distinctive European look and allows us to use a biofoam spray insulation that does not compact and offers energy efficiency and soundproofing. The project also included a geothermal heat pump system, which then allows four-sided architecture since there are no exterior units. And we used a radiant barrier roof-sheathing product that costs very little and makes a dramatic difference.

During the design phase, we also addressed the needs of tenants, such as the wine cellar with upstairs storage space. For that space, no windows

were used except for a few ocular LowE[2] triple-glazed windows that provide a high insulation value. On those and other windows subject to sun exposure, we installed exterior awnings that block the sun before it hits the glazing.

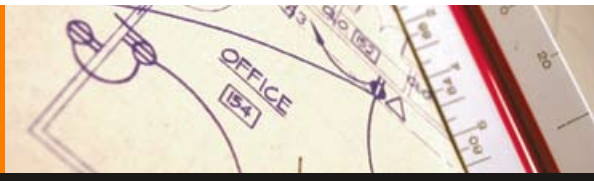
The final result is a project that is aesthetically pleasing, energy efficient, quiet, less costly to operate, and better for the environment than if we hadn't incorporated those measures in our initial planning. On most buildings, the most controllable expense is your energy costs. The measures we included had greater up-front costs, but deliver a payback in about three years. Even those who are building to sell should see return through higher resale value. If you're intending to keep the building and are not thinking about energy in that initial phase, you must be betting on lower energy rates. And that's not something I would do.

Chris Grimes, Director of Facilities Development fo remodeling efforts to serve the growing high school

How does Roseville Joint Union High School District address energy efficiency within the design process?

We approach projects differently than most builders. We focus on low lifecycle costs across several decades, knowing that it costs far more to operate and maintain a building than it does to build one. Some of the district's buildings were built in the 1920s and 30s, and the buildings we are constructing today will likely be used for as long or longer.

Efficiency?



Information and applications at www.RosevilleElectric.org

2

r **Roseville Joint Union High School District** is constantly involved in new construction and district that serves more than 8,000 students.

With that in mind, we include energy efficiency measures in the earliest phases of our design planning. We begin by understanding the programs the building will house and the shape it will take, and then we look at the envelope materials and electrical and mechanical systems that make sense and evaluate them for lifecycle costs. Programs change constantly, so we also plan in flexibility to reprogram a space as needed. All of our newer buildings include cool roofs and high-efficiency lighting, chillers, and heaters. We're looking into solar panels, as well. We also pay attention to materials that contain low volatile organics to create healthier environments.

Daylighting is another important element that must be considered early in the design process. We bring in as much natural light as possible; in fact, some spaces may not have lights turned on all day. There's also a great deal of research supporting how much better students do with natural light — so there's a dual benefit to us.

Few builders hold onto buildings as long as we do, have the well-being of children to consider, or have to build so the spaces can be easily rededicated as programs change. To get the maximum benefit, all those concerns must be factored in during the initial design phase.

When Williams + Paddon Architects + Planners, Inc. designed the new administrative office building and entrance to Roseville High School, they took their inspiration from the school's original building that was torn down in the 1970s over earthquake-safety concerns. The new entrance revives the "school on the hill" theme, creating a new version of one of Roseville's most memorable landmarks. All of the schools new and remodeled buildings feature daylighting and many other energy efficiency features.

3

Kevin Kemper founded Kemper Tree Care in 1984 and recently sold it to his employees so that he could concentrate his efforts on a building project that will house the tree company and other commercial tenants. Tenants will include Kemper Industries, Kemper's company that builds custom truck bodies for arborists. Construction is slated to begin in early 2005.

How do you address energy efficiency within the design process?

The entire project is built around energy efficiency, which comes out of a deep personal philosophy. Through 19 years of working with nature and interfacing with development, I became environmentally sensitive and wanted to create a project that would put into practice what I preach. I looked into a lot of different options for shell materials, lighting and mechanical systems, and chose what would give me the most efficient use of energy and still be economically viable. I wanted to use solar power, for example, but discovered that it would be illegal to sell the power to tenants and I couldn't afford to install the system and give away the power.

continued on back page

Roseville Energy Park Update:

Roseville's new power plant continues to move through the California Energy Commission's approval process. The Roseville City Council recently approved a $1.9 million payment toward emission reductions credits, know as ERCs. The state law requires all new power plants to meet stringent environmental laws and regulations and must be approved and licensed by the CEC. To get the latest update or information regarding the state approval process, visit the CEC's Web site section devoted to the project at:

www.energy.ca.gov/sitingcases/roseville/index.html.

Once approved and constructed, the Roseville Energy Park is expected to provide about 60 percent of Roseville's electricity needs.

"Energy Efficiency" continued from previous page...

I also considered straw bale construction, but decided on insulated concrete forms (ICF) because they allow more precise engineering. The ICF shell will perform at R50 value, which is completely unheard of using standard materials. The building also uses the earth's coolness and air handling systems for cooling and radiant heat in the floors for the shops and offices. We've included lots of daylighting and the high-efficiency lighting is equipped with motion and lumen sensors to automatically regulate the lighting needs.

Building in these features costs more up-front, but I'm building on principle and for the long term. My hope is that the project will result in a model of efficiency and comfort that the tenants will be proud to occupy.

Building trucks designed specifically for arborists is one of the uses Kemper expects his project to house.

New Solar Project Feeds the Grid and Students' Minds

In a move that benefits students, our community and the environment, the Roseville City Council recently adopted a resolution supporting a new 10-killowatt solar-generating system for Silverado Middle School. The rooftop photovoltaic (PV) system, set to begin operation this summer, will generate and feed electricity into Roseville Electric's distribution grid, supplying enough electricity to power three typical Roseville homes each year.

Powering education

Generating electricity is only a small part of the solar system's benefit to the community. The greater benefit is to the students and teachers of Dry Creek Joint Elementary School District who will participate in interactive education programs to support math, physical science, English, and computer-based learning curricula. As part of the program, Roseville Electric will provide a learning package with an onsite educational display describing the technology, classroom activities, and Internet-based activities for the students. Roseville Electric will also provide funding that

will allow four of the school's teachers to take part in a five-day training course on solar power next summer.

Supporting green energy

The project is funded through customer contributions to the RE-New™ Green Fund and Roseville Electric's Public Benefits Fund. The RE-New™ Green Fund allows customers to contribute each month to support renewable energy initiatives in our community. Roseville Electric matches those funds to support projects such as this one and the solar-generating system atop Roseville's Fire Station #6.

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