Auto-DR Puts Railex® on Energy-Saving Track

The newest mega-trans load refrigerated distribution center operated by Railex® — a nationwide full-service transport, logistics and distribution firm — sees significant savings with use of an energy management system (EMS) to control energy consumption during peak periods and automatically participate in Demand Response (DR) programs.

Located in Delano in Central California, the three-year-old facility includes 225,000 square feet of refrigerated space and loads and ships about 80 to 90 rail cars of perishable goods a week, with the number rising as high as 160 cars a week in summer months. To build the facility, Railex® used the statewide Savings By Design (SBD) program to receive design assistance and a $150,000 energy efficiency incentive for high-performance new building construction.

As the facility’s business grew in its first two years of operation, Railex® turned to us to look for opportunities to lower its rising energy costs. “We wanted to make it as economical as possible for us to do business on a grander scale,” notes Railex® Senior Systems Analyst James Johnson.

After helping Railex® identify its DR potential, Railex® decided to utilize Automated Demand Response (Auto-DR), which allows customers with an automated load control system, such as an EMS, to participate in DR programs with no manual intervention, providing flexibility and ease of use. Customers pre-select their level of participation and earn incentives for peak-period energy load reductions, which help ensure adequate electricity supplies and also offer environmental benefits.

Railex® received a $72,400 DR technology incentive for the controls needed to utilize Auto-DR. Railex® Maintenance Manager Terrell Estes says the incentive, combined with the money saved through DR event participation, led to a return on investment in just four months.

Summer CPP Savings of Over $32,653

Railex® now participates in both the Critical Peak Pricing (CPP) program (the default rate for SCE bundled service customers with demands greater than 200 kilowatts (kWs)) and in a Demand Response Contract program with a third-party aggregator.

CPP rewards customers for reducing or shifting electricity usage during critical peak events, when the demand and price for electricity climb. During summer
Energy Management Success Story

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Railex

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James Johnson
Senior Systems Analyst
Railex®

2011, Railex® averaged close to 300 kWs in load reduction per CPP event, with participation yielding savings of more than $32,653. Johnson says that during a DR event, the Auto-DR system — which the company can override at any time — reduces load to battery chargers, some air conditioning and lighting units, refrigeration coils and ammonia compressors.

In addition, the EMS allows Railex® to manage equipment charging in a way that avoids electricity use demand spikes that increase electricity costs. Johnson explains, “That has made an overall impact on our bottom line even when there’s not a Demand Response event.”

Growth with Flat Energy Costs

According to Railex®, while energy use from the peak summer months of 2010 to 2011 increased by 30% to 40% at the Delano facility, participation in DR events and use of the EMS kept energy expenditures essentially the same as in the previous year.

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Beyond this, the EMS provides expanded accessibility, with the ability to manage energy use at the facility remotely using smart technology devices. This, Johnson and Estes note, offers added value that’s not reflected on the electricity bill.

Estes credits SCE with helping Railex® stay on track to save energy, money and the environment. “The communication has been extremely good,” says Gary Pena, Railex® General Manager. “Whenever we have an issue, our SCE account manager personally addresses it. We know we have a direct line to SCE.”

Looking forward, Railex® plans to consider additional energy-saving opportunities such as LED lighting and lighting controls available through SCE. “We haven’t tapped everything in that well yet,” Johnson says. “We realize that the more control we have within our building, the more it increases our opportunity to control costs and increase efficiencies.”

To learn more about SCE energy management solutions, ways to reduce your energy usage and manage your energy costs, visit sce.com/business or call your SCE Account Manager.