



Nordstrom



Nordstrom and SCE's Automated Demand Response (Auto-DR): Showing That Saving Energy Is Always in Fashion

"The Right Thing to Do"

A national retailer that sells the finest apparel, shoes and accessories, Nordstrom always shows its customers the latest in fashion trends. But many customers may not know that the company also stays on top of the latest energy management trends, employing strategies that save energy, money and the environment while helping to ensure adequate electricity supplies for the region.

In the early 2000s, during California's energy crisis, Nordstrom began a voluntary load curtailment program on days when the state reported low operating electricity reserves. Starting with shutting off display window lights, cove lighting, individual merchandise spotlights and some cooling load, Nordstrom stores reduced their energy demand in tiers.

This commitment eventually evolved into participation in Southern California Edison's (SCE's) technology incentives program for Auto-DR. Auto-DR allows customers with an automated load control system, such as an energy management system (EMS), to participate in SCE's Demand

Response (DR) Programs with no manual intervention, while providing flexibility, scalability and ease of use.

Customers pre-select their level of participation based on their energy management strategies and program their energy management systems to automatically drop a set energy load during DR events. This earns incentives for peak-period energy load reductions, which help ensure adequate electricity supplies and additional environmental benefits.

Customers also may qualify for incentives of up to \$300 per kilowatt (kW) of tested load reduction for system upgrades and technologies that enable Auto-DR. Nordstrom's incentive from SCE totaled more than \$526,000. These funds allowed the retailer to install an EMS in stores within SCE's service territory.

Nordstrom uses Auto-DR enabling technologies to participate in the Critical Peak Pricing (CPP) program, which rewards customers for reducing or shifting electricity usage during a few peak periods from June 1 to October 1 when electricity prices climb or demand is high.

Estimated Savings by Managing Energy

- *Industry:* Retail
- *Description:* A leading fashion specialty retailer, with 11 full-line and seven Nordstrom Rack stores in Southern California Edison's service territory
- *SCE Programs Utilized:* Automated Demand Response (Auto-DR) technology incentives, Critical Peak Pricing (CPP)
- *Results:* A technology incentive of more than \$526,000 to pay for Auto-DR equipment, 20 percent load reduction during CPP events in summer 2010 and 3.5% reduction in energy use per square foot annually

SCE TECHNOLOGY INCENTIVES
\$526,000+

Energy Management Success Story

Nordstrom and SCE's Automated Demand Response Program: Showing That Saving Energy Is Always in Fashion

"The primary driver behind this project was social responsibility," says Nordstrom National Facilities Director Bill McQueen. "We want to do our part during those critical peak times just like we did voluntarily. This local community effort does save a few kilowatt-hours and helps offset rolling blackouts. It's the right thing to do."

He adds, "Demand Response is really about making sure we don't have to build more power plants or tap into the higher-emitting coal plants. We know that in California, where we have customers and do business, it makes sense to use less energy on those critical peak days" to help avoid rolling blackouts and ensure customers have power at their workplaces and homes.

Auto-DR: 20 Percent Load Reduction

With Auto-DR, when a DR event (such as CPP) takes place, a central system sends a signal to the EMS units in Nordstrom stores to reduce load in a pre-scheduled manner. Nordstrom retains the ability to override the automated signals and change its load reduction strategies at any time.

McQueen says that before Nordstrom installed the new EMS units to enable Auto-DR, the circuits for some stores affected multiple areas — including some the stores did not want off, such as restrooms. Now, with the EMS units, only selected non-critical lights and equipment are affected during events. Devices can be added and removed from EMS control as needed.

"We can be assured through the automated element that we only turn off what we want," McQueen notes.

During CPP events in summer 2010, Nordstrom stores in SCE's service territory reduced load by 20 percent, which equated to a reduction of over 2 megawatts.

Upon receiving a day-ahead CPP event notification, Nordstrom sends out e-mails to its stores. Then during the event, store employees post door signs and make periodic announcements to keep customers informed about what's happening in the stores. Nordstrom also educates its salespeople about how to answer customer concerns.

"We're not trying to hide from customers that we're curtailing usage," McQueen says. "In essence our customers take part in the event with us. The response has been positive."

Annual Energy Reductions of 3.5 Percent

For Nordstrom, embracing Auto-DR technology is only part of its ongoing energy management strategy. Through use of new technologies in lighting, heating, cooling and other systems, the company has lowered energy use per square foot by 3.5 percent annually since 2008, a rate it aims to continue meeting each year, reports McQueen.



Energy Management Success Story

A major project involves a company-wide conversion to more energy-efficient store spotlight systems, which has the potential to reduce 45 million kilowatt-hours of energy usage across 110 stores by the end of 2012.

"We have an ongoing strategy to explore technologies and energy use in new stores and to retrofit existing stores," McQueen says. Other options being evaluated for widespread implementation include:

- Motion sensors with infrared technology for stockrooms
- LED (light-emitting diode) can lights with optics
- Technologies to reduce escalator motor demand when no one is on the escalators

"We're able to frame up projects in a way that they do have a good rate of return but still keep delivering that 3.5 percent annual energy reduction," McQueen says.

Working with partners like SCE helps Nordstrom continue its long-term commitment to saving energy, money and the environment.

"Through all of our partnerships we always learn a lot," McQueen notes. "We're glad programs like this exist. It's been a good experience for us to learn this way."



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More About Auto-DR

Auto-DR utilizes automated load control systems, such as an EMS or Supervisory Control and Data Acquisition (SCADA) system, to simplify participation in DR Programs and to automatically achieve specified energy demand reductions (kW and duration) during peak periods. Qualifying customers who do not have automated controls can receive technology incentives to help offset the purchase and installation of automation equipment (like an EMS or controls).

Technology incentives for enabling Auto-DR are available to customers who participate, or plan to participate, in at least one of the following programs: Capacity Bidding Program (CBP), Critical Peak Pricing (CPP), Demand Bidding Program (DBP), Demand Response Contracts (DRC) and Real-Time Pricing (RTP).

To save even more, certain DR programs allow customers to enroll in a second compatible program, which may offer benefits beyond what a single program can provide.

To learn more about Auto-DR opportunities, or how to qualify for savings and incentives, contact your SCE Account Representative, visit www.sce.com/autodr or call (866) 238-3605.

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Bill McQueen, Nordstrom National Facilities Director

Earn Even More Savings with Other SCE Programs

- Find out how SCE's Demand Response (DR) Programs can reward you for reducing electricity usage during peak hours.
(866) 334-7827
www.sce.com/drp
- Take free SCE classes in lighting, HVAC, energy management and more at an SCE Energy Center.
Irwindale: (800) 336-2822
www.sce.com/ctac
Tulare: (800) 772-4822
www.sce.com/agtac
- Use Web-based SCE EnergyManager® Program tools such as SCE EnergyManager® Basic, SCE Cost Manager® and SCE Bill Manager® to monitor and track your electricity usage.
(888) 462-7078
www.sce.com/energymanager
- Take the Online Business Survey at www.sce.com/_Tools/Business/online-energy-guide to calibrate your facility for savings.

Start Saving Now

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

For More Information

www.sce.com

(800) 990-7788

Contact your SCE Account Representative

