Bagging the Grocer

To win over this big customer with steady demand, help them rein in usage.

By Charles W. Thurston
Photos by Nancy Pierce

WHEN ELECTRICITY IS YOUR SECOND-LARGEST OPERATING COST, YOU pay attention to the details of power use. Such is the case with retail food stores, which consume an estimated $4 billion worth of electricity per year, according to a U.S. Environmental Protection Agency study.

"In manufacturing [companies], electricity costs typically represent 2 percent to 4 percent of the overall cost structure. They say it costs less than $20 [for the power] to build a car, for example," says Ralph DiNicola, spokesman for FirstEnergy Solutions, Akron, Ohio. "That's not the case for somebody with a large number of freezers and coolers, and a large lighting and space conditioning area." A typical 40,000-square-foot supermarket uses about 350 kilo-watt-hours per year and spends between 7 percent and 9 percent of its total operating budget on energy, says Rick Heithold, energy manager for Food Lion, Salisbury, N.C. (*See "IN FOCUS: Food Lion."*)

As a large, stable customer group, food retailer energy accounts are in high demand. Utilities and energy marketers are pursuing

Food Lion's Rick Heithold (center) worked with Mike Mozingo (left) of ElectriCities and Don Mitchell of Monroe, N.C., to install generators saving the grocer up to 50 percent on its electric costs.

them for long-term contracts, either through chain-wide contracts or aggregate contracts negotiated through industry associations. At the same time, food retailers also are being targeted for premium services by utilities, consultants, and equipment suppliers, which recognize that companies in the food industry are savvy managers of their energy bills, willing to invest in cost-reduction strategies.

"Given their load requirements, food retailers should get lower prices than a commercial office building, because they have a fair amount of off-peak usage; because of that they are a particularly attractive type of customer," says Richard Card,

Bottom Line

- *Up to 9 percent of the food retailer's total operating budget is spent on energy—much of it off-peak demand.*
- *Operating with margins of just 1 percent to 2 percent, food stores can be devastated by energy cost fluctuations.*
- *Long-term supply contracts—chain-wide or through aggregation—are a budgetary necessity.*

manager of new business development at New York-based AES NewEnergy.

FirstEnergy's DiNicola adds, "The key thing that any energy provider looks at is overall and peak usage. And that's going to have growing importance as the market deregulates and the wholesale side sets the price for the market."

The centralized nature of corporate management in the retail food industry also makes the segment an attractive customer group. "With food chains, there typically is one decision-maker who can make a determination for a large number of users," says DiNicola.

That will become even more prevalent if the industry's trend toward consolidation continues. As of May 2001, the top five grocery chains accounted for nearly 40 percent of the market, according to an Andersen food retailing report. By 2005, Andersen predicts that the top five chains will have 55 percent to 60 percent of the market. Their most likely prey: 125 privately owned independent grocery chains. Faced with stiff competition from expanding superstores and large rivals that have better cost structures, some of these independents will look to combine operations with larger chains.

According to the Washington, D.C.-based Food Marketing Institute, there are nearly 32,000 supermarkets in the United States with annual revenues of at least $2 million. Together, these stores ring up some $385 billion in sales each year, but have profit margins between 1 percent and 1.75 percent. With thin margins, fluctuations in energy costs can be devastating, and predictable power supply contract costs are a budgetary necessity.

Shopping for Supermarkets' Energy Dollars

Grocery stores can be some of the most lucrative energy customers to acquire. But who has the advantage in marketing to them? Do deregulated electricity suppliers have an edge over regulated utilities in serving food retailers whose business networks cross multiple utility service areas, if not multiple regulatory regions? "The supermarket industry is certainly regional, so it helps to have a regional presence at least," says Richard Card, manager of new business development at New York-based AES NewEnergy. "Regulated utilities are strong players, but they seem to operate with a shorter time frame outlook than a company like ours, so we have an advantage where a customer is interested in price stability over a long-term frame."

If you want to acquire the food retailer's business, you better get to know them before you come calling, says Rick Heithold, energy manager for Food Lion, a 1,200-store chain based in Salisbury, N.C. Here are four suggestions on how to market to grocery stores:

Learn their rate structure. The cost environment most food retailers work in is extremely important. A lot of rates are time-of-use rates, which means they change throughout the day. That means a proposed energy-efficiency project or product, if it saves energy during on-peak time, may give a pretty decent return on investment. "In, say, a Duke Power market that saves money off-peak at 2 cents, it's tough to have a decent payback," says Heithold. "Ultimately, you better know the rate structure I'm on in all my markets and what those tariffs look like."

Speak their language. Companies need to understand how grocery stores make their financial decisions. "So many vendors will come in here and give us a proposal that says, 'OK, it has a two-year payback,'" says Heithold. "The problem is, we don't operate on a single payback system; we think in terms of net present value.

"Ideally," he says, "they should do their homework on our rate, understand how we make financial decisions, and craft an analysis that already takes that into account. If they've done all that and the net present value looks extra positive, I'm going to give it a hard look."

Time Your Pitch. Find out whether energy is a top priority for each grocer. Some chains backed off spending capital a few years ago, but have made quick returns on more recent investments such as freezers. They've found that more accessible freezers encourage shoppers to buy more frozen foods, which drives up revenue per square foot. More energy-efficient freezers also provide cost savings to help justify their purchase. But before you pitch food retailers on service or products, know what they're up to—how many stores they're opening and where—and what their needs are.

Look for More Trade Group Aggregations

Given consolidation in the retail food sales market, these large supermarkets tend to be members of growing chains with staff dedicated to energy-use analysis. Depending on the geographic spread of the chain and the corresponding coverage of a food council or other sector association, the chains may opt to participate in aggregate contracts or go it alone. Both aggregate contracts and single-chain contracts are used increasingly in the retail food business, says Jim O'Hern, president of Consensis, a Newark, N.J.-based consulting firm.

Aggregate contracts can be sizable and represent significant savings to the chains, as well as dependable profits for energy suppliers. A contract negotiated by the New Jersey Food Council (NJFC) with KeySpan, for example, saved participating members up to 20 percent on their energy bills—a combined $15 million over the 18-month contract, says Jim Morford, president of the Trenton-based association. NJFC has negotiated a new contract with AES NewEnergy that is expected to become operational with the August 2003 lifting of the rate cap in New Jersey. The council represents over 100 retail food companies operating 1,200 stores.

Similarly, an aggregate contract negotiated by the Ohio Grocers Association with FirstEnergy Solutions is expected to save participating members about 15 percent, once the state's restructuring plan is completed in 2005, says Gerard Behrmanns, OGA's vice president of government relations. His Akron-based association includes

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Educate them. With tight margins and ultra-competitive markets, most grocers already understand a lot about their energy usage. Still, energy managers are always looking for the latest lighting and refrigeration technologies that could help them conserve and save even more. *—Brad Wolverton*

In the evenings, Food Lion dims the T8 energy-saving fluorescent ceiling lights over its produce department.

IN FOCUS: Energy Partners Help Food Lion Save Millions

Publix, Kroger, and A&P are a few dangerous competitors in the East Coast markets that Food Lion serves; these grocers have all modernized store designs to entice shoppers. But nobody strikes fear in the heart of the Salisbury, N.C.-based "low-price leader" like the behemoth from Bentonville, Ark. Because of its vast buying power, Wal-Mart has altered the landscape of food retailing, forcing chains like Food Lion to constantly seek cost-cutting opportunities.

Food retailers are one of the few commercial sectors in the country where aggregate contracts make so much sense.

Since energy costs represent 7 percent to 9 percent of Food Lion's total operating cost, the chain has focused on reducing those costs. Sensing the squeeze on already tight margins—about 2 percent—the chain hired Rick Heithold two years ago to begin tracking energy consumption and benchmarking stores. Last year alone, Heithold encouraged Food Lion's parent company, Brussels-based Del Hayes, to spend over $5 million on technology to improve energy efficiencies. Heithold also implemented an incentive program for maintenance employees to help stores conserve more effectively, and educated store managers on the importance of energy.

All the changes helped Food Lion reduce energy usage by 60 million to 70 million kilowatt-hours last year, saving it "millions of dollars" annually on energy costs, Heithold says. As a result of its energy management, Food Lion was awarded an EPA Energy Star award in March. Here are a few of the most effective strategies Food Lion has implemented for conserving energy and saving money:

Look in the fridge. Like most supermarkets, refrigeration represents the largest segment of the energy bill; for Food Lion, it's 40 percent. A new compressor design, which was added to 38 new Food Lions in 2001 and a few stores that were upgraded, saved Food Lion over 100,000 kWh last year.

But because the real savings in refrigeration cost must come from employees who stock coolers and freezers, Heithold has started a training and communication process to help educate store-level employees. He's identified "repeated practices we need to reduce," and written them up in the company's internal newsletter. A couple of his favorites:

- If a store leaves a freezer door open for an hour, what's it cost and how many groceries do they have to sell to pay for that?
- Did you know that stocking produce incorrectly can disturb the airflow from the refrigeration system?

He's also considering adding an energy training segment for Food Lion's Store Managers' College. "With our margins," he says, "an extra dollar spent on energy could be equivalent to as much as $30 in sales. You've got to put it in sales dollars for people to understand."

Lights, please. Effective lighting is one of the most important merchandising techniques in retail, and most grocery stores keep their fluorescent bulbs burning just as bright in the evening as during the day. Not Food Lion.

"Studies show that peoples' eyes chemically change during the evening. They're more susceptible to light, so they don't need as much light after dark," says Heithold. Food Lion also installed occupancy sensors chain-wide in its 4,000 square-foot back-room areas, and will see a return on that investment within two years.

Request backup. Food Lion has worked with the city of Monroe, N.C. and ElectriCities, a group of 70 municipal electric utilities in North Carolina, to install on-site generators at six of its supermarkets. Ten more are approved, and many more could be on the horizon, given the success so far. "They are reducing our annual electric costs as much as 30 to 50 percent and only running a few hundred hours a year," Heithold says.

Food Lion switches its load to generators primarily during high-demand peak summer hours, says Mike Mozingo, key accounts manager for ElectriCities, Huntersville, N.C. "It only makes sense when the rate the customer is being charged has a peak-demand component in there," he says. "In a Food Lion store, typical demand is about 400 kilowatts, and in some cases they might be paying $12 to $14 per kilowatt. Anytime they can reduce a kilowatt, they'll save $14."

Generators have about a two-year payback, says Don Mitchell, director of energy services for the city of Monroe, N.C., where Food Lion's first generators were installed. "With Food Lion's load and this type of generator, they can save $3,500 a month on their power bill," he says.

Benchmark usage. "The toughest thing for a grocery store is to try to account for all the factors that drive energy—weather, store size, design of store, age of equipment, etc.," Heithold says. That's why Food Lion uses Avista Advantage's Facility IQ system to manage its facility-related costs, he says.

"They process all our bills and we get trend information from them. I can go online and look at a scanned image of a bill or look at reports that analyze our energy bills," Heithold says. "The next step's getting this info to the store level. I want to benchmark stores on a Btu per square-foot basis, show what stores are doing well, and show what stores are out of range."

Food Lion already does that for its maintenance department as part of an "energy awareness plan." The company benchmarks technicians against each other and gives the best-performing ones an "energy bonus," Heithold says. "A technician or contractor might come in to fix a problem and do a quick fix that might sacrifice energy in the long term. We need to fix the problem but balance the company's energy needs, too."

—Brad Wolverton

Food Lion's Heithold inspects an occupancy sensor that turns lights off after 15 minutes of no activity.

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600 retail food companies that operate 2,200 stores. "Our first one-year contract is now up, but we're continuing on a month-to-month basis until we can negotiate new unified rates for smaller users," Behrmanns says.

The retail food industry also has growing regulatory interests that may help drive more aggregate contracts negotiated by trade associations. "Early in the process of negotiating our aggregate contract, we partnered with the retail merchants association to gain standing before the New Jersey Board of Public Utilities," says Morford. "We know that the most expensive electrical service to provide is residential, and politically, the commercial and industrial segments have been forced to pick up a greater percentage of overall costs to mitigate retail costs. While the industrial users always have made themselves heard before the regulators, the commercial users haven't. So in August '03 when rate caps come off, and utilities are looking for cost deferrals to be made up and asking for increases in services and transmission costs, we still need to be at the table."

Food retailers are one of the few commercial sectors in the country for which aggregate contracts make so much sense. In contrast, industrial manufacturers are either large enough to negotiate their own power purchase agreements, or so small that the cost of electricity is a low priority in the business plan, reducing the need to negotiate a group contract. Given their uneven load requirements, industrial company usage patterns also differ substantially from those of the retail food segment, so aggregate contracts are less likely through a trade association.

Other commercial customer groups that are being targeted by electricity suppliers for aggregation include general retailers, institutions like hospitals or universities, and municipalities. However, energy suppliers have not found it necessary to form specific units to pursue the retail food segment. "The fact that there are council organizations makes it easier for us to pursue food retailers. There aren't really a lot of marketers going after supermarkets in New Jersey," says Steve Kass, manager of marketing for AES NewEnergy.

Be Prepared to Offer Efficiency Expertise

Beyond power purchase agreements, food stores are keen participants in the market for energy savings. Stores seeking to optimize their energy usage are installing increasingly sophisticated monitors and controls for temperature and lighting. "The larger stores and chains have availed themselves of monitoring technology to cycle freezers on and off in peak times," says Morford. "And they know when their peak load days will occur."

The federal government also is helping the retail food sector conserve energy through the EPA's Energy Star program, which includes databases for benchmarking typical operations and equipment. Food Lion, a 1,200-store supermarket chain, used the EPA's benchmarking databases to save millions on its energy bills last year, says Heithold. By doing so, Food Lion was one of nine U.S. companies to win a 2002 EPA award for excellence in energy management.

Beyond cost cutting, food retailers are examining more detail in their usage patterns as a tool for negotiating differentiated rates with electricity suppliers. "If a supermarket gets its usage data from a utility on a monthly basis, as opposed to daily data or data in 15-minute increments, then the wholesaler will have to price around that data," says O'Hern. "In real-time monitoring, those pieces get smaller, so prices shrink," he says. "It's a decision of the relative price reduction vs. the investment cost of the equipment. But as the stores [and utilities] move into a more competitive marketplace, real-time monitoring will be a valuable tool for competition."

Chains can use such monitoring and benchmarking to improve usage performance on a store-by-store basis, replacing or upgrading equipment for modular controls. These investments, when paired with longer-term power purchase agreements, also can be scheduled with relatively long amortization timeframes. Among chains engaged in such practices is Lunds Food Holdings, of Edina, Minn., which contracts for services from Minneapolis-based Energy Services Group for both mechanical and electrical system analyses on a 24/7 basis, using audits to implement infrastructure improvements.

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