

BY STEPHEN BENNETT

Technology enables variety in cardlock operations

COMMERCIAL FUELING TRENDS

COMMERCIAL FUELING IS UNDERGOING changes. Web-based transmission of transaction data is growing, while fueling networks continue to expand by adding to their number of fueling locations. Some players are also broadening their scope, adding to the variety of products and services they offer. Pacific Pride, for example, is helping its operators phase in diesel exhaust fluid as an offering. Commercial Fueling Network (CFN) has tied its FleetWide card to a lodgings card.

But the main appeal of the FleetWide card, as simply stated by Hughes, is this: "It offers more than ten times the fueling power of what we call our traditional card," which provides access to 3,000 CFN locations.

"We believe that when a fleet travels outside the immediate footprint of the CFN network they have had no other option except to pull another method of payment out, and we think that the FleetWide card can resolve that," Hughes said. The FleetWide card provides access to the CFN locations plus access to the Fuelman network, another FleetCor division, which consists of close to 40,000 fueling locations.

"Issuing the FleetWide card to fleets will mean many of them can take the other card out-of-wallet," Hughes said.

And acceptance of the Fuelman and FleetWide cards grew wider still in November, when all 8,500 Chevron and Texaco locations in the U.S. also began accepting the fleet cards.

"Through our brand wide acceptance program at Chevron and Texaco stations, the Fuelman and FleetWide fleet fuel cards will offer even greater value for customers by making it more convenient for drivers to find acceptance sites," Bill Schmit, FleetCor's president, said in a statement announcing the program. "This broadens the opportunity for businesses to manage their fleet fueling expenses and provides added options for drivers on the road."

Higher-powered information technology is being implemented more widely and at a more rapid pace, said Kevin DeVinney, director of dispensers and fleet systems for Gilbarco Veeder-Root.

"One of the big [trends] we're seeing with cardlock and commercial fueling in general is communications technology"—the advent of high-speed, real-time transmission of data via the Internet, DeVinney said.



A school bus at a fueling site equipped with Gilbarco's Gasboy system

Adding the lodging dimension to the FleetWide card became possible after CFN's parent company, FleetCor, acquired Corporate Lodging Consultants last year. Corporate Lodging's CheckInn direct card provides discounted room rates at mid scale to economy hotel chains—useful to fleets that must send crews into the field for overnight, or longer, stints. Michael Hughes, CFN's director of products, said discounts on rooms typically range from 20 percent to 40 percent off the lowest published rate. Lodging transactions flow through the system in the same way fueling transactions do.

Real-time information about transactions needs to be distributed from cardlock locations back to a central office so personnel can use it to do billing promptly, DeVinney said. "It's something that the retail market has seen for several years now, but the commercial market has been slow to adopt these types of technologies," he said. More and more players in the commercial market also now want that information in real time, he said.

"Historically in the commercial marketplace the systems that customers were used to using were standalone systems," DeVinney said. "They would use a piece of software that would pull the information on a daily basis. That's fine, except there would be modem problems, and phone problems."

With high-speed network capabilities provided by Gilbarco Veeder-Root's Web-based Gasboy Plus Series Fleet Management Systems, DeVinney said, operators are able to manage a network of facilities in real-time. "Within a minute or so after a transaction is completed at the cardlock, the details about it are at your home office," he said. "So you know right away what's just happened. That information, in real-time, is much more valuable."

Users of the systems include local governments, schools districts, companies such as FedEx, J.B. Hunt and Con-way—and jobbers, DeVinney said. They have in common home-based fueling, DeVinney noted. The Gasboy systems help them with wet stock management, fueling management, access control and the like.

"We've got different types of enclosures and configurations based on the architecture at a site," DeVinney said. At the center of the Gasboy system is a Web-based site controller, which functions as an access terminal, DeVinney explained. It has a card swipe, a key pad, and the capability to grant access based on contact lists or identification tags.

More pressing than ever—"as fuel prices continually inch up," DeVinney said—is ensuring that fuel ends up only in authorized vehicles. The Gasboy setup incorporates a wireless vehicle identification, authorization and control system that uses radio frequency identification (RFID). Tamper-resistant components are designed to ensure that the nozzle is inserted into an authorized vehicle before fueling. A module on the authorized vehicle is designed to provide accurate odometer readings and other information directly from the vehicle bus, eliminating human error, according to product literature published by the manufacturer.

"This is a technology that has evolved," DeVinney said. The completely wireless solution includes a RFID ring installed around the fuel inlet of the vehicle and a reader on the nozzle; they work together to automatically identify the vehicle and the type of fuel it requires. "As long as that nozzle is in that tank it will fuel," DeVinney said, "but if you try to take it out and try to fuel another vehicle it will not allow fueling to continue."

Earlier versions involved wiring up the vehicle, which was labor-intensive, among other drawbacks. Of the wireless version DeVinney said, "What's nice about it is that it literally takes less than ten minutes to put that ring on the vehicle, program it up and you can fuel," DeVinney said. "It's a much easier installation, the price point is much better and it's a cleaner way to go."

In October, OPW Fuel Management Systems introduced PetroLink, a wireless fuel control system. The introduction came after five implementations of the system each performed successfully for a year in their respective environments, Jason Kaple, director of marketing and new product development, said. One of the users was, and is, the fleet maintenance department of the city of Cedar Falls, Iowa.

PetroLink monitors vehicle identity, mileage and other fueling information exclusively via RFID (radio frequency identification) technology. It features a nozzle reader that communicates with a vehicle RFID component, and a wireless control unit that oversees system processes and connects to a fueling station's computer.

The authorization process is automated, and the system is designed to prevent tampering. For example the system includes an RFID tag on each vehicle's fuel intake pipe: "If anyone tries to pull the ring off a vehicle and put it on a personal vehicle, a mechanism destroys the RFID tag," Kaple said. The tag "essentially is a stick-and-go tag," Kaple said, making installation quick and easy. There are specialized tags for heavy trucks, such as Peterbilt, Kenworth and Freightliner, as well as tags for non-standard fill necks. Indeed, any equipment—including storage tanks, gas cans and barrels—can be fitted with a tag, Kaple said, since the tags do not need to be wired to a vehicle battery.

For operators who already have earlier OPW fuel management systems in place, upgrading to the new system incurs a limited cost, Kaple said, because PetroLink works with most existing OPW components.

Rich Klima, senior project manager for OPW Fuel Management Systems, pointed out that fleet operators who want to implement PetroLink for a portion of their fleet can do so, while continuing to use cards or keys for other fleet vehicles.

In a further technology development, OPW is using a new software platform, OPW Phoenix SQL, a Microsoft SQL server. A benefit is that installation and use of the OPW system is simplified. Before, Kaple explained, an operator had to install the hardware to poll information from the fuel site controller on a local PC. With the new, server-based setup running the software, commercial fueling operators can manage information with nothing more than a browser.

"They can use nothing more than an Internet Explorer browser to go in and manage their data," Kaple said.

The company has also configured the system so that its fuel site controller, the FSC 3000, can now be integrated into the fuel island terminal, eliminating the need for a hardwire connection to the main building. Wireless technology such as Bluetooth or cellular is used to collect data from the fuel site controller and deliver it to the corporate network. (Kaple also noted that the FSC 3000 complies with the standards of the Payment Card Industry (PCI) Security Standards Council.)

The consistent look of cardlock fueling locations tends to disguise these and other recent changes in commercial fueling.

"The experience to the end user frequently doesn't seem to change dramatically—at least at the site, but there have been some interesting developments just in the last year," said Greg Iverson, president of Pacific Pride Services, a subsidiary of Wright Express Corp.

"We created an iPhone application for drivers in the field so they can find the closest locations," Iverson said, and in the process the app can help lower costs by shortening transit time and driver time, and decreasing vehicle mileage. It also can save fleets the cost of having to buy GPS devices, Iverson pointed out.

The iPhone application also presents a quick and cost-effective way for petroleum marketers to create and maintain a Pacific Pride branded presence, by promoting services and special offers to drivers.

Another advance is in billing software available to the independent fuel marketers who own Pacific Pride cardlock sites. "The billing software that they use to bill the fleets has become remarkably more sophisticated," Iverson said. "It has to be because there are so many emerging tax laws that have to be integrated into bills. Fleets have to report taxes differently, they have to manage them differently." (Among companies that provide billing software are AutoFueling Systems and DM2 Software.)

Pacific Pride marketers tend to be local or regional fleets, Iverson said, including city, county and state governments, utility companies, sand and gravel haulers and refuse collection companies.

A trend and a challenge that has cropped up is that a number of national and large regional fleets are taking away autonomy from local offices, decreeing, for example, that an entire fleet must be on one card platform. "The way we've dealt with that is we accept virtually the entire deck of over-the-road truck cards," Iverson said. "So if a large company tells the local branch office it has no choice any more they can still come to Pacific Pride cardlock. We still have a value to those local businesses."

Pacific Pride is supporting the offering of diesel exhaust fluid (DEF) by its cardlock operators. DEF is used in new model trucks equipped with selective catalytic reduction systems to reduce oxides of nitrogen emissions.

"We introduced DEF solutions and several of our marketers are now dispensing it," Iverson said, including PetroCard.

Nationally, distribution of DEF is in its fledgling stage, but Iverson said, "I believe the demand will go up and fleets are likely to want to get DEF and diesel at the same place." Pacific Pride has worked with at least one DEF supplier to ease financing for the purchase and installation of dispensing equipment for its cardlock marketers, Iverson said.

Pape Group, Eugene, Ore., a capital equipment dealer, uses PetroCard, which is a Pacific Pride cardlock operator. Pape Group consists of multiple companies providing a range of equipment, including Kenworth trucks, John Deere construction and forestry equipment and a line of forklifts. Pape has a fleet of some 750 vehicles, including Class 8 tractors and pickup trucks, and about 100 lowboy trailers, said Lance Keith, fleet manager.

"We've got a large number of service trucks of various sizes so that our customers don't have to bring stuff back to us to be fixed—we'll go to them," Keith said. A sales force drives pickup trucks that are also part of the fleet. The Class 8 tractors with lowboys are used to deliver and pick up equipment that Pape rents.

With PetroCard, Keith said, "We're able to negotiate a lower price as opposed to retail. We're able to control limits better. With cardlock cards you can be very specific on the type of limits you set. I can set per transaction limits, daily limits, and [specify] type of fuel. With retail cards you generally don't have that much flexibility."

Keith added that he uses fuel transaction data to compile "location-specific" reports that he sends to managers of outlying as a means of managing monthly fuel purchases. **NPN**