

Key card-based energy management becoming more commonplace

By **BRUCE SERLEN**

NEW YORK—Having successfully tested its wireless energy management system in individual Wyndham, Hilton, and Le Meridien hotels, among others, Magnum Energy Solutions is completing its first installation this month at the Penn Club in New York.

A critical component of Magnum's Venergy product is the electronic key card issued to guests at the front desk when they check in. When they enter the guestroom, they insert the key card into its dock located on the wall by the front door. "That alerts the system that the room is occupied. When guests leave the room, they take the key card with them, automatically shutting off the television and any lights controlled by the system, while also setting the in-room HVAC system

back to its preset mode," explained Magnum President Josh Felber.

In its beta tests, Magnum has seen

seasonality of the test, according to the company. In the case of the 293-room Wyndham hotel, which is lo-

there's no maintenance required replacing the batteries," Felber noted.

An unexpected benefit is that using the key card makes the guest feel a part of the energy-saving process. "Participation has been a crucial part of it," Giorgi said. "There's been a high level of acceptance. People feel they're doing something good."

The product is based on wireless technology developed by the German company Siemens AG. Siemens spun off the technology into a separate division called EnOcean in 2001.

Although the electronic key card is being used to foster energy conservation, it retains all its usual security functionality. In fact, it takes on

added functionality. "Hotels can use our key card to set up multiple access levels. Guests still have their usual key card, but the housekeeping staff would have cards with limited access," Giorgi said.

Housekeeping oversight

Housekeeper keys, for example, would only access the lighting in the room. The HVAC would stay in the unoccupied mode, while the television could not be turned on, ensuring that associates weren't taking unauthorized breaks to watch a favorite program.

Venergy's front-end software can be integrated into any property management system, Giorgi pointed out. "With the housekeeping staff utilizing that different key card, it allows the hotel to track and monitor how long it takes to clean individual rooms," he added. "As a result, the hotel can keep a running tab of its housekeeping efficiency."

As Magnum gears up for a wave of Venergy installations in 2010, Giorgi, Felber, and their team are fine tuning the installation process in existing hotels, minimizing any disruption to guests. "Installation usually calls for the hotel blocking off a certain number of rooms at a time. We ship the products all tied together, so there's no programming needed on site. It's basically plug-and-play," explained Magnum's vp of sales, Craig Oplaich.

The key card dock is also completely wireless. "It goes right inside the front door of the room, close to where the foyer light switch is, so we don't have to do any reconstruction of the room. It screws right into the wall," Oplaich added.

Components of Magnum Energy Solutions' Venergy product



energy savings range from roughly 28% to 59%, depending on the type and location of the hotel as well as

cated in New England, the property's owner was on track to see a 33% saving in energy costs, which would amount to more than \$73,000 on an annual basis.

Competing products rely on motion sensors to achieve energy savings. Venergy employs motion sensors as well, but its primary tool is the key card. "The technology had always been motion sensor-based, but we're starting to see a shift in the acceptance of the key card in the U.S.," noted Magnum CEO Mike Giorgi. "European travelers have long been familiar with it."

Magnum has also seen higher energy savings with the key card compared with a strictly motion sensor approach. "The motion sensor is time sensitive, so if it doesn't detect movement, it will start to set back the thermostat one degree every half hour," Giorgi explained. "By contrast, benefits of a key card system are immediate. Once a guest removes the card, it automatically sets the thermostat to the unoccupied mode."

Invisible changes

The difference between occupied and unoccupied mode is typically four to five degrees. Consequently, the difference isn't necessarily noticeable to the guest and it only takes a few minutes to reheat or re-cool a room.

Aside from conserving energy, Venergy is environmentally friendly in that it doesn't require batteries, as do first-generation competing products, according to Magnum. "It saves all those batteries ending up in the landfill plus labor costs are lower since