

# Retailer Conserves Energy *with* Proactive Monitoring

A leading home furnishings retailer wanted to know whether monitoring energy consumption at its older stores was warranted given the upfront capital the project would require. Deeply committed to energy efficiency, the company had already begun installing the necessary technology in newly constructed stores, and Prenova was monitoring these sites. So the Corporate Energy Director was interested to see if older stores would benefit from this solution as well.

To get the nod, Proactive Monitoring would need to reduce energy consumption by at least 8.5%. The retailer chose to conduct a test to determine whether return on investment would be great enough to proceed with a full rollout.

## Choosing a Target

The project began with an analysis of the retailer's portfolio to identify stores with higher than normal energy consumption. Using utility bill data, stores were segmented into four categories, from most efficient to least. The retailer then chose to evaluate Remote Monitoring at one of the inefficient sites.

Prenova developed a specification for remote monitoring equipment and oversaw installation. During the process, on-site assets such as HVAC and lighting systems were connected. Corporate standards determined when these systems would be turned on and off each day and what temperature the store would be kept at.

## Monitoring the System

Prenova also recommended installation of an Interval Data Recorder, or IDR, to capture energy meter readings. This made it possible to monitor consumption on a daily basis. Normally, usage data is only available after-the-fact, when a utility bill arrives. As a result, it can take weeks to identify abnormal consumption patterns. Real-time monitoring would prove critical.

With the necessary technology installed, Prenova began monitoring system performance. At first, IDR readings showed consumption was trending

below that of the previous year. But then there was a spike in demand. Energy use remained high for several days and Prenova technicians didn't believe weather conditions caused this sudden change. So they worked with the retailer to identify the problem.



During installation of the remote monitoring equipment, one of the main HVAC units was offline. Because the system wasn't operational at the time, it wasn't being monitored. When a technician arrived onsite later that month, he reactivated the unit without notifying the customer. As a result, it was now running 24 hours a day – even when the store was closed.

Once the problem was identified, it was quickly corrected. Without installation and monitoring of the IDR, however, this sudden increase in consumption may have gone unnoticed.

## Exceeding Project Goals

Despite issues with the HVAC unit, energy consumption for the first month of the trial was down almost seven percent compared to the previous year. While an improvement, this result was below target. With the problem corrected, however, energy usage dropped significantly. The next month saw a 22% reduction in energy use, while the overall result for the project was a 15.6% savings, far exceeding project goals.

For more information on Proactive Monitoring and other Prenova solutions visit: [www.prenova.com](http://www.prenova.com).