The benefits of metering and web-based energy management systems in commercial buildings

July 03, 2014 - Owners Developers & Managers

In light of today's complex business and energy environment, complicated lease language, and complex allocation models, managing utility costs and energy consumption can be difficult, time consuming, and costly. However, by implementing a web-based energy management system, tied to a robust metering system, organizations can achieve significant cost and energy savings. These systems allow you to track and quantify energy use, streamline meter data collection, and accelerate cost recovery, while providing customized energy tenant invoicing and reporting options.

Having a reliable metering system is the first step when developing a strategic approach to managing energy. This became critical for a building owner in Brooklyn, New York after deciding to convert their 19-building, 1000+ unit complex from rent stabilized apartments to condominiums. The majority owner required a solution to monitor energy use and accurately bill and invoice tenants for their Con Edison supplied energy use. Energy costs were previously allocated into tenants' fixed monthly rent, rather than billing for actual energy consumed. Although the complex had an existing sub-metering system in place at some of the buildings, the system was outdated and unreliable.

After new wireless mesh meters were installed in all of the units and upgrades were made to the existing sub-meter infrastructure, usage data was wirelessly transferred to servers and made accessible via SourceOne's online energy management system, EMsys. By implementing this solution, the majority owner was able to accurately monitor and bill tenant usage, accelerate cost recovery, strengthen revenue streams and more accurately forecast and budget annual energy spend.

They were also able to provide tenants with monthly invoices comprised of actual energy usage, facilitating better cost allocation and transparency. By billing tenants based on actual usage, occupants were motivated to reduce their energy use, resulting in a 20% aggregate reduction in energy consumption.

Web-based energy management systems provide organizations with a collection of tools to optimize energy use, accelerate energy cost recovery, and base forecasting and planning on precise consumption data. By implementing a reliable metering and energy management system, owners can significantly reduce their operating expenses and improve the financial performance of their buildings.

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