verifEye™
Smart Submetering Solutions

Project Case Study
Large Public Housing Authority
Northeastern U.S.

LEVITON®

Leviton VerifEye™ Submetering System helps one of the nation's largest subsidized housing authorities track energy use, control operating costs and promote responsible utility consumption among tenants.

Affordable Housing Agency Finds Spiraling Energy Costs Increasingly Less Affordable

With an annual operating budget of $300 million, one of the nation's largest public housing authorities serves over 20,000 people residing within the portfolio of family communities, mixed population developments and senior housing facilities it administers. Soaring energy costs combined with this Agency's inability to monitor residents' electrical consumption made managing its affordable housing developments increasingly challenging.

By redirecting responsibility for energy use to its tenants, one of the nation's largest public housing authorities has reduced its energy costs and become a more profitable, socially-responsible organization.

The Challenges of Master-Metering in Public Housing Developments

Typical of public housing developments, the properties managed by this northeastern public housing agency were "master-metered," with each of its more than 400 buildings using a single utility company meter to measure electrical usage for all tenants in its buildings. This posed significant challenges for the Agency.

First, the Agency had no way to accurately measure how much electricity individual residents were using and therefore had no way to encourage them to conserve energy. Master-metering of its buildings also made it difficult for the Agency to forecast its monthly electrical costs.

In addition, while some residents regularly used more electricity than their monthly allowance, others used less and wound up having to "subsidize" residents who were less conscientious. The Agency sought to add transparency and fairness to the way in which it accounted for residents' electrical usage and promote energy-conservation practices among residents to reduce needless waste and costs.

Leviton VerifEye Mini Metering Solution Makes Managing Energy Use a Snap

The Agency achieved its energy management objectives simply and cost effectively by installing Leviton's VerifEye revenue-grade Mini Meters. To date, roughly one-third of its units across 423 separate buildings have been retrofitted with the low-profile, easy-to-install VerifEye Mini Meters.

The high accuracy of the VerifEye Mini Meters meets the Agency's tenant billing needs, and Leviton's ModHopper-based wireless data acquisition system enable it to access the electrical consumption data required to redirect accountability for usage to residents.

The Bottom Line: Fair Allocation of Energy Costs Among Tenants

Today, thanks to Leviton's robust submetering system, the Housing Agency has a transparent way to measure energy

verifEye™
Smart Submetering Solutions

Project Case Study
Large Public Housing Authority
Northeastern U.S.

LEVITON®

usage for each of its submetered residential units and it can allocate energy costs fairly among those residents.

In addition, the subsequent integration of the Agency's gas and water meters was effortlessly handled by the superior expansion capability of VerifEye's system architecture.

As a result of the installation, one of the nation's largest public housing authorities has in place a system that will enable it to reduce residents' energy consumption, ultimately resulting in a more sustainable portfolio of properties with stabilized energy costs for it.

In addition, residents will benefit from the sense of fairness and equitable policies the submetering program delivers and have a real incentive to reduce their energy use, knowing that they have a social and financial responsibility to conserve where they can.

VerifEye Metering Solution

Data communication was accomplished at the Agency through the installation of Leviton's Energy Monitoring Hub, ModHopper Wireless Transceivers and Mini Meters, which combined to form a robust, reliable and accurate utility billing solution.

VerifEye Energy Monitoring Hub

- Pushes or pulls meter data to energy dashboards, kiosks and software applications
- Provides submetering for electrical, gas, steam and other utility usage applications
- Measures and verifies (M&V) usage data
- Easily integrates with third-party billing companies or site software solutions
- Provides access to energy information from local or remote sites

VerifEye ModHopper

- Designed for wireless metering applications, provides encrypted communications using 256-bit AES, and FIPS-197 certified
- Provides reliable, constant two-way communication and packet verification
- Automatically configures when device is powered
- Features self-healing, self-optimizing wireless "mesh" network

- Uses frequency-hopping, spread spectrum (FHSS) signal transmission
- LEDs on the device provide visual display of signal strength
- Features multiple independent network capability

VerifEye Mini Meter

- Measures electrical consumption for individual resident dwellings
- Certified to all applicable ANSI C12.1 standards
- Equipped with an isolated pulse output for automated meter reading
- Available in NEMA 4X indoor/outdoor individual meter enclosures and Multiple Meter Units (MMUs) from 2 to 19 meters
- Utilizes revenue-grade 0.3 accuracy and solid core current transformers (CTs) that conform to applicable ANSI requirements
- UL and cUL Listed
- Limited Ten-Year Warranty
- Complies with state-level Public Service Commission requirements