Metering program helps Army reduce energy costs

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Sometimes saving energy is as simple as installing a meter.

In the past, the Army did not have meters on buildings to measure electricity or natural gas use like private homes; the installation received one big energy bill that was not broken down by individual buildings.


Energy-use studies have shown that by metering individual buildings, installations are able to identify which buildings are the biggest energy hogs, and take appropriate measures to reduce energy consumption.

The Army Metering Program is installing advanced meters with remote reporting capability to a central database accessible via the Engineering Knowledge Online website. This will provide Army installations the capability to measure and track electricity, water, natural gas and steam consumption at the facility level. It is one way the Army is working to meet established goals for energy reduction.

The Army also requires the installation of advanced utility meters on all military construction projects and for renovation or energy projects with a programmed cost of $230,000 or more that include electrical, natural gas, water or steam components.

The Army Engineering and Support Center in Huntsville, Ala., is responsible for managing the execution of the Army metering and other energy programs for the Office of the Assistant Chief of Staff for Installation Management and the Installation Management Command.

Installation of electric advanced meters began in fiscal 2008 on facilities that were deemed cost effective to meter based upon the Office of the Secretary of Defense criteria, which says that buildings that consume an estimated $25,000 per year in electrical costs are economically justified for metering.

For Army planning and budgeting purposes, the $35,000 per year electrical cost equates to 29,000 square feet and larger buildings.

"This translates to approximately 0,700 Army, Army Reserve and Army National Guard facilities to be metered at more than 400 sites worldwide," said Lawson "Stan" Lee, chief of the Facility Support Division at the Huntsville Center. "Electricity, natural gas, water, and steam or high temperature water will all be metered. To determine the exact number of meters required, all installations are currently being surveyed in phases. The anticipated scope is a total of 13,000 advanced meters."

As of July, the Huntsville Center has awarded meter installation contracts for 36 Army installations. Approximately 3,000 electric and natural gas meters have been installed. By the end of fiscal 2009, the Army will have installed advanced electric meters on 47 percent of its facilities that are economically justified for metering, according to David Purcell, Army energy program manager for ACSM's Facilities and Policy Division. This amounts to 3,151 out of 6,700 required by the end of fiscal year '12.

In December 2008, Huntsville Center awarded the contract for the Meter Data Management System that will receive meter readings from across the Army.