Technical Article



Electric Metering in Federal Buildings

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Summary: The purpose of this article is to define metering requirements for federal buildings.

Information:

The Energy Policy Act of 2005 (EPAct 2005), Section 103, requires all federal agencies to install metering and advanced metering where found to be cost-effective, according to guidelines developed by the Department of Energy (DOE), in consultation with a number of interest groups. DOE has met with representatives from the metering industry, the utility industry, energy services industry, energy efficiency industry, energy efficiency advocacy organizations, national laboratories, universities, and federal facility managers to develop the guidelines set forth in this document.

There were several areas in the language of Section 103 that required some level of clarification prior to finalizing these guidelines, as follows:

- DOE has determined that Section 103 pertains to ELECTRIC metering only.
- Section 103 applies to ALL electric metering, standard and advanced, at all federal buildings and subsystems, based on cost-effectiveness and practicability.
- The definition of "buildings," for the purposes of Section 103, should be considered the same as for annual energy reporting, and will also include industrial or process applications.
- "Maximum extent practicable" includes:
 - installation of metering and advanced metering wherever feasible;
 - the capability of providing useful data and information that leads to improved energy management practices or operations and maintenance improvements resulting in energy and/or energy-related cost savings;
 - the sensible application of metering technology; and
 - cost-effectiveness, which is based on a 10-year simple payback, assuming annual savings of at least 2%, or higher depending on the use of the metered data to implement energy savings and other cost savings measures.

Requirements for federal agencies:

- Agencies must submit their implementation plan by August 3, 2006. This is 6 months after DOE guidance is issued. Section 8 of these guidelines provides a template for agencies to use in developing their metering plans, and to be in compliance with the requirements of EPAct.
- Agencies are required to install standard or advanced meters at all federal buildings to the maximum extent practicable, by October 1, 2012.
- Agencies are required to report on their progress as part of their annual input to the DOE Report to Congress beginning with FY 2007. Progress will be measured based on the number of buildings metered and the percent of agency electricity consumption represented by those buildings. Starting with FY 2008, agencies will be required to report progress on both buildings with standard meters and buildings with advanced meters.

Contact: If you have any questions or concerns, please call LMS technical support at (800) 959-6004.