

C&I 2019 Energy Efficiency Program Guidelines

Building Automation System/Energy Management System Upgrades

Following is the minimum information required for energy conservation measures (ECM's) related to building controls. Projects applying for incentives related to building controls strategies must comply with all applicable requirements listed herein.

The DMP Building Management System Estimator Tool is an Excel-based tool previously used by the Demand Management Program. This tool was used to estimate potential energy savings for projects in that program and relied heavily on post install measurement and verification (M&V) to claim measured energy savings. Because it relies heavily on M&V, this tool is not an acceptable method of estimating energy savings for controls ECMs in the C&I program.

Required Project Documentation

All projects must provide the following documentation.

1. A detailed scope of work that contains all equipment in the proposed measure and includes existing system operation.
 - a. Provide the existing system operation, including unit name, capacity, electrical power requirements, hours of operation, etc.
 - b. Indicate the extent of work to be done. For example, does the scope of work consist of only software/programming upgrades, installation of VFD's or control sensors?
 - c. Provide a list of all new or modified control points
 - d. Provide both material and labor costs to implement the proposed control strategies
2. Mechanical Equipment Schedule
 - a. Schedule should identify mechanical equipment controlled, including Air Handlers, Chillers, Pumps, Cooling Towers, and Heat Exchangers, and associated control parameters, such as capacities, flow rates, and set points.
 - b. This is to properly determine baseline of equipment
3. The control sequence of operation from the controls vendor describing controlled parameters, such as set point ranges, etc.
4. An engineering analysis of the estimated energy savings based on implementation of the proposed measure. Use the existing system operation as the baseline.
 - a. In cases where a project includes multiple ECMs, the engineering analysis must ensure that energy savings impacts due to each measure do not overlap. For example, if one measure is time of day shutdown, and the next measure is static pressure reset, the baseline energy consumption for the static pressure reset measure shall use the reduced hours of time of day shutdown.