

INDUSTRIAL AND PROCESS EFFICIENCY PROGRAM: Technical Guidance Document for Measurement & Verification

This document details the Industrial and Process Efficiency (IPE) Program's requirements for the Measurement & Verification (M&V) of energy savings, effective May 31, 2013. General questions regarding these guidelines should be directed to IPERManager@nyserdera.ny.gov. Project-specific questions should be directed to the assigned NYSERDA project manager.

When is M&V performed?

M&V is required for projects whose annual energy savings (as estimated during the engineering analysis review) meet or exceed the thresholds presented in the table below. Projects are defined as "custom" when they involve production increases (i.e., changes to the specific energy of a product); use process-specific equipment (for example, laser cutters or packaging equipment); involve waste heat recovery; all data center measures; or are not standard improvements.

Project Type	M&V Threshold	
	Electricity (kWh/year)	Natural Gas (MMBtu/year)
Lighting—LED	1,000,000	10,000
Lighting—all other technologies	none required	
Standard improvements to building systems: <ul style="list-style-type: none"> • motors and VFDs • vacuum system improvements • pumping system improvements • HVAC improvements • compressed air improvements 	1,000,000	
Custom	500,000	

At NYSERDA's discretion, M&V may be imposed on a project falling below these thresholds. For example, if the technical reviewer has reason to believe that there is significant variation in a standard building system, M&V may be conducted.





What should M&V consist of?

M&V procedures are chosen by the technical reviewer on a project-by-project basis, subject to NYSERDA approval. Data collection should persist for a minimum of three months and may extend for as long as two years. M&V should provide the reviewer with sufficient data to confidently calculate as-installed project savings.

Other Information

- Projects with M&V plans in place prior to May 31, 2013 will be administered under the previous program guidelines. All other projects will be subject to the requirements listed above.
- The Existing Facilities Program will have different M&V requirements. The guidelines shown above are specific to the IPE Program.
- Short-term monitoring may be performed as needed at the Engineering Analysis and/or Post-Installation Review stage to improve the accuracy of the energy savings estimate, regardless of the kWh savings.
- Bundled projects that are above the M&V guidelines as a whole should be reviewed with the NYSERDA project manager to determine which measures require M&V.