

Initial Measurement & Verification Plan Template

This document serves as a template for an Initial Measurement & Verification (M&V) Plan. At a minimum, PJM expects that the following items outlined in this template be included in an Initial M&V Plan. See Manual 18B for more details on developing an acceptable M&V Plan.

I. Executive Summary

A. Submission Date

B. Company Name

C. Company Address and Contact Information

D. Type(s) of Energy Efficiency (EE) Installation(s)

This Section must include:

- *A list of the types of EE installation(s) included in the plan.*
- *A statement attesting that the EE installation(s) meets the EE Resource definition as provided in Section 1.1 of Manual 18B.*

E. Applicable Energy Efficiency or Performance Standards

This Section must include for each EE installation type:

- *The building codes, appliance standards, or other relevant standards that are in effect at the time of the installation, as known at the time of commitment for each type of EE installation*
- *Documentation that demonstrates that the EE installation(s) exceeds the standards.*

F. Anticipated Nominated EE Value by EE installation type, installation period, and location

This Section must include:

- *Documentation of nominated value of the demand reduction (i.e., Nominated EE Value) by installation type, installation period, and transmission zone (or sub-zone, if plan to model and offer EE Resource in DPL South or PS North LDA) using the “Nominated EE Template” available at <http://www.pjm.com/markets-and-operations/rpm/~media/markets-ops/rpm/rpm-auction-info/nominated-ee-value-template.ashx>.*

II. Schedule

A. Timeline for EE installations and M&V activities

This Section must include for each EE installation type:

- *The actual installation start and completion dates for completed, existing EE installations and planned installation start and completion dates for future, planned EE installations*
- *A proposed timeline for all M&V activities, including:*
 - *Post-installation verification activities*
 - *Actual measurement activities*

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III. Equipment Specifications and Documentation

This Section must include for each EE Installation type:

- *A record of the equipment to be replaced or modified (along with the new replacement equipment). For large EE installations at multiple sites, the equipment should be tracked in a program tracking system/spreadsheet.*

IV. Measurement & Verification Approach

A. Measurement & Verification Methodology

This section must include for each EE installation type:

- *The International Measurement and Verification Protocol (IPMVP) Option (as referenced in PJM Manual 18B, Section 7) that will be used to accomplish the M&V work. Per Section 7.5 of Manual 18B, if an alternative M&V methodology is being proposed, the EE Resource Provider must demonstrate that the alternative method will be equivalent to one of the accepted methodologies and justify the need to deviate from the acceptable methodologies.*

B. Measurement Activity Description

This section must include for each EE installation type:

- *Description of the parameters or variables that will be measured*
- *Identification of the equipment to be used in measurement activities.*
- *A statement attesting that the measurement equipment meets the requirements of Section 12 of Manual 18B.*
- *A discussion of the monitoring interval (i.e., the sample rate of the monitoring equipment and the time period (time of year and duration) of the monitoring period.*
- *A discussion of sampling size and how sampling meets PJM's statistical accuracy and precision requirement (detailed in Manual 18B, Section 9) of no worse than one-tailed 90% confidence level (equivalent to two-tailed 80% confidence level) and 10% relative precision*

C. Verification Activity Description

This section must include for each EE installation type:

- *Description of verification method that will be used (e.g., surveys, on-site inspections, spot measurements, and short-term metering) to provide evidence that the equipment/systems were installed and still operating.*
- *A discussion of sampling size and how sampling meets PJM's statistical accuracy and precision requirement (detailed in Manual 18B, Section 9) of no worse than one-tailed 90% confidence level (equivalent to two-tailed 80% confidence level) and 10% relative precision*

D. Nominated EE Value Calculation

This section must include for each EE installation type:

- *The equation that is used to calculate the Nominated EE Value*
- *An indication of whether or not the "Standard" Baseline or "Current Load" Baseline was used to calculate the Nominated EE Value.*
 - *Per Section 8.1 of Manual 18B, the EE Resource Provider must provide justification for using the "Current Load" baseline condition.*

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This section should be accompanied by demand savings summary spreadsheets that clearly demonstrate how the Nominated EE Values by installation type, installation period, and zone (sub-zone) will be calculated. In the case where the exact quantity of EE installations are not known, the estimates that are used to calculate the total Nominated EE value by EE installation type, installation period, and zone(sub-zone) should be provided. These summary spreadsheets may also serve as the basis for developing the Post Installation M&V Reports.