



## Verification Incentive

### Available to Customers Participating in Paths 1 and 2

The Sponsors of Mass Save offer a 50% cost share up to \$10,000 for supplemental energy use verification as it is defined below. The purpose of this scope is to assist building owners/operators, contractors, and design teams in verifying that the building continues to function optimally during its first year of occupancy. The building must have undergone functional testing prior to this scope.

#### Eligibility

- All projects participating under Path 1 of the C&I New Construction Program are eligible for this additional incentive.
- Projects participating under Path 2 of the C&I New Construction Program: Owner/developer must be planning to commission the building to levels equivalent to the LEED BD&C Version 4 Fundamental Commissioning and Verification Prerequisite.
- All C&I New Construction projects: The project must comply with the requirements of ASHRAE 90.1-2016, para. 8.4.3, related to metering and data storage capacity requirements.

#### Verification Team

The owner/developer must form a Verification Team to complete the scope of work referenced below. The team must include:

- The owner or designated representative
- An “energy verifier”
- A Registered Architect or a Professional Engineer (PE) who has experience looking at trend and metering data as well as an understanding of energy model reports and outputs.

The Verification Team will need to coordinate with the design and construction teams as necessary to complete the verification scope of work. This work will include engagement with the commissioning agent, MEP firm, architect, general contractor and/or controls contractor, and building operator.

#### Energy Verifier

The energy verifier may be any of the following: the project’s commissioning agent, the project’s MEP firm, or an MBCx firm with analysts who can submit comprehensive savings calculations and analysis.

#### Verification Period

The Verification Period is defined as the 12-month period during which the Verification Team completes the scope of work below. The Verification Period begins when the building becomes occupied and once any issues reported from the commissioning agent’s initial functional testing have been substantially resolved.





## Owner/Developer Obligations

The owner/developer is expected to resolve issues found during verification either through workmanship warranties or other means. In addition, the owner/developer must ensure the verification team is provided with:

- The design team's energy model, output files and report (for Path 1 projects) or the Mass Save TA vendor's energy model, output files and report (for Path 2 projects). The building's predicted Energy Use Intensity (EUI) and monthly energy usage for each end-use should be clearly shown.
- Commissioning reports
- The Mass Save Minimum Requirements Document (MRD)
- Monthly energy bills for all fuels following the completion of functional testing
- Following the completion of functional testing, monthly sub-metered electric usage from the equipment installed to comply with ASHRAE 90.1-2016 Section 8.4.3
- Monthly usage and generation from onsite generation following the completion of functional testing

## The Verification Team's Scope of Work required for the Mass Save Verification Incentive:

### 50% or 90% Construction Document Control Sequence Review

- The Verification Team, MEP firm and the commissioning agent shall facilitate an integrated review of the project's control sequences.
- The Verification Team, MEP firm and commissioning agent shall review and comment on the sequences to ensure they are optimized and clearly written. Where possible, the general contractor/controls subcontractor shall be involved in this process.
- This requirement may be met in coordination with the commissioning design review, if applicable.

### Verification Desk Reviews

- Review energy use data at the end of 2-month, 6-month, and 12-month intervals during the Verification Period. (Effort is "front-loaded" to identify/resolve issues early.)
  - Compare to the energy use predicted by the project energy model/reports
  - Identify sources of discrepancies between predicted energy usage and actual energy usage
- Review trend data and as-built control sequences of all major systems to ensure consistency with as--designed sequences and design intent at the end of 2-month, 6 month, and 12-month intervals during the Verification Period.
  - Trends shall include, but not be limited to, those in the Mass Save Minimum Requirements Document (MRD). Trend data parameters may include: ventilation cfm, heating/cooling plant efficiency, and renewable energy generation.
  - Identify sources of discrepancy between trends, as-built sequences and as-designed sequences.
- Review results of desk review with owner/developer, building operator, MEP firm, commissioning agent and contractor.

### Documentation and Deliverables

1. Executed contract, including the above Scope of Work
2. Summarize the outcomes of the control sequence review
3. Maintain a log of issues identified during the Verification Period, including date of resolution
4. Develop a verification report at each interval with the results of each desk review





- Graphically display trend data with a discussion of how discrepancies and resolutions impact trends.
5. Final invoice for reimbursement to customer.

### **Incentive Payment**

The incentive payment will be made upon receipt of the above deliverables.

10/7/2020

