C&I Energy Efficiency Program Guidelines
Custom Measures

The following is the minimum information required for a custom approach to Energy Conservation Measures (ECM's). Custom ECM's are defined as any measure that saves electrical energy and/or reduces natural gas consumption but that does not meet the criteria of the NYS Technical Resource Manual (TRM).

Projects applying for custom measure incentives must comply with all applicable requirements listed below.

Required Project Documentation
All projects must provide the following documentation.

1. A detailed description of the custom measure being proposed including energy savings and calculation methodology that accurately quantifies the proposed savings.

2. A submittal of existing and proposed equipment performance data from manufacturer's sources.
   A. Provide equipment schedule identifying all equipment affected by the proposed scope of work. Include quantity, make, model, capacity, electrical (or gas) power ratings, flow rates, hours of operation, set points, etc. This is required to properly support baseline calculations.
   B. Provide a clear and detailed scope of work narrative that describes the existing conditions, baseline used in calculations, and proposed ECM's to be implemented.
   C. Provide detailed cost proposal(s) that display broken-out costs of the equipment to be installed and installation costs associated with the ECM's only, as was provided to the customer.

3. The sequence of operation for the existing system and the proposed equipment and/or controls with set points from the equipment vendor defining operating parameters. A list of new control points must be provided for control measures.

4. **A clear and detailed engineering analysis showing energy consumption before the implementation of the proposed ECM's, and after the implementation of the proposed ECM's. The analysis must be provided in a datasheet format such as Excel with identifiable savings calculations and algorithms.**
   A. For custom measures that are not covered by the TRM, the following will be acceptable:
      - Standard Engineering Calculations – Calculations must be clear, comprehensive and easy to follow. They must adhere to standard engineering methodologies. Formula sources should be noted (i.e. ASHRAE, ASME, IEEE, etc.…)
      - Any hard coded values or assumptions must be supported with supplemental calculations or suitable documentation.
      - Computer Energy Modeling Software – Software energy models may be used, however, the software model & inputs of the software modeling must be provided. Con Edison reserves the right to request backup software algorithms if necessary. Name of the modeling software used must also be provided.
   B. In cases where multiple ECM's will be implemented, the analysis must account for interactive effects and ensure savings overlap is not incorporated.
   C. The engineering analysis must include both summer peak kW savings and annual kWh savings, and the kW savings should be based on the NYISO peak coincident hours as defined in the NYS TRM.
   D. Equipment downsizing, or system rightsizing, will not be eligible for incentives.

5. **Unacceptable Documentation**

The following methods are NOT acceptable for calculating the energy savings for custom projects:

   a. Vendor-specific or proprietary analysis software.
   b. Simple percent of total kWh savings or percent of end use energy savings.
   c. Marketing materials from the manufacturer or distributor, their company's case studies, or savings claims based on non-standardized methods. For example, a manufacturer or distributor product savings claim that has not been verified by a certified third party.
   d. Operating hours may or may not always be the operating hours of the facility. Where equipment operation varies with days of the week or seasons, you must enter a description of the operation for all days of the week and all seasons.
   e. If documentation provided does not meet requirements, ,technical reviewers may use conservative assumptions if possible

NOTE:

It is recommended to keep calculations simple and direct as overly extensive calculations and algorithms will cause review delays. In some cases, baseline performance data may be adjusted by Con-Edison to reflect current NYC Code compliant performance. Con-Edison reserves the right to request clarification of submitted calculations. Con-Edison also reserves the right to adjust incentive calculations based on standard engineering methodology and equipment/building performance.