Commercial & Industrial (C&I) Custom Program Custom Measures Technical Guidelines

The following is the minimum information required for a customer 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. The DMP Building Management System Estimator Tool is an Excel-based tool that is not an acceptable method of estimating energy savings for projects in the C&I Program.

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 the existing system operation, including equipment make, model, capacity, electrical (or gas) power requirements, hours of operation, etc.
 - B. Provide a clear and detailed scope of work including the measure(s) to be implemented.
 - C. Provide a cost proposal including the scope of work to be done and the proposed ECM's as provided to the customer.
 - D. Provide equipment schedule identifying equipment included in the measure(s) or affected by the measure(s) including capacities, hours of operation, flow rates, power rating, energy consumption and set points. This is required to properly determine equipment baseline.
- 3. The recommended 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 with standard engineering methodologies. Formula sources should be noted (i.e., ASHRAE, ASME, IEEE, etc.)
 - Computer Energy Modeling Software Software energy models may be used, however, the software model & inputs of the software modeling must be provided. O&R 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.

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 O&R to reflect current NY Code compliant performance. O&R reserves the right to request clarification of submitted calculations. O&R also reserves the right to adjust incentive calculations based on standard engineering methodology and equipment/building performance.