

# C&I Energy Efficiency Program Guidelines

## Extended Life Custom Projects

The following is the minimum information required for energy conservation measures (ECM's) related to extended life equipment.

For a measure to be eligible for extended life equipment incentives:

1. At the time of application, existing equipment must exceed its Effective Useful Life (EUL) by at least 25% (See latest version of TRM for updated EUL) OR if the age of the existing equipment cannot be determined relative to 125% of its EUL, then the existing equipment energy consumption must exceed that of the new high efficiency model by at least 35% for chillers, and 20% for all other measures to do the same amount of work.
2. There must be a history of significant repair or replacement with used equipment.
3. The existing equipment must be fully functioning.
4. Existing equipment must have efficiencies lower than current code values to be eligible for early replacement.

### Required Project Documentation

Projects with measures listed in the Technical Resource Manual (TRM) which includes all measures in the table below must provide only the first set of requirements. Projects with measures not listed in the TRM must include all requirements on this sheet.

### All Projects Require Submission of the Following:

- A. A detailed scope of work that contains all equipment in the proposed measure and sequence of operation for the existing system
- B. A formal cost proposal for the proposed energy efficient equipment
- C. A formal cost proposal for the code compliant equipment which must make, model number, and efficiency of the equipment. Data sheets for the code compliant equipment must be provided for verification.
- D. Proof of equipment functionality
  - a. Supported by Con Edison pre-inspection while equipment is operating, BMS trend data, equipment service log
- E. Cooling/heating capacity of the existing equipment and the new energy efficient equipment and its efficiency rating if applicable
  - a. Supported by manufacturer's equipment data sheets or industry standard performance testing results for existing equipment
  - b. Supported by manufacturer's equipment data sheets or AHRI certificate for new equipment
- F. Age of the existing equipment
  - a. Supported by original invoice, bill of sale, construction permit, service log, or nameplate date
- G. Estimated remaining equipment life until total failure (beyond repairs)
- H. Actual repair cost, including component replacement for at least the past 3 years
  - a. Supported by invoices or proof of payment
  - b. Total repair cost must be added and summarized in a document

### Equipment downsizing

- A. Our energy efficiency programs are intended to incentivize energy efficiency improvements and not for correction of equipment sizing. Equipment Downsizing will ONLY be eligible for equipment that has reached its effective useful life as defined in the Consolidated Edison Commercial and Industrial (C&I) Energy Efficiency Program Manual under "Extended Life – Custom"
- B. Baseline Efficiency of the existing equipment will be calculated at the current demand load and will be compared against the proposed equipment's name plate/specification efficiencies.

*Ex: If the output of the systems capacity is 360, but the demand is 300, then the efficiency of the existing equipment should be recognized as 80% capacity ( $300/360 = 80\%$ ), and not the existing equipment's nameplate specifications which are typically rated at 100% load.*

- C. The name plate specification on the proposed equipment will be used because it has been sized correctly for the intended process and represents operating at full load efficiencies.

*Note: the normal replacement of existing equipment that does not comply with the extended life criteria will be subject to the current NYS/NYC energy conservation code to establish the minimally compliant baseline*

**All Non TRM Measures Require the Following Additional Information**

- D. An engineering analysis of estimated energy consumption of the existing equipment, estimated energy consumption of the code compliant equipment and the new proposed energy efficient equipment.
- E. Each engineering analysis must include both summer peak kW load and annual kWh usage, or the annual gas usage (in therms) for gas projects.
- F. Each analysis must be provided in a datasheet format such as Excel with savings calculations and algorithms. Calculations in PDF format are not acceptable.

**References for EUL Table:**

- Latest version of NYS TRM (Appendix P) [NYS State TRM Website- DPS](#)  
***\*Please note that EUL values listed above are subject to change per the latest version of the TRM (Appendix P). The EUL values listed in the current TRM will take precedence.***