

Energy Efficiency for Business

Custom Incentive Program

Customer Reference Guide



Program Overview

The Energy Efficiency for Business (EEB) program from Duke Energy offers custom incentives for eligible improvements not listed as prescriptive measures. Examples of custom measures include, but are not limited to, the following:

- Economizers for air or water
- ENERGY STAR® solid door commercial freezers
- Variable frequency drives on non-HVAC pump and fan motors serving variable-capacity loads, such as air compressors, pumps, fans, blowers, process chillers and cooling towers
- Automatic controls, including time switches, sensors, etc.
- Building envelope improvements (e.g., windows, window film, solar screens, cool roofs, etc.)
- Improved process efficiency
- Compressed air system improvements
- Refrigerated case LEDs and sensors
- Induction and plasma lighting fixtures or retrofit packages

Project Requirements

Qualified custom energy conservation measures (ECMs) that reduce electric energy use due to an improvement in system efficiency, i.e., a net decrease in energy use without a reduction in the level of service. The simple payback period must be between one and seven years to receive the incentive. A preapproval application is required for custom projects (see sidebar).

Incentives

Incentives for custom measures are based on the calculated annual electrical energy savings that occur after energy-efficient measures are installed.

Preapproval Application

A preapproval application is required for custom projects.

- The preapproval application for custom incentives must include an estimate of the annual energy savings, plus sufficient descriptive information, i.e., equipment performance data, operating schedules, load profiles, assumptions, calculations, etc., to support the energy savings estimates.
- A complete online, emailed or faxed copy of the preapproval application form initiates the review process. Funding reservations are only committed to a given project when the project details have all been approved.
- **The preapproval application must include a customer signature.**

Important

The EEB Custom Incentive program requires project approval prior to entering contracts, placing orders for equipment or beginning construction.

Guidelines for Calculating and Documenting Energy Savings

Custom incentives are calculated based upon the first year's estimated annual kilowatt-hour (kWh) savings. To be accepted as a basis for the incentive, the savings calculations must be developed using acceptable engineering calculation techniques supported by site-specific operating and equipment performance documentation. Other required documents include invoices, cut sheets or commissioning reports.

Acceptable Calculation Methods

Whole-building Metering

For some projects, where the energy savings exceed 10 percent of the total annual kWh usage, a "bills before – bills after" approach may be used. This approach assumes that building occupancy levels or operating hours are unchanged.

Equipment or Process Submetering

When ECMs are installed that affect individual equipment or systems, submetering may be used to document energy savings. This may require the installation of temporary portable monitoring equipment that measures and records the equipment power at short intervals over several days or weeks.

Engineering Calculations

For ECMs that impact several small systems, submetering may be impossible. For these measures, an engineering calculation method is likely the best method to document savings. For most equipment types and efficiency measures, there are well-established engineering procedures as well as a number of public domain component or equipment performance models that are available to calculate pre- and post-energy use.

Whole-building Modeling Methods

For measures that have buildingwide or multisystem impacts, engineering modeling using generally accepted public domain software is acceptable to document savings. When using any model, the applicant must provide both the "base case" and "post-case" input files and annotate the files to clearly show how the differences between the pre- and post-retrofit systems are being simulated.

Please refer to the procedures and policy manual for descriptions of how basic savings estimation principles and submittal requirements may apply to certain project types or technologies.

Contact Information

Program Hotline: 866.326.6059

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Program Steps



Preapproval Application Submission

Fill out the application form (check the "preapproval" box) and incentive worksheet. Also include the specification sheet for proposed equipment and a brief description of the project. Submit the application via mail, fax or email. If approved, funds will be reserved for you for 90 days.



ECM Installation

Install the equipment or systems properly. Dispose or recycle materials properly and permanently remove or disable all replaced equipment and systems.



Document Assembly

Assemble the required documentation of project completion, costs and energy savings. Obtain copies of the purchase orders, work orders, statement of work, equipment specifications and itemized paid invoices.



Final Application Submission

Accurately record any changes from the preapproval application and check the "Final Application" box on the form.



Program Staff Review

Program staff will review the request for payment and the final project documentation. The final payment will be based on the results of the post-review.



Payment Processed

Incentive payments will be sent within six to eight weeks from the time that all the required documentation is received and the field inspection is complete.