

Design 2000_{plus}

Custom – Energy Efficient Projects

2009 Project Information Form for Massachusetts, Nantucket, and Rhode Island

This Project Information Form provides a template to collect project systems and equipment information and specifications. In addition, this form serves as a general overview of eligibility criteria for incentives as well as a guide to Custom Energy Efficient Projects and products. This form is intended for use by individuals experienced with National Grid's Custom Program. Contact your **Energy Solutions representative** for complete details on this program and to submit an application.

Customer Facility Information

Customer Facility Name: _____ Date of Application: _____
 _____ Sq. Ft. Covered by Application: _____
 Contact Person: _____ Design 2000_{plus} Project Type:* (see below for details)
 Street Address: _____ Federal ID Number: _____
 City: _____ State: _____ Zip: _____ Company Type:
 Incorporated Exempt Not Incorporated
 E-mail Address: _____ Phone Number: _____
 Facility Description: _____ Fax Number: _____

Customer of Record Information: Billing Account Number: _____ *Internal Use only*

*Design 2000_{plus} Project Type (select one)

- | | |
|--|---|
| <input type="checkbox"/> Change in the use or Function of the Building Space | <input type="checkbox"/> Expansion of an Existing Building |
| <input type="checkbox"/> New Building | <input type="checkbox"/> New Controls for Improved Operations |
| <input type="checkbox"/> New Equipment for New Process or Expanded Operation | <input type="checkbox"/> Planned Replacement of Equipment |
| <input type="checkbox"/> Renovation of Existing Equipment | <input type="checkbox"/> Replacement of Failed Equipment |

Installation Contractor Information

Installation Performed By:** Customer Installation Contractor Project Expediter Other (Vendor)

Complete this section if installation is not by the customer

Installation Company: _____ Street Address: _____
 Contact Person: _____ City: _____
 E-mail Address: _____ State: _____ Zip: _____
 Phone Number: _____

** If contractor has not been selected, select **Customer**

Application Information

Application Funding Type AAP Other *Internal Use only*

Expected Completion Date _____

Proposed Incentive Recipient Customer (Account Credit or Check) Installation Contractor*** Other (Vendor)***

*** Complete this section if Installation Contractor or Other has been selected

Federal ID Number: _____ Company Type: Incorporated Exempt Not Incorporated

This Form Was Completed By:

Name: _____
 Phone Number: _____ E-mail Address: _____

For More information

Phone: 1-800-787-1706

Internet: www.nationalgridus.com

Custom Measure Application Process

1. All applications for incentives under the Custom program require sound documentation of the proposed cost, projected electricity savings and the related non electric savings.
2. Before commencing the application process, check with your National Grid Energy Solutions representative to determine eligibility of the proposed project and to establish requirement for detailed savings projections and cost estimates.
3. This information will be submitted to National Grid's Technical Representative for review and evaluation of potential incentives.
4. The Technical Representative will develop a Minimum Requirements Document which describes the minimum equipment specifications and operational requirements of the proposed system. Customer will be required to sign this document.
5. After successful review and project approval, the Energy Solutions representative will notify customer in writing of the project approval, the incentive value and the terms and conditions required to receive final incentive payment.
6. The following is a guide to the level of technical information and documentation that is typically required.

Project Description

- General description of facility, it's use and typical operation (include occupancy schedules)
- Overall project description including operating schedules and parameters

Base Case Materials and Equipment (*applicable for Design 2000*plus* expansion or equipment replacement projects)

- Detailed description of equipment and operations
- Cuts sheets with equipment performance ratings (BHP, CFM, kW, etc.) (*Provide nameplate data if cut sheets unavailable*)
- Part load performance data where applicable
- Description of controls & sequence of operations

Proposed Materials and Equipment

- Detailed description of equipment and operations
- Cuts sheets for the materials or performance ratings for equipment being installed (BHP, CFM, PSI, Efficiency rating, U-value, Lumens, etc)
- Description of controls & sequence of operations

Load Profile

- Equipment hours of operation (operating schedule per day, week, year)
- Provide operating load profiles showing how equipment load and operating parameters vary over time due to changes in: occupancy, weather, production, etc..
- Where there are existing systems involved, metering kW and kWh of major equipment loads is recommended. If metered information is not available, provide other documentation used to estimated loads and operating hours.

Savings Calculations

- Show calculations used to determine electricity savings including:
 - ◆ On-peak Consumption (kWh)
 - ◆ Off-peak Consumption (kWh)
 - ◆ Summer Demand (kW) (see Table 1)
 - ◆ Winter Demand (kW) (see Table 1)
 - ◆ Percent Energy Savings On Peak (see Table 1)
- The calculations should clearly show all the details of how the energy savings were estimated. This includes all engineering formulas and documentation of all the factors, values and assumptions used in the formulas (Excel spreadsheet preferred)
- In cases where energy modeling is used to determine savings, approved modeling software must be used. Input and output data from the model must be provided. .

See Table 1 below for the specific details on the Demand data required.

The following form may be filled out for preliminary project submittal and review, but a final Custom Project information package must also be submitted in electronic format. Contact a National Grid Technical Representative for details.

Proposed Equipment Specification (Facility Detail)

Building, Room and Equipment Identification (Installation Site): _____

Description of Project: _____

Base System

Measure Description

Proposed System

Measure Description

Manufacturer Incentives, Manufacturer Discounts, Taxes, and/or Salvage Values

Internal Use Only: Measure Code: _____ Measure Description: _____

Does this project include a Variable Frequency Drive (VFD)? Yes No (if yes – provide information below)

Harmonics Test Eligibility Information:

- Total VFD Load Supplied by Transformer (HP)** _____
- KVA Rating of Building Transformer _____

** The value for the "Total VFD Load Supplied by Transformer" is the sum of the rated horse power for all motors, existing as well as all proposed at this time, in the facility that are under control of Variable Frequency Drives. For Utility Owned Transformers, contact your Energy Solutions representative.

Table 1: Average Demand Reduction

Please provide the Average Energy (kWh) and Demand (kW) Reduction that occurs during the time periods listed below.

Time Period			Average Reduction
Winter (kW)			
January	5pm - 7pm	Peak Day*	
Summer Demand (kW)			
June	3pm - 5pm	Peak Day	
July	3pm - 5pm	Peak Day	
August	3pm - 5pm	Peak Day	
Annual Energy (kW)			
Total Estimated Annual kWh Savings			
Percent Energy Savings On Peak**			

* Peak Day is defined as the day the highest heating or cooling loads occur. *Example:* Assume the demand savings is 10 kW whenever a plant is in operation and the plant shuts down at 6pm, then the average demand reduction in winter is 5 kW (10 kW ÷ 2 hours = 5 kW).

** **Percent Energy Savings On Peak:** is the ratio of annual energy (kWh) saved Monday through Friday, 6am to 10pm (*excluding nine holidays*) divided by the total annual energy savings. *Example:* (for a continuous operating load and savings) **365 days / 7 days/week = 52.14 weeks x 5 weekdays/week = ~261 weekdays - 9 holidays = 252 days x 16 on-peak hours/day (6am-10pm) = 4,027 hours/year (on-peak) hours / 8760 total hours = 46%.**

Note: there is a max of 4027 peak demand hours in a year. Refer to the Custom diskette for further explanation.

Cost Estimates

- Provide back-up documentation for all material and labor costs, broken down by major pieces of equipment and project components. Sales tax may not be included. Adjust for salvage/resale value of equipment being replaced. Enter summarized costs in the table below.

Table 2: Cost Estimates

Measure	Cost (\$\$\$)
Estimated Base Equipment Cost	
Estimated Proposed Equipment Cost	
Estimated Incremental Total Cost	
Estimated Incremental Labor Cost	
Estimated Incremental Material Cost	

Non Electric Benefits and Effects

Installing the proposed measure may result in significant savings or possibly increased costs for the owner beyond electric savings. Examples include water, sewer, fossil fuel and labor costs. These costs are to be assessed and quantified in the support documentation. These Effects are to be combined and reported in the categories laid out in Table 3.

Table 3: Non-Electric Benefits Summary Table

Non-Electric Benefits	
Gas - Space Heating (MMBTU)	_____ Therms
Gas - Non Heating (MMBTU)	_____ Therms
Oil (MMBTU)	_____ Gallons
Water	_____ Gallons
Wastewater (Sewer)	_____ Gallons
O & M (\$/yr) (Labor & Materials)	\$ _____
Site Environmental	\$ _____
Other _____	\$ _____

