

NEW CONSTRUCTION

2010 Custom Application

Customer Information

COMPANY NAME _____ APPLICATION DATE _____

INSTALLATION SITE _____ PHONE NUMBER _____

CONTACT PERSON _____ FAX NUMBER _____

E-MAIL ADDRESS _____ SQ. FT. (covered by this application) _____

STREET ADDRESS _____ CITY _____ STATE _____ ZIP _____

MAILING ADDRESS (if different) _____ CITY _____ STATE _____ ZIP _____

ELECTRIC COMPANY NAME _____ ELECTRIC ACCOUNT # (or copy of electric bill) _____

GAS COMPANY NAME _____ GAS ACCOUNT # (or copy of gas bill) _____

BUILDING TYPE: (select one) **TOTAL FACILITY SQ. FT.** _____

| | | | | | |
|--|--|---|--|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> Assembly | <input type="checkbox"/> Fast Food | <input type="checkbox"/> Hotel | <input type="checkbox"/> Multi Story Retail | <input type="checkbox"/> Religious | <input type="checkbox"/> Small Retail |
| <input type="checkbox"/> Automobile | <input type="checkbox"/> Full Service Restaurant | <input type="checkbox"/> Large Refrigerated Space | <input type="checkbox"/> Multifamily high-rise | <input type="checkbox"/> K-12 Schools | <input type="checkbox"/> University |
| <input type="checkbox"/> Big Box | <input type="checkbox"/> Grocery | <input type="checkbox"/> Large Office | <input type="checkbox"/> Multifamily low-rise | <input type="checkbox"/> Small Office | <input type="checkbox"/> Warehouse |
| <input type="checkbox"/> Community College | <input type="checkbox"/> Heavy Industrial | <input type="checkbox"/> Light Industrial | <input type="checkbox"/> Other _____ | | |
| <input type="checkbox"/> Dormitory | <input type="checkbox"/> Hospital | <input type="checkbox"/> Motel | | | |

PROJECT TYPE: (select one)

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

Payment Method

CHECK PAYABLE TO: (fill in data below) Customer Vendor/Installer

TAX ID# _____ **COMPANY TYPE:** Check one: Incorporated, Not Incorporated, Exempt

Vendor Information

VENDOR/INSTALLER _____ **STREET ADDRESS** _____

CONTACT PERSON _____ **CITY** _____ **STATE** _____ **ZIP** _____

PHONE NUMBER _____ **E-MAIL** _____

Customer Acknowledgement

Pre-Installation — I certify that all statements made in this application are correct to the best of my knowledge and that I have read and agree to the Terms and Conditions on the back of this form. **ANTICIPATED COMPLETION DATE:** _____

AUTHORIZED SIGNATURE _____ **NAME** (print) _____ **DATE** _____

Post-Installation — I certify that I have seen the Energy Efficiency Measures that have been installed and I am satisfied with their installation.

AUTHORIZED SIGNATURE _____ **NAME** (print) _____ **DATE** _____

For Program Administrators Only

| | | | | |
|-------------------------|------|-----------------|----------------|--|
| Required Inspections | Date | Inspector | Project Costs: | |
| Pre-Inspection: | | | Labor \$: | |
| Post Inspection: | | | Material \$: | |
| Approval | Date | Program Manager | | |
| Pre-approved Incentive: | | | | |
| Final Incentive: | | | | |

1. All applications for incentives under the Custom Application Process require sound documentation of the proposed cost, projected electricity savings and the related non electric savings.
2. Before starting the application process, check with National Grid 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 a National Grid 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. The Customer will be required to sign this document.
5. After successful review and project approval, National Grid will notify customer in writing of the project approval, the incentive amount 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 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 are unavailable
- Part load performance data where applicable
- Description of controls and 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 and 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 estimate 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 (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 Speed Drive (VSD)? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <i>(if yes — provide information below)</i> |
| Harmonics Test Eligibility Information: | | | |
| • Total VSD Load Supplied by Transformer (HP)** _____ | | | |
| • KVA Rating of Building Transformer _____ | | | |
| <small>** The value for the "Total VSD 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 Speed Drives. For Utility Owned Transformers, contact a National Grid representative.</small> | | | |

Table 1: Energy (kWh) and Demand (kW) Reduction

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

| | kWh | | | | Total Percent Energy Savings on Peak *** | | |
|---|--------|------|--------|---------|--|-----|--|
| | Summer | | Winter | | | | |
| Peak Energy | | kWh | | kWh | | % | |
| Off-Peak Energy | | kWh | | kWh | | | |
| Total Estimated Annual kWh Savings** | | | | | | kWh | |
| | kW | | | | | | |
| | June | July | August | January | December | | |
| Average Peak* | | | | | | | |

Estimated Savings with Calculations: Provide Calculations that show the following:

1. First Year kWh savings (annual)
2. Winter Peak Energy kWh: 6AM – 10PM, weekdays except holidays, October to May
3. Winter Off-Peak Energy kWh savings: 10PM – 6AM weekdays, all day weekends and holidays, October to May
4. Summer Peak Energy kWh savings: 6AM – 10PM, weekdays except holidays, June to September
5. Summer Off-Peak Energy kWh savings: 10PM – 6AM weekdays, all day weekends and holidays, June to September
6. Summer Average Demand kW Reduction: 1PM – 5 PM, weekdays except holidays, June, July and August
7. Winter Average Demand kW Reduction: 5PM – 7 PM, weekdays except holidays, December and January

*** Average Peak kW:**

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)

**** Total Estimated Annual kWh Savings:** The sum of all the Summer and Winter Peak and Off-Peak kWh Savings

***** Total Percent Energy Savings On Peak:** The sum of the Summer and Winter Peak kWh divided by the Total Annual kWh Savings

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 provided 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 _____ | \$ _____ |

Minimum Requirements Document

Energy Conservation Measures

APPLICATION # _____ CUSTOMER NAME _____

This form is to be completed by a National Grid Technical Representative or designated Technical Assistance Contractor to specify herein minimum equipment and operational requirements of the proposed system. This document requirements shall address the criteria necessary to be met to achieve the demand and energy savings estimated in the engineering analysis for this project. Testing and submittals may be required as further verification of system compliance. Use additional sheets, if necessary. These requirements must be met before the Company's incentives are paid.

Equipment Requirements: Provide a list of equipment or materials to be installed as part of this project. Include manufacturer, model, HP or kW ratings, efficiency rating, etc. Post-Installation Inspection Record (Check one) OK Not OK

Operational Sequences Requirements: Provide a description of equipment operating sequences, set points, operating schedules, balancing requirements (such as flow, velocity, head, suction, etc.) or any other operating parameters to obtain the estimated energy savings. Post-Installation Inspection Record (Check one) OK Not OK

Documentation: List any written documentation that should be required to verify, operate or maintain the equipment being installed or controlled. This information may include equipment specification sheets, test reports, construction drawings, sequences of operation, etc. Post-Installation Inspection Record (Check one) OK Not OK

Other Requirements Or Comments: Describe any requirements for demolition, removal, or decommissioning of existing equipment. Post-Installation Inspection Record (Check one) OK Not OK

The pre-approved incentive is subject to the Companies' post-installation inspection of final specifications, drawings and operation of the proposed equipment. In the event the proposed system is altered from the above description, notify the Company of the change prior to the equipment purchase and installation as the change in design and operation may impact the incentive.

| | | | |
|---------------------------------|-------------|---------------------------|-------------|
| TECHNICAL REPRESENTATIVE | DATE | CUSTOMER SIGNATURE | DATE |
| _____ | _____ | _____ | _____ |