

The New Construction Program is designed for commercial and industrial customers who are building new facilities, undergoing major renovations of an existing facility, or replacing failed equipment. The New Construction Program provides prescriptive incentives as well as technical services that will facilitate the identification and installation of premium efficient equipment. Call National Grid to arrange a convenient time to learn about strategies for designing and constructing a better building.

## Prescriptive New Construction Application & Instructions

For New Facilities, undergoing major renovations of an existing facility, or replacing failed equipment

### 1. Is your project eligible?

- Equipment shall be new and shall be installed in a commercial, industrial, institutional, educational, or municipal building within an electric National Grid's service territory

### 2. Is the equipment you intend to buy eligible?

- Product types listed in this form are eligible for prescriptive incentives. However, other measures not listed here may be eligible for custom incentives using the Custom New Construction Application

### 3. Pre-Approval requirements:

- Contact your National Grid representative before purchasing and installing the equipment
- To see if the energy efficient measure (EEM) qualifies for an incentive:
  - i. Review the Terms and Conditions governing the program, then submit a completed application form with an authorized signature
  - ii. Submit a copy of the Manufacturer's technical specification sheets ("cut sheets") for each type of eligible equipment to be purchased
  - iii. Once pre-approved, a "pre-approved incentive letter" will be issued
  - iv. Cool Choice and MotorUp applications only — Pre-approval is required for incentive or rebate totals greater than \$5,000.00

### 4. Installation and incentive requirements:

- Once pre-approved, purchase and install the qualifying equipment within twelve (12) months of National Grid's pre-approval
- Return the required information to your National Grid representative within 30 days of the installation:
  - i. A copy of the completed and signed pre-approval application
  - ii. If there is a change in equipment, please submit a new manufacturer's technical specification sheets ("cut sheets") for each type of eligible equipment purchased
  - iii. A copy of your invoice indicating Proof of Purchase must indicate type, size, make, and model number of the equipment and date of purchase and installation
  - iv. At the post-installation verification, the customer is required to sign the post-installation customer acknowledgement section of the original application

### Program details:

This incentive program covers applications created on or after January 28, 2010. Details of this Program, including incentive levels, are subject to change without prior notice. Contact National Grid for the latest program details.

**NEW CONSTRUCTION**

# 2010 Chiller 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:				

## Chiller Measure Information

Please review the eligibility requirements on the page three.  
 Attach invoices, product specification sheets and other relevant documentation to this sheet.

### STEP 1: Select Eligible Chiller Installation Type (Check One):

- NEW CONSTRUCTION:** Chiller installation in a new single chiller system (excluding back-up systems).
- EQUIPMENT REPLACEMENT:** Chiller replacement in an existing single chiller system. Complete Chiller Plant Inventory on page 2.
- PRIMARY CHILLER REPLACEMENT:** Replacement of the primary/lead chiller in an existing multiple chiller plant.

### STEP 2: Verify Eligibility and Calculate Incentive (Complete Table Below):

Eligible Equipment			Proposed Equipment		Incentives						
Type	Unit Size-ARI Net Tons	Minimum Efficiency(*) FL or IPLV	ARI ratings		Base Unit Incentive (per ton)	Base Total	Performance Incentive: For each 0.1 EER point above or for each 0.01 kW/ton point below minimum criteria	Performance Total(**)	Requested Incentive Dollars		
			Net Tons	Unit Efficiency							
<b>Water Chillers@ ARI 550/590-98</b>											
<b>(A)</b> Air Cooled Chiller w/ Condenser	> 30 and ≤ 300	FL: 10.5 EER IPLV: 11.5 EER	NT(A): _____	FL: _____ EER	\$20	BT(A): _____	\$3.25/ton	PT(A): _____	RI(A): \$ _____		
				IPLV: _____ EER							
<b>(B)</b> Water Cooled-Rotary Screw and Scroll	< 150	FL: 0.711 kW/Ton IPLV: 0.609 kW/Ton	NT(B): _____	FL: _____ kW/Ton	\$13	BT(B): _____	\$3.00/ton	PT(B): _____	RI(B): \$ _____		
	≥ 150 and < 300	FL: 0.646 kW/Ton IPLV: 0.565 kW/Ton		IPLV: _____ kW/Ton						\$11	\$2.50/ton
	≥ 300	FL: 0.575 kW/Ton IPLV: 0.515 kW/Ton								\$18	\$3.00/ton
<b>(C)</b> Water Cooled Centrifugal	< 150	FL: 0.633 kW/Ton IPLV: 0.603 kW/Ton	NT(C): _____	FL: _____ kW/Ton	\$20	BT(C): _____	\$3.50/ton	PT(C): _____	RI(C): \$ _____		
	≥ 150 and < 300	FL: 0.570 kW/Ton IPLV: 0.536 kW/Ton		IPLV: _____ kW/Ton						\$17	\$1.25/ton
	≥ 300 and ≤ 1000	FL: 0.519 kW/Ton IPLV: 0.494 kW/Ton								\$10	\$1.75/ton

(\*) Compliance with Full Load Efficiency or IPLV. In either case both Full Load and IPLV efficiency figures must be provided.

(\*\*) Performance Incentive is limited to a maximum of two times the base incentive.

Air cooled oil free compressors classified here as air cooled.

Water cooled oil free compressors classified here as centrifugal.

### STEP 3: Complete Chiller Plant Inventory below:

Chiller Plant Inventory									
Please complete the following form in the typical sequencing order.									
Total Plant Load:			Tons						
Chiller ID#	Tons	Evaporator			Condenser			Peak kW/ton	IPLV kW/ton
		GPM	EWT	LWT	GPM	EWT	LWT		
Ex. CH-1	1000	1500	56°F	40°F	3000	76°F	85.22°F	0.545	0.498

## Chiller Eligibility Requirements

1. Prescriptive incentives will be provided for the installation of electrically operated comfort cooling Air-cooled Water Chillers and Water-cooled Water Chillers with a maximum capacity of 1000 tons.
2. Chillers shall comply with the minimum requirement the Massachusetts 780 CMR Energy Code, Section 1305.3.3
3. Efficiency criteria are based on ARI Standards 550/590-98, as appropriate.
4. Chillers selected off-ARI conditions must provide both the ARI rated performance and the design duty performance.
5. Attach a copy of manufacturers' performance sheet where the ARI standard FL and IPLV and/or design duty FL and IPLV are clearly stated. Air-Cooled Chillers shall be rated in EER and Water-Cooled Chillers shall be rated in kW/ton.
6. New replacement chillers must be a one-to-one replacement in kind for tonnage and condenser type.
7. All new Water-Cooled Chillers must be equipped with condenser water reset strategy.
8. Chiller with VFD must have a minimum of 3% impedance reactor in its AC power input connection.
9. Educational facilities with summer breaks shall have at least 300 hours of operation. All other types of facilities shall operate at least 800 EFLH annually or 1500 annual run hours.
10. The above Chiller Plant Inventory must be completed and the total estimated plant load must be stated.

## Customer may choose the alternative Custom approach:

- A. For all chillers greater than 1000 tons.
- B. For application for more than one chiller.
- C. Chillers for process cooling (manufacturing, data center, etc.) loads.
- D. Chillers that are under consideration of the Comprehensive retrofit in an existing facility or Comprehensive lost-opportunities in a new construction.

Contact your Program Administrator for more detail on the requirements of the Custom approach.