



# COMMERCIAL AND INDUSTRIAL REFRIGERATION RETROFIT PROGRAM

The Town of Norwood Municipal Light Department ("NMLD") is pleased to offer a **Commercial / Industrial Refrigeration Retrofit Program**. This program is designed to help our business customers operate their commercial refrigeration systems as efficiently as possible. By participating in this program, our commercial customers will not only be reducing their electric bills but will also be helping the Commonwealth and NMLD achieve its carbon reduction and energy conservation goals.

NMLD has divided this program into four groups: (1) municipal, (2) small commercial, (3) medium commercial, and (4) large commercial/industrial. The Town of Norwood will contribute a percentage (maximum of fifty percent) of the project cost or up to certain specified limits depending upon the size of the customer. The breakdown is as follows:

	<u>GROUP NAME</u>	<u>CUSTOMER SIZE</u> (in annual consumption)	<u>NMLD MAX CONTRIBUTION</u>
GROUP 1	MUNICIPAL	ALL SIZES	\$ 10,000
GROUP 2	SMALL COMM.	< 700,000 kWh	\$ 4,000
GROUP 3	MEDIUM COMM.	700,000 < 4,000,000 kWh	\$ 8,000
GROUP 4	LARGE COMM.	> 4,000,000 kWh	\$ 12,000

We would like all our business customers take advantage of this worthwhile program to reduce their energy demand and lessen their electric bills. However, due to budgetary limitations only a certain number of projects can be undertaken each year. Project proposals will be analyzed according to greatest kilowatt reduction during peak periods per cost of the project (NMLD contribution). NMLD will review applications on a first come-first-serve basis, and the NMLD will determine whether it deems a project worthwhile. NMLD determination as to whether a project is worthwhile is final and not subject to review. **All work must be completed and inspected to qualify for this program.**

The NMLD hopes this program will continue for several years and would like all its business customers to participate in this program. Many customers who have refrigeration systems may be surprised to find that up to 30% of their electrical consumption is from those systems. By retrofitting their existing refrigeration systems customers can realize substantial and ongoing savings. If you have any further questions concerning this program, you may call Joe Collins at (781) 948-1116 or email at [JaCollins@norwoodlight.net](mailto:JaCollins@norwoodlight.net). The mailing address for the Norwood Light Department is 136 Access Road, Norwood, MA 02062. You can also submit the application to [commercial@ene.org](mailto:commercial@ene.org) for direct intake and processing.

### **Application Directions**

All information must be completed legibly before the application will be reviewed, otherwise it will be returned. If you are unsure of any part of this application, call the NMLD at (781) 948-1100. The contribution amounts that the "Customer" requests should not exceed \$4,000, \$8,000, \$10,000, \$12,000 (depending on the size of the customer), or fifty percent of the project cost.

### **In Which Group Do I Belong?**

To determine which group your business is part of a company would need to sum their billed kilowatt hour (kWh) energy consumption for the previous 12 months.

If for example, your company's total energy consumption was 1,500,000 kWh it would be part of Group 3, being eligible for an incentive of up to fifty percent of the project cost or \$10,000 whichever is lower.

### **How do I fill-out the Application?**

The application must be submitted by the NMLD customer, but it can be filled-out by an electrician or a conservation company that performs refrigeration audits.

### **Location**

The location must be precise so that when a representative of the NMLD goes to the facility they can easily find where the work is to be performed.

### **Energy Savings**

The Energy Savings will be determined based upon the most recent Massachusetts Technical Reference Manual (TRM). The TRM is the basis from which the NMLD excel calculator is built.

### **Labor, Materials, and Equipment**

This section is a breakdown of the project cost according to the cost of labor (for example, one licensed electrician and an apprentice), the cost of materials (motors, controls, sensors), and the cost of any equipment (for example, hydraulic lift, scaffolding) that may be necessary to perform the retrofit.



## APPLICATION FORM

ELECTRIC ACCOUNT #: \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

SERVICE ADDRESS: \_\_\_\_\_

NORWOOD, MA 02062

MAILING ADDRESS: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_

CONTACT ROLE (check one):  Business Owner  Business Representative  Other

Email: \_\_\_\_\_

Phone #: \_\_\_\_\_ Ext: \_\_\_\_\_

FACILITY SQ. FT.: \_\_\_\_\_

FACILITY PRIMARY USE: \_\_\_\_\_

(e.g., retail store, warehouse, school, etc.)

The above-named entity ("Customer") hereby requests a contribution in the amount of \$\_\_\_\_\_ to retrofit its facility. Customer understands and acknowledges that the application is subject to the Terms and Conditions provided in this booklet and Customer agrees to such Terms and Conditions. Customer further certifies that the estimate of installation cost stated in this application is a reasonably accurate estimate of the cost of installing the measure. In addition, if the actual installation cost is less than estimated, the Norwood Light Department's contribution will be reduced to a maximum of fifty percent of the actual cost.

Signed by: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Authorized Signature

Signed by: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Authorized Signature

# PAYMENT METHOD

(Payee must submit a W-9 form)

PAYMENT TO (select one):            \_\_\_ Customer            \_\_\_ Vendor

CUSTOMER TAX ID NUMBER (required): \_\_\_\_\_

CUSTOMER COMPANY TYPE (Check One):   \_\_\_INC.        \_\_\_ NOT INCORP.    \_\_\_ EXEMPT

VENDOR / INSTALLER TAX ID NUMBER: \_\_\_\_\_

VENDOR COMPANY TYPE (Check One):   \_\_\_INC.            \_\_\_ NOT INCORP.    \_\_\_ EXEMPT

CHECK PAYABLE TO: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The Customer hereby acknowledges that their requested incentive contribution to retrofit its facility can be paid directly to the implementing Vendor / Installer or the Customer. If the Customer has selected to have their incentive directly paid to the Vendor, their proposal should show the total invoiced value reduced by the requested incentive value.

Signed by: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_  
Customer Authorized Signature

Signed by: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_  
Vendor Authorized Signature

# Terms & Conditions

## 1. Customer Application

- (a) All information must be answered completely. Failure to complete any part of the application will make it unacceptable.
- (b) The Norwood Municipal Light Department (NMLD) will review the Customer's application and reserves the right to reject or modify any calculations based on its own analysis.

## 2. Application Does not Guarantee the Proposal will be Accepted

Due to program budget restrictions only a limited number of projects can be undertaken any given year. All project proposals will be analyzed and those projects which have the greatest kilowatt reduction during peak periods per cost of the project will be undertaken first.

## 3. Eligibility

All NMLD commercial and industrial customers are eligible provided that their electric bill is paid up to date.

## 4. Pre-Approval and Pre-Installation Survey

The NMLD is not bound to contribute money towards any project. If the NMLD decides to contribute to a specific project the customer will be notified in writing.

## 5. Post-Installation Verification

The NMLD will not pay any contributions until it has performed a post-installation verification of the installation. If the NMLD determines that the refrigeration retrofits were not installed in a manner that is consistent with the purpose of achieving energy savings or if the installation was not consistent with generally accepted good engineering practices, the NMLD may require changes before making any payments.

## 6. Monitoring

The NMLD reserves the right to perform pre- and post- installation monitoring of the installed retrofits to determine the actual kilowatt reduction and energy savings.

## 7. Incentive Amounts

(a) Incentive Amounts will be based upon the amount of kilowatt reduction that can be attained during peak periods per cost of the project. The NMLD will contribute up to fifty percent of the project cost up to certain specified limits (see below). In addition, the NMLD reserves the right to adjust the amount requested or negotiate a lower amount.

	<u>CUSTOMER SIZE</u>	<u>NMLD MAX. CONTRIB</u>
GROUP 1	Municipal	\$ 10,000
GROUP 2	Less than 700,000 kWh	\$ 4,000
GROUP 3	700,000 to 4,000,000 kWh	\$ 8,000
GROUP 4	Larger than 4,500,000 kWh	\$ 12,000

(b) The NMLD reserves the right to stop this program at any time without notice if the contributions may result in spending more than the annual budget for the program.

## 8. Proof of Cost of Installation

After installation, the Customer is required to submit copies of all invoices (including all materials, labor, and equipment discounts) reflecting the costs of purchasing and installing the retrofits. In addition, the NMLD may request any other reasonable documentation or verification of the cost to the Customer of purchasing and installing the equipment.

## 9. Payment Date

The NMLD expects to make contribution payments within sixty (60) days of completion of satisfactory post-installation verification and verification of installation costs.

## 10. Arrangements with Contractors

The NMLD will deal with the Customer only. Any dealings between the customer and a contractor will be handled solely by those two parties, the NMLD will not participate in any dealings with contractors.

## 11. Replacement of Failed Equipment

Customers who install incentivized energy-efficient equipment must keep the retrofit equipment in the NMLD service territory for a period of at least 10 years and must maintain or upgrade these materials with materials of similar or superior energy savings efficiency, at the Customer's expense.

## 12. No Warranties

The NMLD does not endorse, guarantee, or warrant any particular manufacturer or product. Also, the NMLD does not make any representations of any kind regarding the results to be achieved by the refrigeration retrofits or the adequacy or safety of such measures.

## 13. Limited Inspections

The scope of review by the NMLD of the design and installation of the equipment retrofits is limited solely to determining whether program conditions have been met. It does not include any kind of safety review.

## 14. Changes in the Program

The program and these Terms & Conditions may be changed by the NMLD at any time without notice. Projects already approved under these terms and conditions will be processed according to these terms and conditions.

**15. Follow-up Visits**

(a) The NMLD reserves the right to make a reasonable number of follow-up visits to the Customer's facility during the 12 months following initial operation of the refrigeration controls installation. Such visit(s) will be at a time convenient to the Customer, made with at least one-week advance notice given to the Customer by the NMLD.

(b) The purpose of these visit(s) is to provide the NMLD with an opportunity to evaluate the present program. This will have no effect on the contribution paid to the customer.

(c) The NMLD is under no obligation to make follow-up visits, to review the operation of the retrofits, or to make any suggestions of any kind to the Customer.

**16. Publicity of Customer Participation**

Unless the Customer objects in writing at the time of applying, the NMLD may publicize the fact of the Customer's participation in the program, the results, the amount paid to the Customer, and any other information that reasonably relates to the Customer's participation.

**17. Limitation of Liability**

Neither the NMLD or the Town of Norwood shall be liable to the Customer (including negligence) for any damages caused by any activities associated with the Program, nor shall they be liable for consequential or incidental damages under any Theory of Recovery.

**18. Customer Must Pay All Taxes**

The benefits conferred upon the Customer may be taxable by the federal, state, and local government. The customer is responsible for declaring and paying all such taxes. The NMLD is NOT responsible for the payment of any such taxes.

**19. Approved Applications Valid for One Year**

Approved applications are in effect for one year from the date that the application is signed by an authorized NMLD supervisor. If the project is not fully completed within the one-year period, the NMLD has no obligation to pay any amount for the retrofit, nor shall the NMLD pay any prorated amount for partially installed equipment.

**20. Approval Letter**

After an application is approved by the NMLD authorized supervisor, the Customer will receive written notification of the approved contribution amount and the date that the retrofit must be fully installed to qualify for payment. Any work performed prior to the issuance of the NMLD's written authorization will be deemed unauthorized installation and the NMLD will have no obligation to pay for that work performed.

**21. Application does not Entitle Customer to Participate**

The program described in this application may be altered, suspended, or canceled by the NMLD at any time without prior notice. The Customer is not entitled to any program benefits or review of its application in such a circumstance. Submission of a completed application does not entitle the Customer to program participation. Entitlement to program participation can only occur after the Company has signed a copy of the application and granted approval.

**22. Vendor Selection**

The NMLD acknowledges that the Customer may select any vendor or contractor to perform the work contemplated by this Application. However, all materials that are to be used need to meet or exceed the minimum requirements of the equivalent Mass Save Commercial and Industrial program offering, and need to carry relevant regulatory approvals, for example, UL, DLC, Energy Star, Mass Save Qualified Product List (QPL), AHRI)

**23. Modifications**

If either the Company or the Customer desires to modify this Agreement, the modification must be in writing and signed by an authorized person of the other party for the modification to be enforceable against the party. This agreement is the entire agreement between the NMLD and the Customer and supersedes all other communications.

*Worksheet 1: Case Motor Replacement*

**Existing Shaded Pole Motors**

<b>LOCATION (ROOM #)</b>	<b>Metered Motor kW</b>	<b># of Motors being replaced</b>
1 _____		
2 _____		
3 _____		
4 _____		
5 _____		
6 _____		
7 _____		
8 _____		

**Existing Permanent Split Capacitor (PSC) Motors**

<b>LOCATION (ROOM #)</b>	<b>Metered Motor kW</b>	<b># of Motors being replaced</b>
1 _____		
2 _____		
3 _____		
4 _____		
5 _____		
6 _____		
7 _____		
8 _____		



*Worksheet 2: Door Heater Controls*

**Existing Door Heating Elements Refrigeration**

<b>LOCATION (ROOM #)</b>	<b>Name Plate Volts</b>	<b>Name Plate Amps</b>	<b># of Heating Elements</b>
1 _____			
2 _____			
3 _____			
4 _____			
5 _____			
6 _____			
7 _____			
8 _____			

**Existing Door Heating Elements Freezer**

<b>LOCATION (ROOM #)</b>	<b>Name Plate Volts</b>	<b>Name Plate Amps</b>	<b># of Heating Elements</b>
1 _____			
2 _____			
3 _____			
4 _____			
5 _____			
6 _____			
7 _____			
8 _____			

*Worksheet 3: Electronically Commutated Motor (ECM) Evaporator Fan Motors for Walk-in Cooler / Freezer*

Existing Evaporator Fan Motors

LOCATION (ROOM #)	Name Plate Volts	Name Plate Amps	Motor Phase	# of Motors
1 _____				
2 _____				
3 _____				
4 _____				
5 _____				
6 _____				
7 _____				
8 _____				

*Worksheet 4: Electronic Defrost Control*

Existing Defrost System

LOCATION (ROOM #)	Metered kW load of Defrost System	# of Defrost Cycles Per day	Average Length of Defrost Cycle
1 _____			
2 _____			
3 _____			
4 _____			
5 _____			
6 _____			
7 _____			
8 _____			

*Worksheet 5: Evaporator Fan Control*

Existing Evaporator Fan Motors

LOCATION (ROOM #)	Name Plate Volts	Name Plate Amps	Motor Phase	# of Motors
1 _____				
2 _____				
3 _____				
4 _____				
5 _____				
6 _____				
7 _____				
8 _____				

*Worksheet 6: Novelty Cooler Shutoff*

Existing Novelty Coolers

LOCATION (ROOM #)	Name Plate Volts	Name Plate Amps	Motor Phase	# of Coolers	Hours of Operation
1 _____					
2 _____					
3 _____					
4 _____					
5 _____					
6 _____					
7 _____					
8 _____					

*Worksheet 7: Vending Miser*

**Existing Beverage Vending Machines**

<b>LOCATION (ROOM #)</b>	<b># of Vending Machines</b>
1 _____	
2 _____	
3 _____	
4 _____	
5 _____	

**Existing Snack Vending Machines**

<b>LOCATION (ROOM #)</b>	<b># of Vending Machines</b>
1 _____	
2 _____	
3 _____	
4 _____	
5 _____	

**Existing Glass Front Vending Machines**

<b>LOCATION (ROOM #)</b>	<b># of Vending Machines</b>
1 _____	
2 _____	
3 _____	
4 _____	
5 _____	