

LIPA Commercial Construction Program – 2009

Prescriptive

Pre-Qualified Equipment -
General and Performance Lighting, HVAC/Heat Pumps,
Chillers, HVAC Controls/ECM Motors, Air Compressors,
Premium Efficiency Motors, VFDs, Commercial Kitchen
Equipment, Vending/Snack Machine Controls

Equipment Eligibility Guidelines

1. Incentives are available to **non-residential** electric customers in the LIPA service territory.
2. Review all eligibility guidelines and the Terms and Conditions found on the back of the Prescriptive Application Form.
3. **Incentives for PRE-QUALIFIED equipment are limited to a maximum of \$100,000 per account, per calendar year.**
4. **Incentives for PRE-QUALIFIED equipment are limited to a maximum of \$300,000 per applicant, per calendar year.**

Incentive Request for Less than \$10,000 - No Pre-Approval Required

1. **Complete Sections 1 through 3** of the application and applicable worksheets. LIPA strongly recommends that worksheets be completed with the assistance of the project architect, engineer, or equipment contractor or vendor.
2. **Sign the *Certification Statement* in Section 4 of the application form. Mail the application form, completed worksheet(s), W-9 form, and required documentation to LIPA Commercial Construction Program, 25 Hub Drive, Melville, NY 11747. *Required documentation includes: item descriptions, paid invoices, product manufacturer and model number, and manufacturer literature.***
3. LIPA may require a post installation inspection.
4. Upon review and approval of the application, LIPA will authorize payment and either mail a check to the applicant or apply a bill credit to the applicant's account.

Incentive Request Equal to or Greater than \$10,000 – PRE-APPROVAL REQUIRED

1. Before purchasing equipment, **complete Sections 1 through 3** of the application and applicable worksheets. LIPA strongly recommends that worksheets be completed with the assistance of the project architect, engineer, or equipment contractor or vendor.
2. **Sign the *Certification Statement* in Section 4 of the application form. Mail the application form, completed worksheet(s), W-9 form, and required documentation to LIPA Commercial Construction Program, 25 Hub Drive, Melville, NY 11747. *Required documentation includes: item descriptions, cost proposal, product manufacturer and model number, and manufacturer literature.***
3. If appropriate, LIPA will conduct a pre-inspection of the building.
4. After the applicant has received PRE-APPROVAL, applicant will be notified in writing and assigned a project number. Applicant may then purchase and install the pre-qualified equipment.
5. After installing the pre-qualified equipment, the applicant must submit the required documentation, including item descriptions, paid invoices, product manufacturer and model number and manufacturer literature, to LIPA with a brief letter indicating that the project is complete (equipment is installed and operational).
6. LIPA may require a post-installation inspection. If so, LIPA will schedule the inspection at a time convenient for the customer.
7. After verification that all necessary requirements have been met, LIPA will authorize payment and either mail a check to the applicant or apply a bill credit to the applicant's account.

By participating in this program, the customer agrees that LIPA obtains and/or retains ownership of all rights to existing and future emission credits, renewable energy rights to existing and future emissions credits, renewable energy green tags, tradable renewable certificates and/or any and all other environmental benefits associated with the installation of the eligible equipment.

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Section 1 – Applicant's Information

Electric Account # _____

Rate Code _____

Organization Name: _____ DBA: _____

Facility Address: _____

Town: _____ State: _____ Zip: _____

Mailing Address: _____

Town: _____ State: _____ Zip: _____

Customer Federal Tax ID #: _____ Incorporated Not Incorporated Exempt

Contact: Mr. Mrs. Ms. _____ Title: _____ Tel: _____

E-Mail Address: _____

Primary Use of Facility: Sq. Ft. of Facility: _____ Est. Completion Date: ____/____/____

Restaurant Health Grocery Retail Other
 School Hospital Hotel Religious
 College Office Warehouse Manufacturing

Contractor Name: _____ Lighting HVAC General Contractor ESCO

Contractor Federal Taxpayer ID #: _____ (required)

Contractor Contact: _____ Title: _____ Tel: _____

Address: _____

Town: _____ State: _____ Zip: _____ E-mail: _____

Section 2 – Project Type

New Bldg. Equip. Replacement Expand Exist. Bldg. Renovation Other
For LIPA Use Only -- Retrofit

Section 3 – Incentives Requested

Transfer incentive amounts from all worksheets:

General Lighting: \$ _____ Premium Efficiency Motors: \$ _____

Performance Lighting (LPD): \$ _____ Variable Frequency Drives (VFDs): \$ _____

HVAC/Heat Pumps: \$ _____ Commercial Kitchen Equipment.: \$ _____

Chillers: \$ _____ Vending/Snack Machine Controls: \$ _____

HVAC Controls/ECM Motors: \$ _____

Air Compressors: \$ _____ Total: \$ _____

Section 4 – Certification Statement

Customer has read and understands the Terms and Conditions set forth in this application and agrees to abide by them. By participating in this program, customer agrees that LIPA obtains and/or retains ownership of all rights to existing and future emission credits, renewable energy rights to existing and future emissions credits, renewable energy green tags, tradable renewable certificates and/or any and all other environmental benefits associated with the installation of the eligible equipment. Customer certifies that the information provided in the incentive application is true and accurate. Customer further certifies that the energy saving products described in the incentive application have or will be installed in the Facility indicated above and will not be resold. Customer agrees to permit LIPA to (1) verify the purchase invoices and product installations and (2) upon request, install and remove load-monitoring equipment at the facility. Customer acknowledges that the rights and obligations in this Agreement shall be binding upon lessee's assigns, and future owners of the Facility. Customer agrees to include restrictions contained in this Agreement in leases, sales, contracts, or other similar documents relating to the end use and ownership of the facility. Customer acknowledges that consistent with LIPA's Efficiency Long Island program policies and procedures, LIPA may pro-rate a rebate or incentive (the "Rebate") if the customer purchases less than its full electric requirements from LIPA. Customer further acknowledges that LIPA may require Customer to pay all or a portion of the Rebate received if within five (5) years of receipt of the Rebate, Customer ceases purchasing its full electric requirements from LIPA or increases its use of electric power from non-LIPA sources at the Facility. This stipulation does not apply to Long Island Choice Customers.

Applicant's Signature: _____ Date: _____

LIPA Representative: _____ Date: _____

2009 TERMS AND CONDITIONS

1. Incentives

- a) Subject to these Terms and Conditions, The Long Island Power Authority or LIPA (The "Authority") will pay incentives to eligible Customers or their Representatives (hereinafter "Customers") for the installation of ECMs (Energy Conservation Measures).
- b) "ECMs" are those electric conservation measures identified as such in program materials issued by the Authority and other site-specific Custom or Whole Building Design Measures that are approved by the Authority.

2. Customer Eligibility

- a) The LIPA Commercial Construction Program is available to all non-residential electric customers in the LIPA service territory.
- b) By participating in this program, Customer agrees that LIPA obtains and/or retains ownership of all rights to existing and future emissions credits, renewable energy rights to existing and future emissions credits, renewable energy green tags, tradable renewable certificates and/or any and all other environmental benefits associated with the installation of the eligible equipment.

3. Pre-Approval and Pre-Installation Survey

- a) The Authority is not bound to pay any incentives unless the Authority pre-approves the ECMs proposed by the Customer and completes a satisfactory pre-installation survey of the Customer's facilities, unless the Authority has waived such pre-approval/inspection requirement explicitly.
- b) The Authority reserves complete discretion to approve or disapprove of any proposed ECMs.

4. Post-Installation Verification

The Authority is not bound to pay any incentives until it has performed a satisfactory post installation verification of the installation unless the Authority has waived such post-installation verification requirement explicitly. If the Authority determines that the ECMs 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 Authority may require changes before making any payments. The Authority will not pay incentives until it has been verified that the Customer has received, as appropriate, final drawings, operation and maintenance manuals, and operator training.

5. Customer Application and Analysis

- a) In addition to completing the worksheet, the Customer may be required by the Authority to provide an analysis of the demand and energy reduction potential of the proposed ECMs. In some cases, a Professional Engineer licensed in the state where the Facility is located must prepare the analysis. Nameplate data may be required for ECMs having incentives based on peak demand.
- b) The Authority may independently review the Customer's application and analysis to determine the energy saving and demand reduction potential. The Authority reserves the right to reject or modify any calculations, based on the Authority's own analysis.

6. Site-Specific Custom Measures

The Authority will only approve of those site-specific Custom Measures that the Authority believes have cost-effective energy and/or demand reduction potential. In any case, the Authority reserves sole discretion to approve or disapprove of any such Measures proposed.

7. Incentive Amounts

- a) Before pre-approving any incentive amounts requested by the Customer, the Authority reserves the right to adjust and/or negotiate the incentive amount.
- b) Once an incentive amount is pre-approved, the Authority will pay no more than the cost to the Customer of purchasing the ECM, or the pre-approved incentive amount, whichever is less.
- c) The Authority reserves the right to lower the incentive amount if the quantity and/or cost of ECMs actually installed by the Customer differ from the pre-approved amounts. Notwithstanding any other provision of these Terms and Conditions, the Authority reserves the right to seek a refund for incentives paid if, at any time, it learns that the agreed to ECMs were not actually and properly installed or have subsequently been disconnected.
- d) The Authority reserves the right to withhold payment or award the incentive in the form of a bill credit for customers in arrears.
- e) The Authority reserves the right to withhold incentive payments for any ECM's that do not carry the Underwriter's Laboratory (UL) Classification Mark or, with the written consent of LIPA, an equivalent independent testing laboratory. Please consult with Underwriters Laboratory for your product classification into the appropriate UL category of the UL Listing Mark or the UL Classification Mark.

In addition, prior to including a technology in the program, the Authority reserves the right to require that the customer undertake, at the customer's own expense, further testing of such technology by Underwriters Laboratories (UL) or, with the written consent of LIPA, an equivalent independent testing laboratory. The UL classification of Energy Verification Services (EVS) is required. The purpose of the testing is to evaluate the technology's energy performance levels.

8. Cost of Equipment

At any time, upon the Authority's request, Customer must provide copies of all invoices (including all materials, labor, and equipment discounts) reflecting the costs of purchasing and installing the ECMs. The invoices shall include a breakdown of all ECMs purchased for installation under this Agreement. In addition the Authority may request any other reasonable documentation or verification of the cost to the Customer of purchasing the ECM. The Authority reserves the right at any time to require invoices from the contractor to determine the price paid by the contractor (including any discounts or incentives) for the ECMs. For custom ECMs, the Authority reserves the right to use the contractor's reasonable costs in order to determine the correct incentive amount.

9. Date of Incentive Payments

The Authority expects to pay the Design Incentive and Equipment Incentive within sixty (60) days after all of the following conditions are met: (1) construction/renovation of Customer's facility is completed; (2) Customer has received an occupancy permit; and (3) the Authority has verified installation costs and satisfactory installation of the ECMs, all in accordance with the specifications.

10. Installation Service Costs Recognized

The Authority will recognize installation costs only to the extent that they are reasonable and actually incurred by the Customer.

11. Contractor Shared Savings Arrangements

If custom ECMs are being installed by a contractor under a "shared savings" contract, the Authority reserves the right to determine the cost of purchasing and installing the ECMs based on the reasonable retail costs in purchasing the equipment and installing the ECMs.

12. Replacement of Burn-Outs

Customers who install energy-efficient lighting ECMs are expected to replace any of the energy-efficient lights that burn out with lights of similar or superior energy savings efficiency at the Customer's expense.

13. Monitoring and Evaluation Follow-up Visits

- a) The Authority reserves the right to make a reasonable number of follow-up visits to Customer's Facility during the 24 months following the Actual Completion Date noted on this application. 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 Authority.
- b) The purpose of the follow-up visit(s) is to provide the Authority with an opportunity to review the operation of the ECMs for program evaluation purposes. The follow-up visit(s) will have no impact on the incentive paid to the Customer for installing the ECMs.

14. Limited Scope of Review

The Authority is under no obligation to: (1) make follow-up visits, (2) review the operation of the ECMs, or (3) make any suggestions of any kind to the Customer.

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

15. Changes in the Program

Notwithstanding paragraph 28(d), the Authority may change the program and the Terms & Conditions at any time without notice. The Authority, however, will process pre-approved applications, to completion under the Terms & Conditions in effect at the time of the pre-approval.

16. Payments Assignable to Contractors

The Customer may direct that incentives be paid directly to the Customer's contractor. This request must be made in writing.

17. Publicity of Customer Participation

The Authority may wish to publicize the Customer's participation in the program, the results, the amount of incentives paid to the Customer, and any other information which reasonably relates to the Customer's participation. In such instances, the Authority will secure a release from the Customer authorizing to make such information public.

18. Installation Schedule Requirements

If the Customer is not engaged in construction of the Facility by the end of one year from the date the Authority signs this Agreement, the Authority may cancel this Agreement.

19. Limitation of Liability and Indemnification

The Authority's liability under this Agreement will be limited to paying the incentives specified in this Agreement. The Authority and any of its affiliates shall not be liable to the Customer for any consequential or incidental damages or for any damages in tort (including negligence) caused by any activities associated with this Agreement or in the program.

The Customer shall protect, indemnify, and hold harmless the Authority from and against all liabilities, losses, claims, damages, judgments, penalties, causes of action, costs and expenses (including, without limitation, attorney's fees and expenses) imposed upon or incurred by or assessed against the Authority resulting from, arising out of, or relating to the performance of this Agreement.

20. No Warranties

- a) The Authority does not endorse, guarantee, or warrant any particular manufacturer or product, and the Authority provides no warranties, expressed or implied, for any product or services. The Customer's reliance on warranties is limited to any warranties that may arise from, or be provided by contractors, vendors, etc.
- b) The Customer acknowledges that neither the Authority nor any of its consultants are responsible for assuring that the design, engineering and construction of the Facility or installation of the ECMs is proper or complies with any particular laws (including patent laws), codes, or industry standards. The Authority does not make any representations of any kind regarding the results to be achieved by the ECMs or the adequacy or safety of such measures.

21. Customer Must Pay All Taxes

The benefits conferred upon the Customer through participation in this program may be taxable by the federal, state, and local government. The Customer is responsible for declaring and paying all such taxes.

22. Limit of Incentive Payments

The Authority reserves the right, for any reason, to stop pre-approving ECMs at any time without notice. In particular, the Authority is not obligated to pre-approve any application for an incentive that may result in the Authority exceeding its program budget.

23. Pre-Approved Letter

After an application is approved by the Authority's authorized executive, the Customer will receive written notification of the pre-approved incentive amount and the date that the ECMs must be fully installed to qualify for incentive payments. Any ECMs installed prior to the issuance of the Authority's written authorization will be deemed as an unauthorized installation and the Authority will have no obligation to pay incentives for those ECMs.

24. Application Does Not Entitle Customer to Participate

The program described in this application may be altered, suspended, or canceled by the Authority at any time without prior notice. Under such circumstances, the Customer is not entitled to any program benefits in excess of those approved prior to such action by the Authority. Submission of a completed application does not entitle the Customer to program participation. Entitlement to program participation can only occur after the Authority has signed a copy of the application and granted pre-approval.

25. Vendor Selection

The Authority acknowledges that the Customer may select any vendor or contractor to perform the work contemplated by this Application, even after the Application is submitted for pre-approval by the Authority. Notwithstanding the foregoing, the Customer acknowledges that the Authority has the right to prohibit specific vendors or contractors from program participation.

26. Removal of Equipment

The Customer agrees, as a condition of participation in the program, to remove and dispose of the equipment being replaced by the ECMs and in accordance with all laws, rules, and regulations. The Customer agrees not to reinstall any of this equipment in the service territory of the Authority or its affiliates.

27. Review of Specifications, Submittals and Drawings

The Customer may be required to provide the Authority with a copy of the specifications for the construction or renovation of the Facility that will be provided to the construction contractors. Such specifications must include the ECMs that are the subject matter of the Customer's application to this program. The Authority may refuse to pay incentives if the specifications do not adequately provide for installation of the ECMs consistent with good engineering and energy-efficient design practices. Customer will, upon request by the Authority, provide a copy of the as-built drawings and equipment submittals for the facility. The Authority may refuse to pay incentives if the final submittals and drawings do not adequately reflect the installation of the ECMs consistent with the original design intent as identified on the Customer application and worksheets. All equipment eligible for a rebate must be new equipment and installed by licensed contractors when required by code and/or law.

28. Miscellaneous

- a) This Agreement is composed of the application and these Terms and Conditions. It is the entire agreement between the parties and supersedes all other communications and representations.
- b) Paragraph headings are for the convenience of the parties only and are not to be construed as part of this Agreement.
- c) The Customer acknowledges that the only individuals authorized to bind the Authority under this Agreement are the individuals who signed this Agreement, or an officer of the Authority.
- d) If either the Authority or the Customer desires to modify this Agreement, the modification must be in writing and signed by an authorized person of the other party in order for the modification to be enforceable against that party.

If any provision of the Terms and Conditions is deemed invalid by any court or administrative body having jurisdiction, such ruling shall not invalidate any other provision, and the remaining Terms and Conditions shall remain in full force and effect in accordance with their terms.

Customer Name _____

Date _____

Instructions

- Fill in the appropriate fields of the worksheet. To calculate the TOTAL \$ multiply the COUNT (quantity of installed equipment) by the UNIT INCENTIVE and enter the amount in the TOTAL \$ column.
- General Eligibility Requirements for Lighting Systems and Controls: *All equipment must be new.* Used or rebuilt equipment is not eligible.
- Fluorescent Fixtures w/ 4' T8 lamps: The lamp/ballast combinations must meet the specifications for High Performance HPT8 Systems as set forth by the Consortium for Energy Efficiency (CEE). Refer to CEE for High Performance HPT8 and Reduced Wattage HPT8 Lamp System specifications: www.cee1.org
- Fluorescent fixtures with all other lamp sources: Ballast must be high frequency (>10 kHz) electronic and have THD <20 and a PF > 0.90 and be ETL- and UL-listed and the lamps must have tri-chromatic phosphors.
- All eligible lighting products must be UL listed.
- Lamp and ballast retrofits are eligible for Custom Rebates. (See LIPA Representative.)
- Note: Applicant can not apply for a General Lighting incentive and a Performance Based Lighting (LPD) incentive for the same or overlapping building space area.

Fluorescent Fixtures with Reflectors		Code	Count	Unit Incentive	Total \$
Each eligible new unit shall include a new fixture with a minimum reflectivity of 87%. Fixtures must use HPT8 or T5 lamps and electronic ballasts. For industrial applications, not general office lighting.	Open, non-recessed fixture, 4-ft. length, with specular reflector	10-100		\$15 per fixture	
	2 – Open non-recessed Tandem Wired 4-ft. fixtures with specular reflectors	10-110		\$15 per fixture	
	Open, non-recessed fixture, 8-ft. in length, with specular reflector	10-120		\$20 per fixture	
	2 – Open, non-recessed Tandem Wired 8-ft. fixtures with specular reflectors	10-130		\$20 per fixture	
High Intensity (High Bay) Fluorescent Fixtures (interior use only)		Code	Count	Unit Incentive	Total \$
Fixture efficiency must meet or exceed 75%. Only new fixtures with electronic ballasts qualify. Roadway or street lighting does not qualify. Must have a minimum of 125 watts.	HPT8 or T5 linear Fluorescent Lamps and Ballasts	10-146		\$35 per fixture	
	Hard-wired (Pin Base) Compact Fluorescent Lamps and Ballasts	10-147		\$40 per fixture	
Indirect Fluorescent Fixtures – Pendant and Wall Mounted		Code	Count	Unit Incentive	Total \$
Each eligible fixture shall consist of a four-foot section containing not more than 3 lamps, with an indirect or indirect/direct light distribution. Overall fixture efficiency shall meet or exceed 80%. Lighting should be designed and installed to meet IES standard RP-1 MAXIMUM criteria. When HPT8's are not manufactured, other lamp types may be eligible.	HPT8 or T5 lamps with electronic ballast	10-200		\$30 per 4-ft. section	

Customer Name _____

Date _____

Indirect Fluorescent Fixtures – Recessed		Code	Count	Unit Incentive	Total \$
<p>Each eligible unit shall be recessed containing no more than 3 lamps with an indirect or indirect/direct distribution. Overall fixture efficiency shall meet or exceed 80%.</p> <p>When HPT8's are not manufactured, other lamp types may be eligible.</p>	HPT8 or T5 lamps with electronic ballast	10-195		\$20 per fixture	
High-Efficiency Fluorescent Fixtures		Code	Count	Unit Incentive	Total \$
<p>New recessed or surface-mounted fixture with electronic ballast. Each eligible fixture shall consist of ballast and not more than 3 lamps. Overall fixture efficiency shall meet or exceed 75% for parabolic louvered fixtures and 83% for fixtures with a prismatic lens.</p> <p>When HPT8's are not manufactured, other lamp types may be eligible.</p>	1 HPT8 or T5 lamp with electronic ballast	10-151		\$5 per fixture	
	2 HPT8 or T5 lamps with electronic ballast	10-150		\$10 per fixture	
	3 HPT8 or T5 lamps with electronic ballast	10-152		\$10 per fixture	
High-Efficiency Fluorescent Fixtures with low-power electronic ballast		Code	Count	Unit Incentive	Total \$
<p>New recessed or surface-mounted fixture with electronic ballast. Each eligible fixture shall consist of a low power electronic ballast (Ballast Factor <0.85) and not more than 3 lamps. Overall fixture efficiency shall meet or exceed 75% for parabolic louvered fixtures and 83% for fixtures with a prismatic lens.</p> <p>When HPT8's are not manufactured, other lamp types may be eligible.</p>	1 HPT8 or T5 lamp with low-power electronic ballast	10-161		\$15 per fixture	
	2 HPT8 or T5 lamps with low-power electronic ballast	10-162		\$20 per fixture	
	3 HPT8 or T5 lamps with low-power electronic ballast	10-160		\$20 per fixture	

Customer Name _____

Date _____

High Efficiency Low-Glare Fluorescent Fixtures		Code	Count	Unit Incentive	Total \$
<p>New low-glare recessed or surface mounted fixture with electronic ballast. Overall fixture efficiency shall meet or exceed 60% for parabolic fixtures. Lighting must be designed and installed to meet IES Standard RP-1 Preferred criteria.</p> <p>When HPT8's are not manufactured, other lamp types may be eligible.</p>	2 HPT8 or T5 lamps with electronic ballasts with parabolic louver	10-170		\$20 per fixture	
	3 HPT8 or T5 lamps with electronic ballasts with parabolic louver	10-171		\$20 per fixture	
High Efficiency Low-Glare Fluorescent Fixtures with low-power electronic ballast		Code	Count	Unit Incentive	Total \$
<p>New low-glare recessed or surface mounted fixture with low-power electronic ballast. (Ballast Factor <0.85) Overall fixture efficiency shall meet or exceed 60% for parabolic fixtures. Lighting must be designed and installed to meet IES Standard RP-1 Preferred criteria.</p> <p>When HPT8's are not manufactured, other lamp types may be eligible.</p>	2 HPT8 or T5 lamps with low-power electronic ballasts with parabolic louver	10-181		\$30 per fixture	
	3 HPT8 or T5 lamps with low-power electronic ballasts	10-180		\$30 per fixture	
HID Fixtures for Interior Use (Roadway or street lighting does not apply)		Code	Count	Unit Incentive	Total \$
<p>Each eligible new unit shall consist of a ceramic metal halide PAR lamp with integrated ballast. For replacement of applications, lamps must replace standard incandescent or halogen PAR lamps of greater wattage.</p>	Integrated Ballast Ceramic Metal Halide PAR lamp	10-141		\$20 per lamp	
	Pulse Start Metal Halide Lamp with Electronic Pulse Start Ballast	10-142		\$20 per fixture	

Customer Name _____

Date _____

HID Fixtures for Interior Use (Roadway or street lighting does not apply) - continued		Code	Count	Unit Incentive	Total \$
For high ceiling retail, industrial applications, each eligible new unit shall include a metal halide lamp with ceramic arc tube technology. For replacement applications, the new fixture shall be a one-for-one replacement of incandescent, mercury vapor, high pressure sodium, or halogen fixtures. Ceramic metal halide wattage must be less than the existing lamp wattage.	Ceramic Metal Halide Fixture	10-143		\$45 per fixture	
Each eligible new unit shall consist of a ceramic metal halide lamp with remote ballast In a down light, directional, accent or track lighting application. Maximum lamp wattage of 100 watts.	Ceramic Metal Halide with Remote Ballast	10-144		\$45 per fixture	
Fluorescent Lighting Controls		Code	Count	Unit Incentive	Total \$
Each eligible unit shall be a hard-wired, passive infrared and/or ultrasonic detector. Installations must comply with manufacturer's guidelines on coverage and maximum controlled watts. Installations with manual "ON" overrides are not eligible.	Ceiling/Remote Mounted Occupancy Sensors	10-210		\$35 per control	
Each eligible unit shall consist of a photo sensor that controls a minimum of 4 dimming ballasts and fluorescent lamps. Dimming shall be continuous or stepped at 4 or more levels. Fixtures controlled ON/OFF are NOT eligible.	Daylight controlled dimming of fluorescent systems	10-220		\$40 per ballast	
Each eligible unit - HPT8 Dimming Ballast must appear on the latest CEE list for High Performance T8 Dimming Ballast refer to: www.cee1.org	HPT8 dimming ballasts Can not be combined w/10-220	10-225		\$10 per ballast	

Customer Name _____

Date _____

Fluorescent Lighting Controls - continued		Code	Count	Unit Incentive	Total \$
Each eligible unit shall control fluorescent lamps based on occupancy. Ballast consumption in "Low" mode must not exceed 60% of full load. Fixtures controlled ON/OFF are NOT eligible.	Occupancy controlled Hi-Low switching of fluorescent systems	10-230		\$40 per ballast	
Each eligible unit shall be a wall mounted, hard-wired passive infrared and/or ultrasonic detector. Not eligible if installed in rest rooms, locker rooms, stairwells, or rooms greater than 250 square feet.	Wall Mounted Occupancy Sensors	10-235		\$15 per control	
Each eligible unit shall be mounted on and control a Fluorescent fixture with an on/off control.	Fluorescent fixture mounted occupancy sensor with on/off	10-236		\$35 per control	
Each eligible unit shall be mounted on and control a Fluorescent fixture based on available daylight.	Fluorescent fixture mounted daylight sensor	10-237		\$30 per control	
HID Lighting Controls		Code	Count	Unit Incentive	Total \$
Each eligible unit shall control HID lamps. Fixtures controlled ON/OFF are not eligible.	Occupancy controlled Hi-Low switching of HID	10-240		\$75 per fixture	
	Daylight controlled dimming of HID	10-250		\$75 per fixture	
Total General Lighting Worksheet Requested Incentive \$					
Please attach lighting equipment invoice(s) containing product model number, manufacturer, product specifications, purchase price, and installation labor costs to this application.					

Customer Name _____

Date: _____

To qualify under this program the customer must:

- Install new fixtures throughout the space addressed.
- Use calculations in accordance with New York State Energy Conservation Construction Code (NYSECCC).
- Meet the “Terms & Conditions” set forth by LIPA as specified in the application document.
- Consult with a LIPA representative or refer to ASHRAE Std 90.1 2004 if space/building type is not listed in Reference Tables.

Recommendations:

Provide lighting levels in accordance with the Illuminating Engineering Society of North America (IESNA)

Provide high quality lighting, including appropriate levels of glare control, color rendering, and lighting uniformity.

Required Documentation:

Lighting Fixture schedule, including manufacturer model number and rated wattage

Incentive Tier

Tier 1:

\$0.40/Watt saved for 10% better than NYSECCC 2007.

Tier 2:

\$0.80/Watt saved for 30% better than NYSECCC 2007.

All hard-wired lighting must include calculations. Contact LIPA for assistance in identifying lighting technologies and design strategies.

SPACE/ BUILDING TYPE	TABLE 1			TABLE 2		
	Space-by-Space Method			Building Method		
	Base Watts/ Sq. Ft.	Max. Tier 1 LPD	Max. Tier 2 LPD	Base Watts/ Sq. Ft.	Max. Tier 1 LPD	Max. Tier 2 LPD
Auditorium	1.8	1.62	1.26			
Automotive Facility				0.9	0.81	0.63
Bank/Financial Institution	1.5	1.35	1.05			
Classroom/Lecture Hall	1.4	1.20	0.98			
Convention, Conf., or Meeting Center	1.3	1.17	0.91			
Corridor, Restroom or Support Area	0.9	0.81	0.63			
Courthouse/Town Hall				1.2	1.08	0.84
Dining	0.9	0.81	0.63			
Dormitory				1.0	0.90	0.70
Exercise Center	0.9	0.81	0.63	1.0	0.90	0.70
Exhibition Hall	1.3	1.17	0.91			
Grocery Store	1.6	1.44	1.12	1.5	1.35	1.05
Gymnasium playing surface	1.4	1.26	0.98			
Hotel				1.0	0.90	0.70
Hotel function	1.3	1.17	0.91			
Industrial work, < 20' ceiling height	1.2	1.08	0.84			
Industrial work, ≥ 20' ceiling height	1.3 *	1.17	0.91			
Kitchen	1.2	1.08	0.84			
Library	1.7	1.53	1.19	1.3	1.17	0.91
Lobby - hotel	1.1	0.99	0.77			
Lobby - other	1.3	1.17	0.91			
Mall, Arcade or Atrium	0.6	0.54	0.42			
Medical and Clinical Care	1.2	1.08	0.84	1.2	1.08	0.84
Motel				1.0	0.90	0.70
Multi-family				0.7	0.63	0.49
Museum	1.0	0.90	0.70	1.1	0.99	0.77
Office	1.1	0.99	0.77	1.0	0.90	0.70
Parking Garage				0.3	0.27	0.21
Penitentiary				1.0	0.90	0.70
Police/Fire Station				1.0	0.90	0.70
Post Office				1.1	0.99	0.77
Religious Worship	2.4	2.16	1.68	1.3	1.17	0.91
Restaurant	0.9	0.81	0.63	1.6	1.44	1.12
Retail Sales, Showroom	1.7	1.53	1.19	1.5	1.35	1.05
School				1.2	1.08	0.84
Storage - Industrial and Commercial	0.8	0.72	0.56	0.8	0.72	0.56
Theaters - motion picture	1.2	1.08	0.84	1.2	1.08	0.84
Theaters - performance	2.6	2.34	1.82	1.6	1.44	1.12
Transportation				1.0	0.90	0.70

Note: Applicant can not apply for a Performance Based Lighting incentive and a General Lighting incentive for the same overlapping building space. LIPA will have final determination regarding the applicability of the building or space type used in determining the rebate.

*Modified from NYSECCC 2007 Code

Customer Name _____

Date: _____

Please enter your project information in the table(s) below:

SPACE-BY-SPACE METHOD (Use Reference Table 1)

Example - Savings Calculation Using the SPACE-BY-SPACE METHOD								
A	B	C	D	E	F	G	H	I
Space Type (From Reference Table 1)	Building Area (Sq. ft.)	Est. Annual Hours of Operation	Installed Wattage	Base Watts/ Sq. Ft. (Table 1) *	Installed LPD (watts/sq. ft.)	LPD Reduction from Baseline (E-F)	Incentive Tier Tier 1 = \$0.40 Tier 2 = \$0.80	Total \$ (B x G x H)
Total Performance Lighting – Space-by-Space Method Incentive Requested \$								
* Use Baseline Watts/SF Factor from Reference Table 1.				(All rebates will be rounded to the nearest whole dollar.)				

BUILDING METHOD (Use Reference Table 2)

Example - Savings Calculation Using the BUILDING METHOD								
A	B	C	D	E	F	G	H	I
Building Type (From Reference Table 2)	Building Area (Sq. ft.)	Est. Annual Hours of Operation	Installed Wattage	Base Watts/ Sq. Ft. (Table 2)	Installed LPD (watts/sq. ft.)	LPD Reduction from Baseline (E-F)*	Incentive Tier Tier 1 = \$0.40 Tier 2 = \$0.80	Total \$ (B x G x H)
Total Performance Lighting – Building Method Incentive Requested \$								
* Use Baseline Watts/SF Factor from Reference Table 2.				(All rebates will be rounded to the nearest whole dollar.)				

Customer Name _____

Date _____

Instructions

- Use **Incentive Tables below** to determine the category of your equipment and eligibility.
- Use **Worksheet on Page 2** to calculate the incentive.
- Attach invoices, product specification sheets, and other relevant documentation, to the worksheet on Page 2.
- General Eligibility Requirements for HVAC System Incentives may be applied to packaged and split systems. List major indoor and outdoor components of split systems. **Window units, compressor or condenser replacements are not eligible for incentives.**

Unitary AC and Split Systems and Air-to-Air Heat Pump Systems – Efficiency and Incentive Levels

Equipment Size		Tier I		Tier II	
Tons	Btuh	Minimum Efficiency	Incentive (\$/ton)	Minimum Efficiency	Incentive (\$/ton)
<5.4	<65,000	14.0 SEER (Split/Packaged AC)	\$125	15.0 SEER (Split/Packaged AC)	\$230
< 5.4	<65,000	14.0 SEER/8.5 HSPF (Split Heat Pump)	\$125	15.0 SEER/9.0 HSPF (Split Heat Pump)	\$230
< 5.4	<65,000	14.0 SEER/8.0 HSPF (Packaged Heat Pump)	\$125	15.0 SEER/8.5 HSPF (Packaged Heat Pump)	\$230
≥ 5.4 to < 11.25	≥ 65,000 to < 135,000	11.5 EER	\$80	12 EER	\$110
≥ 11.25 to < 20	≥ 135,000 to < 240,000	11.5 EER	\$80	12 EER	\$100
≥ 20 to < 63	≥ 240,000 to < 760,000	10.0 EER	\$50	10.5 EER	\$90
≥ 63 to ≤ 300	≥ 760,000 to ≤ 3,600,000	9.7 EER	\$25 per ton plus \$5/ton for each 0.1 EER above min. criteria	n/a	n/a

Water Source Heat Pump Systems – Efficiency and Incentive Levels – COOLING ONLY

Equipment Size		Minimum Efficiency	Incentive (\$/ton)
Tons	Btuh		
≤ 30	≥ 360,000	14.0 SEER	\$80

Water or Evaporative Cooled DX Unitary A/C Systems – Efficiency and Incentive Levels

Equipment Size		Minimum Efficiency	Incentive (\$/ton)
Tons	Btuh		
>30 and ≤ 300	> 360,000 to ≤ 3,600,000	14.0 EER	\$40 per ton and \$5/ton for each 0.1 EER point above minimum criteria

Note: Geothermal Heat Pump Systems are now evaluated under LIPA’s Custom Program Component.

Customer Name _____

Date _____

Attach invoices, product specification sheets, and other relevant documentation to this application.

R = Replacement		S AC = Split AC		SHP = Split Heat Pump		AHP = Air Source HP		WDX = Water/Evap. Cooled DX Unitary AC		Calculation for AC, Air-to-Air Heat Pump Systems less than 63 tons			Calculation for Water or Evaporative DX Unitary AC Systems							
N = New		UAC = Unitary AC		UHP = Unitary Heat Pump		WHP = Water Source HP		WDX = Water/Evap. Cooled DX Unitary AC		Example: 5.4 ton Unitary AC, 11.5 EER $A \times F \times G = \text{Rebate}$ $5.4 \times \$80 \times 1 = \432			Example: 30 ton, 14.3 EER $A \times [(D \times E) + F] \times G = \text{Rebate}$ $30 \times (\$15 + \$40) \times 1 = \$1,650$							
										Manufacturer and Model Number (Note 1)			Unit Size (Tons)	Unit Efficiency	Min. Qualifying EER	No. Points Above Min. Eff. (Note 2) $(B-C) \times 10$	Additional Incentive \$/ton	\$/Ton	No. Of Units	Total \$
										Examples			A	B	C	D	E	F	G	(see Formula)
N								W		Acme Best, Inc. F-345-9099			30	14.3	14.0	$(.3 \times 10) = 3$	\$5	\$40	1	\$1,650
N		U								Systemex, Inc. H-000-999-0008			5.4	11.5	11.5	NA	NA	\$80	1	\$432

Note 1: Split Systems - List matching indoor and outdoor component

Note 2: This only applies to Water or Evaporative Cooled DX Unitary AC Systems and Unitary/Split systems and Heat Pumps >=63 tons to <=300 tons

LIPA COMMERCIAL CONSTRUCTION – 2009

Chillers <= 1,000 Tons Worksheet

Customer Name _____ Date _____

Instructions:

Calculate the rebate using both the Full Load and IPLV minimum criteria for the unit. Only units that meet both minimum requirements are eligible for rebates. The final rebate will be the higher dollar value obtained from using both minimum requirements.

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Notes	Equipment	Base Unit Incentive per ton	Minimum Equipment Efficiency	Additional Incentive	Unit Size	Qty	Est. Full Load Hours	Unit Efficiency	Total \$ (Note 3)
See Notes 1,2,4,5	Air Cooled Chiller with condenser ≥ 30 and ≤ 300	\$25	Full Load: 10.0 EER and IPLV 12.0 EER	\$5/ton for each 0.1 EER point above min. criteria			Hrs:	EER:	
								IPLV	
See Notes 1,2,4	Water Cooled Chiller ≥ 30 and < 150	\$15	Full Load: 0.72 kW/ton and IPLV 0.62 kW/ton	\$8/ton for each 0.01 kW/ton below min. criteria			Hrs:	kW/ton peak	
								kW/ton IPLV	
See Notes 1,2,4	Water Cooled Chiller ≥ 150 and < 300	\$15	Full Load: 0.63 kW/ton and IPLV 0.51 kW/ton	\$2/ton for each 0.01 kW/ton below min. criteria			Hrs:	kW/ton peak	
								kW/ton IPLV	
See Notes 1,2,4	Water Cooled Chiller * ≥ 300 and ≤ 1000	\$6	Full Load: 0.56 kW/ton and IPLV 0.51 kW/ton	\$4/ton for each 0.01 kW/ton below min. criteria			Hrs:	kW/ton peak	
								kW/ton IPLV	

* For centrifugal chillers equipped with factory mounted variable frequency drives using R134a refrigerant, the minimum requirements are 0.575 full load kW/ton and 0.51 IPLV kW/ton, use IPLV value to calculate the incentive.

- Notes:**
- HVAC equipment efficiency criteria are based on applicable ARI standards at ARI standard conditions using a non-CFC refrigerant. Attach a copy of manufacturer's performance sheet. Air-cooled chiller efficiencies shall include condenser fan energy consumption. Tons should be ARI net capacity, not gross capacity.
 - HVAC equipment using chlorofluorocarbons (CFC's) as a refrigerant is not eligible for an incentive.
 - The incentives for Projects with efficiencies based on EER are calculated: $\{(A \times D) + [C \times (G - B) \times 10 \times D]\} \times \text{quantity}$. The incentives for Projects with efficiencies based on kW/ton are calculated: $\{(A \times D) + [C \times (B - G) \times 100 \times D]\} \times \text{quantity}$.
 - ARI standard conditions are as follows:
 - Efficiency ratings for full load or IPLV kW/ton must be calculated at ARI standard rating conditions per ARI Standard 550/590-98 including but not limited to the following
 - 44 degrees F; leaving chilled water; 2.5 gpm/ton
 - 95 degrees F; entering condenser air [air cooled chillers only]
 - 85 degrees F; entering condenser water [water cooled chillers only]; 3.0 gpm/ton
 - Chiller equivalent full load hours (EFLH) are preferably estimated by an engineer, technical representative, or technically qualified vendor.

Customer Name _____

Date _____

Eligibility Requirements:

HVAC Unitary Controls and ECM Motors

- Dual Enthalpy Economizer Controls must have capability to supply minimum of 25% of total system air flow with mixed air damper operational ECM motors (Electrically Commutated) on new equipment up to 1 HP.
- Controls required to meet compliance with the New York State Energy Conservation Code are not eligible.
- Other types of systems/controls may be considered under LIPA’s Custom Program Component.

Controls/Motors	Attach Inventory Sheet (Required)	Unit EER	Unit Tons	# of Units	Incentive Per Unit	Total \$
Dual Enthalpy Economizer Controls	One Control Per Unit				\$250	
Programmable Thermostats	Existing Buildings Only				\$50	
Total						

Controls/Motors	Criteria	Select One And Enter Letter Code	# of Units	Incentive Per Unit	Total \$
		H = Heating Only C= Cooling Only HC = Heating & Cooling			
ECM Motors	Fan Powered Boxes and Fan Coils Only			\$150	
Total					

Please attach equipment invoice(s) containing product model number, manufacturer, product specifications, purchase price, and installation labor costs to this application.

Customer Name _____ **Date** _____

Section 1 - Compressed Air – Eligibility Requirements

- Prescriptive rebates are only applicable to single compressor systems.
- Custom rebates are available for compressors rated in excess of 100 HP or for other compressed air energy saving strategies (e.g., storage, piping, dryers, drains, etc.). See a LIPA representative for details
- Multiple compressor systems of any size that serve a common distribution system may submit applications as a Custom Rebate project.
- Only compressors operating at a pressure below 145 psi are eligible.
- Compressors with VFDs must have a minimum 3% impedance series reactor in its AC power input connector.

Compressor Technology	Up to	Number of Units	Horsepower	Incentive/HP	Total \$
Variable Displacement	100 HP *			\$60	
Variable Speed Drive	100 HP *			\$95	
* Based on name plate HP, nominal					
Total Compressed Air Requested Incentive \$					

Section 2 - Refrigerated Dryer – Eligibility Requirements

- Refrigerated dryers with VFDs must have a minimum 3% impedance series reactor in its AC power input connector.
- CFM = cubic feet per minute as determined in accordance with CAGI Standard ADF 100 @ 100 PSI.

Refrigerated Air Dryers	Up to	Number of Units	Capacity (CFM)	Incentive/CFM	Total \$
Cycling Dryer	500 CFM			\$6	
Variable Speed Drive Dryer	500 CFM			\$6	
Total Dryer Incentive Requested \$					

Section 3 – Storage Tanks

- New storage tanks for existing compressors are eligible.
- Tanks with a ratio of:
 - 3 to < 5 gal per compressor CFM are eligible for \$2/gal incentive
 - ≥ 5 gal per compressor CFM are eligible for \$3/gal incentive

Compressor Horsepower*	Total Storage Capacity In Gallons (A)	Compressor CFM (B)	Tank Ratio (A/B)	Incentive/Gallon (C)	Total \$ (A x C)

* Based on name plate HP, nominal

Total Compressor Worksheet Incentive Requested \$

Please attach equipment invoice(s) containing product model number, manufacturer, product specifications, purchase price, and installation labor costs.

Total Compressor Worksheet Incentive Requested (Section 1 through 3) \$

LIPA Commercial Construction Program – 2009

Premium Efficiency Motors Worksheet

Customer Name: _____ Date: _____

Eligibility Requirements

Fill in the appropriate fields in the worksheet to determine your incentive.

- **Efficiency and Incentive Levels:** Motors meeting or exceeding the NEMA Nominal Efficiencies below are eligible for incentives.
- **Motor Run Hours:** Motors must operate a minimum of 2,000 hours per year to be eligible for incentives.
- **Motors must be NEW, three-phase induction motors, NEMA design A & B, Open Drip Proof (ODP) or Totally Enclosed Fan Cooled (TEFC), 1200, 1800, or 3600 RPM**

Motor Efficiencies and Incentives

OPEN DRIP-PROOF (ODP)					TOTALLY ENCLOSED FAN COOLED (TEFC)				
Motor Size (HP)	Speed (RPM)			Incentive (\$/Motor)	Motor Size (HP)	Speed (RPM)			Incentive (\$/Motor)
	1200	1800	3600			1200	1800	3600	
	NEMA Nominal Efficiency					NEMA Nominal Efficiency			
1	82.5%	85.5%	77.0%	\$45	1	82.5%	85.5%	77.0%	\$50
1.5	86.5%	86.5%	84.0%	\$45	1.5	87.5%	86.5%	84.0%	\$50
2	87.5%	86.5%	85.5%	\$54	2	88.5%	86.5%	85.5%	\$60
3	88.5%	89.5%	85.5%	\$54	3	89.5%	89.5%	86.5%	\$60
5	89.5%	89.5%	86.5%	\$54	5	89.5%	89.5%	88.5%	\$60
7.5	90.2%	91.0%	88.5%	\$81	7.5	91.0%	91.7%	89.5%	\$90
10	91.7%	91.7%	89.5%	\$90	10	91.0%	91.7%	90.2%	\$100
15	91.7%	93.0%	90.2%	\$104	15	91.7%	92.4%	91.0%	\$115
20	92.4%	93.0%	91.0%	\$113	20	91.7%	93.0%	91.0%	\$125
25	93.0%	93.6%	91.7%	\$117	25	93.0%	93.6%	91.7%	\$130
30	93.6%	94.1%	91.7%	\$135	30	93.0%	93.6%	91.7%	\$150
40	94.1%	94.1%	92.4%	\$162	40	94.1%	94.1%	92.4%	\$180
50	94.1%	94.5%	93.0%	\$198	50	94.1%	94.5%	93.0%	\$220
60	94.5%	95.0%	93.6%	\$234	60	94.5%	95.0%	93.6%	\$260
75	94.5%	95.0%	93.6%	\$270	75	94.5%	95.4%	93.6%	\$300
100	95.0%	95.4%	93.6%	\$360	100	95.0%	95.4%	94.1%	\$400
125	95.0%	95.4%	94.1%	\$540	125	95.0%	95.4%	95.0%	\$600
150	95.4%	95.8%	94.1%	\$630	150	95.8%	95.8%	95.0%	\$700
200	95.4%	95.8%	95.0%	\$630	200	95.8%	96.2%	95.4%	\$700

Motor Table (Attach additional sheets if necessary)

	Example	#1	#2	#3	#4
Reason: "N" = New or "F" = Failed	F				
Location: Building & Room	Mechanical RM 4				
Function: Fan, Pump, Process, Etc.	HVAC Pump				
Manufacturer	RR/C 1957				
ODP or TEFC	TEFC				
Size in Horsepower	30				
Speed in RPM	1800				
NEMA Nominal Efficiency	93.6%				
Annual Run Hours	4400				
Quantity	2				
Incentive (\$/Motor) (from Table)	\$150				
Total \$	\$300				

Total Premium Efficiency Motor Worksheet Requested Incentive \$

Note: Qualifying motors purchased for emergency shelf stock are eligible for rebates.

Please attach motor equipment invoice(s) containing product model number, manufacturer, purchase price, and installation labor costs.

Customer Name _____ **Date** _____

General Eligibility Requirements for VFDs

- Prescriptive incentives will be provided for installation of VFDs from 5 to 25 HP on qualifying installation types (See VFD Installation Type Table). **All other VFDs must file a Custom Application.**
- VFDs cannot replace existing VFDs.
- Forward curve fans with inlet guide vanes, variable pitch vane axial fans, and code required VFD installations **are NOT eligible for incentives.** VFDs must be controlled by an automatic signal.
- Motors must operate a minimum of 2,000 hours annually. Motors with lower hours may be eligible for incentives under the Custom Program component.

VFDs can be sensitive to over-voltages that can occur when power factor correcting capacitor banks on the utility system are switched on. **To qualify for an incentive under LIPA's Commercial Construction Program, each VFD must include a series reactor (inductor choke) in its AC input connections.** Your VFD supplier should assist in the sizing of the reactor. LIPA's minimum requirement is a 3% impedance reactor, based on the horsepower rating of the VFD, be installed.

Variable Frequency Drive Incentive Calculation

Instructions:

Use a separate line for each VFD. Look up the incentive amount in **Table 1**, the application code in **Table 2** and enter them in the worksheet. **LIST EACH MOTOR INDIVIDUALLY.**

Table 1	
Controlled Motor HP Controlled by Each VFD	Incentive Amount
5	\$ 800
7.5	\$ 1,000
10	\$ 1,100
15	\$ 1,500
20	\$ 1,800
25	\$ 2,000

1. No incentive for VFDs controlling less than 5 HP.
2. For VFDs controlling more than 25 HP, incentives are offered on a Custom basis. **Do not use this form for Custom rebates.**
3. If the controlled HP falls in between the HP listed in Table 1, the incentive is paid for the nearest HP less than the controlled HP.
4. Forward curve fans in VAV systems are not eligible for VFD incentives.

Table 2	
Code	
BEF	Building Exhaust Fan
CWP	Chilled/Condenser Water Pump
FWP	Boiler Feed Water Pump
HWP	Hot Water Circulator Pump
RFA	HVAC Return Air Fan
SFA	HVAC Supply Air Fan
WHP	Water Source HP Circulator Pump
CTF	Cooling Tower Fan

Variable frequency drive must meet the eligibility requirements identified on page 2.

For other VFD applications, please apply for a Custom rebate.

Table 3	
Code	Baseline Control Types
CF	Constant Flow
OD	Outlet Damper
IV	Inlet Vane
TV	Throttle Valve

Worksheet

Item	Motor HP Controlled by Each VFD	Application Code (Table 2)	Fan or Pump ID	Baseline Control Type (Table 3)	Quantity	Incentive Amount (Table 1)	Total \$
Example	10	SFA	AC-1	OD	1	\$1,100	\$1,100
1.							
2.							
3.							
4.							
5.							
Total VFD Worksheet Incentive Requested \$							

Customer Name _____ **Date** _____

VFD Estimating Equipment Cost

- Please attach a separate document that lists all the equipment to be installed for incentives including brand, model number, quantity, size and location.
- Please complete the tables below to calculate the cost. Attach additional sheets as necessary.

Line Number From Worksheet	Description	Unit Cost	Quantity	Labor	Total Cost
Total Estimated Cost of Proposed System \$					

Important

VFDs can be sensitive to over voltages that occur when power factor correcting capacitor banks on the utility system are switched on. ***To qualify for an incentive payment under LIPA’s program, each VFD must include a series reactor (inductor, choke) in its AC input connections. Your VFD supplier should assist in the sizing of the reactor. LIPA’s minimum requirement is that a 3% impedance reactor, based on the horsepower rating of the VFD, be installed.***

As a general rule, a 3% reactor is sufficient to avoid of harmonic currents generated by the drive. In some instances, your supplier may find it necessary to install 5% reactors and, rarely, additional filtering devices to meet LIPA’s current and voltage harmonic distortion requirements.

If your power factor is less than 0.8 (80%), LIPA recommends that you consider power factor correction concurrent with the installation of the drives because the presence of power factor correction equipment can influence proper reactor sizing and because the presence of VFDs can influence the design of power factor correction equipment. In situations where the load due to VFDs is a substantial part of the facility load, LIPA recommends that filters, rather than capacitors, be used for power factor correction.

The use of VFDs that incorporate pulse width modulation (PWM) may produce over wattages that may cause premature failure of AC Induction Motors not rated for use with an inverter. LIPA recommends that when installing PWM drives you consider utilizing inverter rated motors or suitable over voltage mitigation devices that may include additional line reactors between the drive and the motor. Consider shaft grounding insulated bearings, load side filters or conductive lubricants to prevent possible bearing frosting or fluting. This is particularly important for installations where the motor will operate in a narrow speed band for long periods of time.

Customer Name _____

Date _____

Commercial Kitchen Equipment						
A	B	C	D	E	F	G
Equipment	Type	Efficiency Criteria	Eff. Level % , Energy Rate or Flow Rate	Qty	Incentive Amount	Total \$ (E x F)
Electric Steamers (Note 1)	Pressurized or Pressureless Compartments	≥ 70% Energy Efficiency, Must meet or exceed CEE Tier 2 requirements			\$750	
Comm'l Combination Oven (Note 2)	Standard Electric	≥ 60% Energy Efficiency			\$1,000	
Comm'l Convection Oven (Note 3)	Standard Electric	≥ 70% Energy Efficiency			\$350	
Comm'l Electric Griddles (Note 4)	Single or double side	≥ 70% Energy Efficiency			\$300	
Comm'l Electric Fryer (Note 5)	Deep fat, Open kettle, Pressurized, or Flat Bottom	≥ 80% Energy Efficiency			\$200	
Low-Flow Pre-Rinse Spray Valves (Note 6)	Any	Flow rate < 1.6 gpm. @ 60 psi			\$30	
Insulating Holding Cabinet (Note 7)	Full Size (fully insulated)	Energy Rate (ER) ≤ 0.8 kW			\$300	
Insulating Holding Cabinet (Note 7)	3/4 Size (fully insulated)	Energy Rate (ER) ≤ 0.6 kW			\$250	
Insulating Holding Cabinet (Note 7)	1/2 Size (fully insulated)	Energy Rate (ER) ≤ 0.4 kW			\$200	

Total Commercial Kitchens Worksheet Incentive Requested \$

Please attach equipment invoice(s) containing product model number, manufacturer, product specifications, purchase price, and installed labor costs to this application.

Notes:

- (1) Efficient steamers offer shorter cook times, higher production, and lower idle energy rates due to thicker insulation and more efficient steam delivery. ENERGY STAR® rated units have cooking efficiencies of at least 70%.
- (2) Rebates apply to electric models with cooking efficiencies of 60% or greater.
- (3) Rebates for Commercial Convection Ovens apply to electric models with cooking energy efficiencies of 70% or greater.
- (4) Rebates for Commercial Electric Griddles apply to electric models with cooking energy efficiencies of 70% or greater.
- (5) Efficient fryers give shorter cooking times and higher production rights through the use of more advanced burner and heat exchange designs. Thicker insulation in the fry pot means less heat is lost while not in use, resulting in lower idle power rates. ENERGY STAR® rated fryers have a cooking efficiency of at least 80%.
- (6) Pre-rinse spray valves consist of a spray nozzle, a lever to control water flow, and a dish guard pump. They are normally placed in sinks or commercial dishwashers, and are used to rinse the food off the plates before entering into the dishwashers. A Federal standard mandates that all new units produced have a flow rate of 1.6 gpm, the old ENERGY STAR® standard.
- (7) ENERGY STAR® rated hot food holding cabinets incorporate better insulation, and better door technology to become 60% more efficient than standard models.

**LIPA
Commercial Construction Program – 2009**

**Vending, Snack, Cooler Controllers for
Vending Machines Worksheet**

Customer Name _____ **Date** _____

Eligibility Requirements:

Incentives are for controllers for glass fronted coolers and refrigerated snack vending machines where the controller functions to power down the machine when the surrounding area is vacant (vending machine occupancy control), monitors the room temperature and, also, re-powers the cooling system to maintain a cool product.

Incentives are for controllers for non-refrigerated snack vending machine(s) with mechanisms that function to power down the machine if the surrounding area is vacant.

Eligible Equipment to be Controlled	Quantity	Rebate	Total \$
Refrigerated Snack Vending Machines		\$45	
Non-refrigerated Snack Vending Machines		\$30	
Glass Fronted Refrigerated Cooler		\$45	
Total Vending, Snack, Cooler Controllers Worksheet Incentive Requested \$			
Please attach equipment invoice(s) to this application containing product model number, manufacturer, product specifications, purchase price, and installed labor costs.			