

Efficient Living

Illinois Public Housing Authority Energy Program



Efficient Living: Illinois Public Housing Authority Energy Program Guidelines and Application 2013-2014

Program Year 6 Start Date: June 1, 2013

**STANDARD & CUSTOM GRANTS
for
LOW INCOME HOUSING,
RESIDENTIAL & COMMON AREAS**



**Illinois
Department of Commerce
& Economic Opportunity**

Pat Quinn, Governor

PROGRAM CONTACT INFORMATION

Application reviewers may be contacted at:

ILPHA Energy Efficiency Program
University of Illinois
1 Saint Marys Rd.
Champaign, IL 61820
Att: Efficient Living Energy Program
Phone: 217-244-6769
Email: pha@SEDAC.org

APPLICATION CHECK LIST FOR THE EFFICIENT LIVING ENERGY PROGRAM

Completed applications must include:

- Completed and signed application and worksheet.
- Brief description of the project.
- Completed Utility Bill Authorization form.
- Signed project completion certification
- Any supporting materials (equipment model numbers, pictures, etc.). Note that inventories will need to be collected for many measures but can be sent after the initial application.

Once complete, forms can be emailed to pha@sedac.org, with Subject: Kate Brown.

1.1 Introduction. The Illinois Public Housing Authority Energy Efficiency Program (ILPHA EEP) at the University of Illinois in partnership with the Illinois Department of Commerce and Economic Opportunity (DCEO) invites eligible public housing authorities to participate in the Efficient Living: Illinois Public Housing Authority Energy Program. This program encourages public housing authorities and their residents to incorporate energy cost reduction practices into their daily operations. The program supports implementation of cost-effective energy efficiency measures that help meet annual state energy savings targets. In addition, implementing such measures also enhance economic development in the State of Illinois through job creation and business development.

1.2 Who Is Eligible? Eligibility is limited to applicants that manage public housing authorities located in the State of Illinois. In addition, public housing authorities to which funding can be applied must receive electric delivery services from Ameren Illinois, ComEd, and/or natural gas services from Ameren Illinois, Nicor, Peoples, or North Shore. If you are a PHA with properties located in these service areas, you are eligible to participate in the Illinois PHA Efficient Living Energy Project. Applicants are required to submit documentation that projects are located in the appropriate utility service territories.

This program will allow you to save money and energy consumption when you improve your properties with energy-efficiency upgrades to common areas and residential units. Specifically, the installation of energy efficiency measures in common areas and/or residential units must produce electricity and/or natural gas savings through improvements in building equipment, appliances, and operations. Targeted public housing authorities include residential households at or below 30% of Average Median Income (Extremely Low-Income), 50% of Average Median Income (Very Low-Income), and 80% of Average Median Income (Low-Income). Average Median Income Levels are defined by individual counties where the properties are located.

Coordination with other State of Illinois Energy Programs

The PHA Efficient Living Program reserves the right to restrict applications for energy cost reduction measures where the applicant's participation in another State of Illinois Energy and/or Energy Efficiency Portfolio Program would constitute double dipping or a conflict of interest between programs.

1.3 How Much Is Available? The program may provide up to \$450,000 in incentives/grants. Funding decisions are made as funding is available and the program is not obligated to provide the maximum incentive/grant amount. Maximum incentive/grant rates for each individual energy efficiency measure are outlined in the Incentive/Grant Worksheets as part of the application process. The total incentive/grant cannot exceed 100 percent of the total project cost. Custom projects are subject to cost effectiveness evaluation.

1.4 What Is Eligible? The program will provide incentives/grants for upgrades in electric and/or natural gas savings measures for both common areas and residential units. Incentives/grants will be awarded in amounts up to but not exceeding the cost of the measure for interior lighting improvements, vending machine sensors, ENERGY STAR® rated appliances, and high efficiency HVAC equipment. Incentive/grants may not be used for grant recipient's personnel expenses, the purchase of real property, operating expenses, projects that replace the use of electricity or natural gas with other fuel sources, projects that repair or replace existing equipment with like equipment, projects for the sole purpose of implementing demand response measures, projects receiving funding for the same equipment through any other funding source, custom projects with simple paybacks greater than the equipment life, and/or the purchase of used equipment.

2.1 Step 1: Complete Initial Application & Worksheet. Complete and sign the Initial Application and fill as much information as possible for the Incentive/Grant Worksheet. The Initial Application and draft of the worksheet will provide basic information on the size and scope of the proposed energy cost reduction project and a general idea of the amount of incentive funds required. Each form submitted should include all of the information required in the application package. Ineligible or otherwise incomplete applications will be immediately rejected and returned to the applicant. Once complete, forms can be emailed to pha@sedac.org, with Subject: Kate Brown, or can be mailed to the ILPHA EEP at the following address:

Kate Brown
Building Research Council
One Saint Mary's Rd
Champaign, IL 61820

2.2 Step 2: Conference Call. Once the Initial Application has been reviewed by ILPHA EEP staff, applicants will be contacted to discuss specifics of the proposal. Methods of integrating the Energy Cost Reduction Measures (ECRMs) with the applicants' existing programs as well as the incentive/grant amounts, payments, and reporting schedule will be discussed. Conducting a conference call confers no right upon any applicant and ILPHA EEP is not obligated to award a grant or to pay any costs incurred by the applicant as a result of the conference call.

2.3 Step 3: Finalize Worksheet. After the conference call, applicants should finalize their Incentive/Grant Worksheet in order to determine the final incentive/grant amount for their project. Once verified by ILPHA EEP staff, a Notice of Award will be issued, which will specify the conditions of payment and the payment schedule. ILPHA EEP reserves the right to determine the appropriate payment structure on a project specific basis. The agreement term/performance period will be determined on a project specific basis.

2.4 Step 4: Installation of ECRMs. Once approved, grantees are responsible for ensuring that funded measures meet program requirements and are properly installed. The applicant's signature on the application form is certification that all authorizations required to perform the project have either been obtained or will be obtained no later than 180 days following the grant beginning date set forth in the Notice of Award. As part of the agreement, grantees will be required to certify the project commencement date to ILPHA EEP and are prohibited from the sale, lease, transfer, assignment, or encumbrance of any equipment or material purchased with grant/incentive funds without the express written approval from ILPHA EEP or for the duration of 5 years or end of product life, whichever is less.

2.5 Step 5: Verification & Reporting. ILPHA EEP will monitor compliance with the terms of the agreement and reserve the right to structure reporting requirements on a project specific basis. As acceptance of the agreement, grantees agree to assist with an energy consumption analysis for up to three years following completion and occupancy of the projects. Grantees agree to provide ILPHA EEP with 2 years of utility data on selected buildings. Grantees will be contractually required to allow ILPHA EEP access to the project site and the ability to obtain, publish, disseminate, or distribute any and all information obtained from the project (except any data or information that has been negotiated as being confidential or proprietary), without restriction and without payment or compensation by ILPHA EEP.

In addition, grantees will be required to submit progress reports on a quarterly basis in accordance with the requirements of the agreement. Progress reports must include grant expenditure per project, energy efficiency measures funded by project, total incentive/grant expenditures provided during the quarter, total number of each energy efficiency measure funded during the quarter, addresses of funded projects, addresses of projects completed during the quarter, number of occupants that are at or below 30%, 50%, or 80% of the poverty level, and documentation that projects meet the utility provider requirement.

In the event of a grantee's failure to comply with this requirement, the grant agreement will provide that ILPHA EEP, may at its discretion, require the grantee to return all grant/ incentive funds provided by the program, require the grantee to transfer to the state ownership of equipment and materials purchased with funds and bar the grantee from consideration for future funding. When requested, the grantee shall return to ILPHA EEP any and all funds that are determined by ILPHA EEP to have been spent in violation of the grant agreement.

SECTION 3**FUNDED TERRITORIES****3.1 Ameren Illinois.**

Ameren Illinois		
Adams County Housing Authority	Granite City Housing Authority	Montgomery County Housing Authority
Alton Housing Authority	Greene County Housing Authority	Morgan County Housing Authority
Bloomington Housing Authority	Hancock County Housing Authority	Pekin Housing Authority
Bond County Housing Authority	Henry County Housing Authority	Peoria Housing Authority
Brown County Housing Authority	Jackson County Housing Authority	Perry County Housing Authority
Calhoun County Housing Authority	Jefferson County Housing Authority	Piatt County Housing Authority
Cass County Housing Authority	Jersey County Housing Authority	Pike County Housing Authority
Champaign County Housing Authority	Johnson County Housing Authority	Pulaski County Housing Authority
Christian County Housing Authority	Knox County Housing Authority	Quincy Housing Authority
Clark County Housing Authority	LaSalle County Housing Authority	Randolph County Housing Authority
Coles County Housing Authority	Lawrence County Housing Authority	Richland County Housing Authority
Cumberland County Housing Authority	Livingston County Housing Authority	Saline County Housing Authority
Danville Housing Authority	Logan County Housing Authority	Scott County Housing Authority
Decatur Housing Authority	Macoupin County Housing Authority	Shelby County Housing Authority
DeWitt County Housing Authority	Madison County Housing Authority	St. Clair County Housing Authority
East St. Louis Housing Authority	Marion City Housing Authority	Union County Housing Authority
Edgar County Housing Authority	Marion County Housing Authority	Vermillion County Housing Authority
Edwards County Housing Authority	Mason County Housing Authority	Warren County Housing Authority
Ford County Housing Authority	Massac County Housing Authority	White County Housing Authority
Franklin County Housing Authority	McDonough County Housing Authority	Williamson County Housing Authority
Fulton County Housing Authority	Menard County Housing Authority	Woodford County Housing Authority
Gallatin County Housing Authority	Mercer County Housing Authority	

3.2 Commonwealth Edison.

Commonwealth Edison		
Aurora Housing Authority	Grundy County Housing Authority	North Chicago Housing Authority
Chicago Housing Authority	Kankakee County Housing Authority	Oak Park Housing Authority
Cook County Housing Authority	Joliet Housing Authority	Ogle County Housing Authority
DeKalb County Housing Authority	Lake County Housing Authority	Rockford Housing Authority
Elgin Housing Authority	Lee County Housing Authority	Waukegan Housing Authority
Freeport Housing Authority	McHenry County Housing Authority	Winnebago County Housing Authority

3.3 Natural Gas. This also includes the natural gas territories of Ameren Illinois, Nicor, People's Gas and North Shore.

3.4 Disclaimer. Applications will be accepted beginning June 1, 2013 and will continue until all of the available funding is obligated. Grantees shall hold the State of Illinois or the University of Illinois harmless from any and all claims, demands, and actions based upon or arising out of any services performed by the grantee or by their agents or employees under a grant agreement. ILPHA EEP, by entering into an agreement, does not pledge or promise to

pledge the assets of the state nor does it promise to pay any compensation to the grantee from any moneys of the treasury or the state except such moneys as shall be appropriated and paid to the grantee by ILPHA EEP. The grantee agrees to assume all risks of loss and to indemnify and hold ILPHA EEP, its officers, agents, and employees, harmless from and against any and all liabilities, demands, claims, damages, suits, costs, fees, and expenses, incidents thereto, for injuries or negligence, intentional acts or omissions. In the event of any demand or claim, ILPHA EEP may elect to defend any such demand or claim against ILPHA EEP and will be entitled to be paid by the grantee for all damages.

SECTION 4

DEFINITIONS

4.1 Act. Public Utilities Act.

4.2 AFUE. The Annual Fuel Utilization Efficiency (AFUE) is the season-long, average efficiency of the heating equipment being examined.

4.3 Applicant. An eligible public housing authority proposing an energy efficiency project in Illinois.

4.4 Application. An application that reflects the actual measures and equipment to be installed as well as determines the incentives paid.

4.5 Common Areas. Areas open to and for use by all tenants, which typically include, but are not limited to, hallways, stairways, on-site building management offices, laundry rooms, community rooms, exterior spaces, etc.

4.6 Consortium for Energy Efficiency (CEE). A nonprofit public benefits corporation that develops standards for both commercial and residential energy efficient equipment.

4.7 Custom. Measures that are not standard projects, which typically include, but are not limited to, those shown in Section 5.5.

4.8 Delamping. The permanent net reduction in the number of lamps in a fixture.

4.9 Department. Illinois Department of Commerce and Economic Opportunity, Bureau of Energy and Recycling.

4.10 EER. Energy Efficiency Ratio. A measure of the efficiency of cooling system, such as a heat pump or air conditioner, equal to the ratio of the output in B.T.U./hour to the input in watts.

4.11 EF. The Energy Factor (EF) is a rating system used by ENERGY STAR to indicate a water heater's overall energy efficiency based on the amount of hot water produced per unit of fuel consumed over a typical day. The higher the factor, the more efficient the water heater.

4.12 Energy Efficiency. Measure that reduces the amount of electricity and/or natural gas required to achieve a given end use.

4.13 Entity. Any applicant submitting an application to ILPHA EEP.

4.14 Grant Beginning Date. The date the grant is signed and goes into effect.

4.15 Grantee. An entity that has been awarded a grant.

4.16 Incentive. A grant award or rebate.

4.17 Incremental Measure Cost. The increased equipment cost of upgrading to energy efficiency equipment. For retrofit measures, such as most lighting and vending machines measures, the incremental measure cost is the total cost to purchase and install the qualifying measures. For replacement measures or new equipment the incremental measure cost is the cost to purchase and install the energy efficiency equipment minus the cost to install equipment that meets codes or standards.

4.18 Initial Application. An application for incentives that reflects the estimated number of various measures to be installed (given the best information at the time of its application). It is used to determine if the project is eligible for funding, and to assure that the calculations and methodology used to estimate the energy impacts meet the program requirements. Required information must be submitted using the approved forms and attachments as prescribed in the 2012 Public Housing Authority Efficient Living Energy Program Guides.

4.19 MBH. Unit of capacity equal to 1,000 Btuh or 1,000 BTUs per hour.

4.20 Performance Period. The length of time the Grantee is required to operate the project and submit information/data to ILPHA EEP.

4.21 Project. An eligible energy project that is funded through the program.

4.22 Project Completion Date. The date that all necessary procurement is complete, equipment is installed and operational. The project completion date may not exceed nine months after the grant beginning date unless an alternative schedule has been approved by ILPHA EEP staff.

4.23 SEER. The Seasonal Energy Efficiency Ratio (SEER) is the ratio used to judge how efficiently an air conditioner performs.

4.24 Building Research Council (BRC). The entity that provides advice and analyses enabling public housing authorities in the State of Illinois to increase their economic viability through the efficient use of energy resources. The ILPHA EEP is sponsored by the Illinois Department of Commerce and Economic Opportunity in partnership with ComEd, Ameren Illinois Utilities, Nicor, Peoples, and North Shore Gas. ILPHA EEP is managed by the School of Architecture at the University of Illinois at Urbana-Champaign.

4.25 Standard Incentives. Measures that have set incentive levels.

4.26 Total Project Cost. The cost to purchase and install the qualifying measures including labor and cost.

SECTION 5 ENERGY COST REDUCTION MEASURES SPECIFICATIONS & DEFINITIONS

5.1 LIGHTING ECRMs

5.1.1 Bi-Level Stairwell/Hall/Garage Fixtures with Integrated Sensors.

Existing fixtures must be T12 or incandescent fixtures. Eligible fixtures are hardwired two-lamp T8 fluorescent fixtures with electronic ballasts and manufacturer integrated occupancy sensors used in areas where code requires lighting 24 hours a day (such as stairwells, halls, and garages). Fixtures with manual override capabilities are not eligible. During occupied periods, the fixture should operate at full light output. During unoccupied periods, the fixture should operate at lower light output and wattage. This measure is not eligible for the occupancy sensor, Incandescent to CFL, or T12 to T8 incentive.

5.1.2 Compact Fluorescent Lamps (Screw-in)

This incentive applies to screw-in compact fluorescent lamps (CFLs) and applies only if an incandescent or high intensity discharge (HID) lamp is being replaced. All screw-in CFLs must be ENERGY STAR® rated. The lamp/ballast combination must have an efficacy of ≥ 40 lumens per Watt (LPW). For screw-in CFLs, electronic ballasts are required for lamps ≥ 18 watts.

5.1.3 New Hardwired Compact Fluorescent Fixtures

For hardwired CFL fixtures, only complete new fixtures or modular hardwired retrofits with hardwired electronic ballasts qualify. The CFL ballast must be programmed start or programmed rapid start with a power factor (PF) ≥ 90 and a total harmonic distortion (THD) $\leq 20\%$.

5.1.4 Reduced Wattage 4-foot T8 Lamps and Ballasts

Incentives are available for replacing T12 systems with reduced wattage T8 lamps and electronic ballast systems. The lamps and ballasts must meet the Consortium for Energy Efficiency (CEE) specification (www.cee1.org). Qualified lamps and ballast products can be found at <http://www.cee1.org/content/cee-program-resources>. Both the lamp and ballast must qualify. Incentives are calculated per lamp installed.

5.1.5 Reduced Wattage 4-foot T8 Lamp Only

Incentives are available for replacing 32 Watt T8 lamps with reduced wattage T8 lamps when an electronic ballast is already present. The lamps must be reduced wattage in accordance with the Consortium for Energy Efficiency (CEE) specification (www.cee1.org). Qualified products can be found at <http://www.cee1.org/content/cee-program-resources>. The nominal wattage of new lamps must be 28W (≥ 2585 Lumens) or 25W (≥ 2400 Lumens) to qualify.

5.1.6 Reduced Wattage 8-foot T8 Lamp and Ballast

This measure is for the replacement of existing T12 lamps and magnetic ballasts with reduced wattage 8-foot T8 lamps and electronic ballasts. Lamps must have a minimum mean lumen per watt (MLPW) of 90 and must have a nominal wattage of less than 57W.

5.1.7 Reduced Wattage 8-foot T8 Lamps Only

Incentives are available for replacing 59 Watt T8 lamps with reduced wattage 8-foot T8 lamps. Lamps must have the minimum mean lumen per watt (MLPW) of 90 and must have a nominal wattage of less than 57W. The incentive level is calculated on a per lamp basis and ballast replacement is not necessary.

5.1.8 2- and 3-foot T8 Lamps and Ballasts

This measure consists of replacing existing T12 lamps and magnetic ballasts with T8 lamps and electronic ballasts. The lamp must have a color rendering index (CRI) ≥ 80 and the ballast must have a total harmonic distortion (THD) $\leq 32\%$ at full light output, and the power factor (PF) must be ≥ 90 .

5.1.9 U-bend T12 to U-bend T8 or 2' T8 Lamps and CEE Qualified Ballasts

Incentive applies for retrofitting existing U-Tube T12 lamps and magnetic ballasts with U-Tube T8 lamps and CEE qualified electronic ballasts. The lamp must have a color rendering index (CRI) ≥ 80 . Qualified ballasts can be found at: <http://www.cee1.org/content/cee-program-resources>. Manufacturer's specification must be provided prior to receiving

funds. Alternatively, this incentive also applies to replacing existing 2' x 2' U-tube T12 lamps and magnetic ballasts with 2-lamp 2' T8 fixtures and CEE qualified electronic ballasts. The 2' T8 lamps must meet the specifications stated in section 5.1.8.

5.1.10 Exit Signs

High-efficiency exit signs must replace or retrofit an existing incandescent exit sign. Electroluminescent, photoluminescent, T1 and light emitting diode (LED) exit signs are eligible under this category. Non-electrified and remote exit signs are not eligible. All new exit signs or retrofit exit signs must be UL 924 listed, have a minimum lifetime of 10 years, and have an input wattage ≤ 5 Watts per face.

5.1.11 LED Lamp/Fixture < 20 Watts

Incentive applies for retrofitting 20-100 Watt incandescent lamps with LED integral lamps (screw-in base or pin-type). LED Lamp wattage must be < 20 Watts and be ENERGY STAR labeled. Specifications must be submitted with ENERGY STAR label. LED fixtures must be listed on the Design Lights™ Consortium Qualified Products list at <http://www.designlights.org/> and specifications must include proof of certifications circled.

5.1.12 Metal Halide Fixture -- Pulse Start or Ceramic

This incentive applies to retrofits of high intensity discharge fixtures with either pulse start metal halide or ceramic metal halide fixtures. Total replacement wattage must be lower than existing wattage to ensure energy savings. Retrofit kits may be used on existing mercury vapor, standard metal halide or high pressure sodium fixtures only.

5.1.13 Occupancy Sensor

Passive infrared, ultrasonic, and microphonic detectors and fixture-integrated sensors or sensors with a combination thereof are eligible. All sensors must be hard-wired and control interior lighting fixtures. Each occupancy sensor must control at least 125 watts to be eligible for this incentive. Incentive amount is based upon type of occupancy sensor selected.

5.2 HVAC ECRMs

5.2.1 High Efficiency Natural Gas Boiler

This formula-based incentive is for replacing older, inefficient natural gas boilers with high efficiency ENERGY STAR labeled units. In order to qualify for this incentive, the new boiler must have a minimum annual fuel utilization efficiency (AFUE) ratio of 90%. ILPHA EEP encourages purchasing units with an AFUE rating that exceeds 90% and offers a greater incentive for higher efficiency units. The incentive is also based on the size (represented in MBH) of the new boiler to account for the increased cost of a larger boiler. The new boiler should be sized by a mechanical engineer or HVAC specialist and the new boiler size should not exceed the existing boiler size.

5.2.2 Boiler Lockout/Reset Controls

These controls adjust the supply water temperature based on the outdoor air temperature. This saves energy by allowing the boiler to reduce the supply water temperature on milder days, thereby reducing the overall fuel consumption of the boiler. This incentive can be combined with the high efficiency natural gas boiler incentive if installed at the same time as the new boiler is being installed.

5.2.3 High Efficiency Natural Gas Furnace

This formula-based incentive is for replacing older, inefficient natural gas furnaces with high efficiency ENERGY STAR labeled units. In order to qualify as ENERGY STAR, the new furnace must have a minimum annual fuel utilization efficiency (AFUE) ratio of 95%. ILPHA EEP encourages purchasing units with an AFUE rating that exceeds 95% where possible and offers a greater incentive for higher efficiency units. The incentive is also based on the size (represented in MBH) of the new furnace to account for the increased cost of a larger furnace. The new furnace should be sized by a mechanical engineer or HVAC specialist and should not exceed the existing boiler size. In addition, all furnaces should be specified to have an EC Motor (see 5.2.4).

5.2.4 Electronically Commutated Motor (ECM)

An ECM is an ultra-high efficiency programmable brushless DC motor utilizing a permanent magnet rotor and built-in inverter. They are more energy efficient and much easier to control than AC motors. At all speeds, these motors maintain an efficiency of 65-72%.

5.2.5 Variable Speed Drive (VSD)

Variable-speed drives (VSDs) which are installed on existing chillers, fans, and pumps are eligible for this incentive. New chillers with integrated VSDs are eligible under the chiller incentive. VSDs on new equipment are not eligible. The installation of a VSD must accompany the permanent removal or disabling of existing flow control devices such as inlet vanes, bypass dampers, and throttling valves. The incentive is per controlled horsepower (HP).

5.2.6 Central Air Conditioning

Qualifying central AC units must be replaced with ENERGY STAR rated units. For split systems, the replacement central AC unit must have a minimum seasonal energy efficiency (SEER) and energy efficiency rating (EER) rating of 14.5 SEER and 12 EER respectively.

5.2.7 Window Air Conditioning Unit

For this grant program, window AC units are defined as room air conditioners that have louvered sides. This incentive constitutes a one-for-one replacement of qualifying window AC units with an ENERGY STAR rated unit. In order to qualify for replacement, the existing unit must have a rated EER of less than 9.0. The replacement unit must have a minimum EER rating of 10.8. Additionally, all qualifying units must be hauled and recycled by an environmentally approved vendor as part of this measure. An additional incentive will be awarded for this purpose.

5.2.8 Through-the-Wall Air Conditioning Unit

For this grant program, through-the-wall AC units are defined as room air conditioners that do not have louvered sides. This incentive constitutes a one-for-one replacement of qualifying through-the-wall AC units with an ENERGY STAR rated unit. In order to qualify for replacement, the existing unit must have a rated EER of less than 8.4. The replacement unit must have a minimum EER rating of 9.4. Additionally, all qualifying units must be hauled and recycled by an environmentally approved vendor as part of this measure. An additional incentive will be awarded for this purpose.

5.2.9 Air-Source Heat Pump (ASHP)

This incentive applies for replacing qualifying electric heating and/or cooling equipment with ENERGY STAR rated Air Source Heat Pump (ASHP) units. Systems can be either split systems or single package units. Water-cooled systems, evaporative coolers, and water source heat pumps do not qualify under this program, but may qualify under the Custom Incentive Program. The efficiency of split systems is based on an Air Conditioning, Heating and Refrigeration Institute (AHRI) reference number. All packaged and split system cooling equipment must meet AHRI Standards (210/240 or 340/360), and be UL listed. The refrigerant must comply with local codes. All required efficiencies are based on the Consortium for Energy Efficiency (CEE) high efficiency commercial air conditioning and heat pump specifications (www.cee1.org). Namely, for split systems, the replacement ASHP must have a minimum seasonal energy efficiency (SEER) of 14.5, energy efficiency rating (EER) rating of 12, and heating seasonal performance factor (HSPF) of 8.2. For single package equipment, the replacement ASHP must have a minimum SEER of 14, EER of 11, and a HSPF of 8.0. A manufacturer's specification sheet indicating the system efficiency must be provided prior to receiving funds. Disposal of the existing unit must comply with local codes and ordinances.

5.2.10 PTHP (replace PTAC)

This incentive applies for replacing qualifying packaged terminal air conditioners (PTACs) with high efficiency packaged terminal heat pump (PTHPs). The new PTHP units should meet the following cooling efficiency condition: Replacement unit EER > 13.08 - 0.2256*Capacity (in MBH). All EER values must be rated at 95°F outdoor dry-bulb temperature. The unit should also have a minimum heating efficiency of 3.0 COP as rated at a 47°F dry-bulb/ 43°F wet-bulb outdoor air temperature.

5.2.11 Electric Heat Pump Water Heater

Incentive applies for the installation of new hybrid electric (heat pump) water heaters. Qualifying units must be ENERGY STAR rated [have a rated energy factor (EF) ≥ 2.0 and a first hour rating (FHR) ≥ 50 gallons per hour (gph)]. A list of "Qualified Heat Pump Water Heaters" can be found at ENERGY STAR website: http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=WHH.

5.2.12 Natural Gas Residential Storage Water Heater

Incentive applies for the installation of new natural gas-fired, storage tank water heaters. Qualifying units must be

ENERGY STAR rated [have a rated energy factor (EF) \geq 0.67 and a first hour rating (FHR) \geq 67 gallons per hour (gph)] and have an input capacity of 75,000 Btuh or less. New unit must be on the CEE “Residential Natural Gas Water Heaters (Storage) Qualifying Product” list available at <http://library.cee1.org/content/natural-gas-residential-water-heaters-storage-qualifying-products-list/>. Larger units will be considered under a custom incentive.

5.2.13 Natural Gas Condensing Commercial Water Heater

Incentive applies for the installation of new natural gas-fired commercial water heaters. Qualifying water heaters must meet the CEE Tier 2 rating [have a rated thermal efficiency (TE) \geq 0.94] and have an input capacity exceeding 75,000 Btuh. These units must be on the CEE “Commercial Natural Gas Water Heaters (Storage) Qualifying Product” list available at <http://www.cee1.org/content/cee-program-resources>.

5.2.14 Programmable or Limited Range Thermostats

Incentive applies for the replacement of mercury thermostats with new programmable thermostats that utilize setback schedules to reduce heating and cooling loads during periods of non-occupancy. Alternatively, the new thermostats can be limited range units that only allow the occupants to set their thermostat to a pre-determined maximum and/or minimum temperature setting. As part of this measure the existing mercury thermostats must be responsibly recycled. This can be done free of charge through the Thermostat Recycling Corporation (<http://www.thermostat-recycle.org/>). This measure is designed to be used in conjunction with the boiler, furnace, ASHP, and central AC replacement measures but may be used independently of those measures.

5.3 BUILDING ENVELOPE ECRMS

5.3.1 Air Conditioner Cover (Exterior)

This reusable cover helps reduce drafts and seals out weather, leaves, and dust during the heating season. These covers are used on both window mounted and through-the-wall air conditioners. Apply through the electric measures section if the unit is heated via electric heat or through the natural gas measures section if the unit is heated via natural gas heat.

5.3.2 Air Conditioner Cover (Interior)

This reusable, quilted, insulated cover seals drafts and wind from coming through room air conditioners. Apply through the electric measures section if the unit is heated via electric heat or through the natural gas measures section if the unit is heated via natural gas heat.

5.3.3 Attic/Ceiling Insulation

This measure is for upgrading attic/ceiling insulation levels to at least R-45. In order to qualify for this measure, the existing unit should contain no to low levels of insulation. Apply through the electric measures section if the unit is heated via electric heat or through the natural gas measures section if the unit is heated via natural gas heat.

5.3.4 Duct Insulation

This measure involves insulating uninsulated ducts to at least R-6. Apply through the electric measures section if the unit is heated via electric heat or through the natural gas measures section if the unit is heated via natural gas heat.

5.3.5 Duct Sealing

In a typical household, approximately 20% of the air distributed through the duct system is lost due to leaks, holes, and poor connections in the ducts. The measure provides fund for sealing ductwork to 6% loss or less. For more information, visit: http://www.energystar.gov/index.cfm?c=home_improvement.hm_improvement_ducts. Apply through the electric measures section if the unit is heated via electric heat or through the natural gas measures section if the unit is heated via natural gas heat.

5.4 PLUG LOAD ECRMS

5.4.1 ENERGY STAR Refrigerator

ENERGY STAR labeled refrigerators are at least 20% more efficient than models that meet the federal minimum energy efficiency standards. This incentive constitutes a one-for-one replacement of qualifying refrigerators with ENERGY STAR models. Refrigerators that qualify for replacement must be manufactured prior to 2000. Additionally,

all qualifying refrigerators must be hauled and recycled by an environmentally approved vendor as part of this measure. An additional incentive will be awarded for this purpose.

5.4.2 CEE Tier 3 Rated Commercial Washing Machines

The Consortium for Energy Efficiency (CEE) Tier 3 ranking for commercial washing machines specifies a MEF of at least 2.40 and a max of 4.0 for its WF. MEF, the Modified Energy Factor, is a measure of the energy consumption for the total laundry drying cycle (washing and drying). It indicates how many cubic feet of laundry can be washed with and dried with one kWh of electricity; the higher the number the greater the efficiency. WF is the Water Factor, or the number of gallons needed for each cubic foot of laundry. The lower the number is the lower the consumption, and therefore, the more efficient use of water.

5.4.3 CEE Tier 2 Rated Commercial Washing Machines

The Consortium for Energy Efficiency (CEE) Tier 2 ranking for commercial washing machines specifies a MEF of at least 2.20 and a max of 4.5 for its WF. MEF, the Modified Energy Factor, is a measure of the energy consumption for the total laundry drying cycle (washing and drying). It indicates how many cubic feet of laundry can be washed with and dried with one kWh of electricity; the higher the number the greater the efficiency. WF is the Water Factor, or the number of gallons needed for each cubic foot of laundry. The lower the number is the lower the consumption, and therefore, the more efficient use of water.

5.4.4 ENERGY STAR (CEE Tier 1) Residential Washing Machines

ENERGY STAR rated washing machines must have a MEF of at least 2.00 and a max of 6.0 for its WF. MEF, the Modified Energy Factor, is a measure of the energy consumption for the total laundry drying cycle (washing and drying). It indicates how many cubic feet of laundry can be washed with and dried with one kWh of electricity; the higher the number the greater the efficiency. WF is the Water Factor, or the number of gallons needed for each cubic foot of laundry. The lower the number is the lower the consumption, and therefore, the more efficient use of water.

5.4.5 ENERGY STAR Rated Vending Machine

Incentive applies for the installation of a new ENERGY STAR beverage vending machine. Qualifying machines can be found at <http://www.energystar.gov>. Vending machines that comply with ENERGY STAR specifications use efficient compressors, fan motors, and lighting systems and are up to 50% more efficient than standard models.

5.4.6 Snack Vending Machine Sensor

Incentive applies for the installation of controls on a non-refrigerated vending machine. Controls for the snack machine must include a passive infrared occupancy sensor to turn off fluorescent lights and other vending machine systems when the surrounding area is unoccupied for 15 minutes or longer.

5.4.7 Beverage Vending Machine Sensor

Incentive applies for the installation of beverage machine (assumed to be refrigerated vending machine that contains only non-perishable bottled and canned beverages) controls. Controls for beverage machines must include a passive infrared occupancy sensor to turn off fluorescent lights and other vending machine systems when the surrounding area is unoccupied for 15 minutes or longer. The control logic should power up the machine at 2-hour intervals to maintain product temperature and provide compressor protection.

5.4.8 Plug Load Occupancy Sensor

This incentive applies to passive infrared and/or ultrasonic detectors only. Plug-load sensors must control electricity using equipment in office or cubicles, including lighting, shared copiers, and/or printers.

5.4.9 Ceiling Fan

This incentive applies for replacing existing fans with incandescent lamps with ENERGY STAR rated ceiling fans with CFLs. The replacement ceiling fans and CFLs must meet all ENERGY STAR product criteria. Visit www.energystar.gov for more details. This incentive cannot be combined with the incandescent lamp to CFL replacement incentives.

5.4.10 Low-Flow Showerheads

This measure applies to replacing standard showerheads with WaterSense™ labeled, low-flow showerheads. Low-flow fixtures will not only reduce water consumption and costs but will also reduce energy demands due to reduced

hot water demand. In order to qualify for replacement, the existing units should consume 2.0 gallons per minute (gpm) or more, and the replacement showerhead should consume 1.5 gpm or less. Apply through the electric measures section if the supplied hot water is heated via an electric water heater or through the natural gas measures if the supplied hot water is heated via a natural gas water heater.

5.4.11 Low-Flow Faucet Aerators

This measure applies to replacing standard faucet aerators with WaterSense™ labeled, low-flow faucet aerators. Low-flow fixtures will not only reduce water consumption and costs but will also reduce energy demands due to reduced hot water demand. In order to qualify for replacement, the existing units should consume 2.0 gallons per minute (gpm) or more, and the replacement aerator should consume 1.5 gpm or less. Apply through the electric measures section if the supplied hot water is heated via an electric water heater or through the natural gas section if the supplied hot water is heated via a natural gas water heater.

5.5 Commonly Requested Custom Incentive ECRMs

5.5.1 LED Wall Packs (or Induction Wall Packs) - New Fixtures

Incentive applies for the replacement or retrofit of existing exterior light fixtures with new LED or induction wall pack light fixtures. LED fixtures must be listed on the Design Lights™ Consortium Qualified Products list at <http://www.designlights.org/> and specifications must include proof of certifications circled. Specifications for other Exterior LED fixtures are located near the bottom of this list. Custom incentive is increased to \$0.30 per annual kWh saved for this measure.

5.5.2 New Exterior LED or Induction Fixtures

Incentive applies for the replacement of existing incandescent, mercury vapor, T12 High Output and Very High Output fluorescent, metal halide, or high pressure sodium fixtures with new LED fixtures or new induction or retrofit induction fixtures. Retrofit must not void the fixture UL listing. New LED fixtures must be listed on the Design Lights™ Consortium Qualified Products list at <http://www.designlights.org/>. Linear LED lamp retrofits are not eligible for incentives. For exterior LED and Induction Wall Packs see New LED Wall Packs (or Induction Wall Packs) - New Fixtures. Custom incentive is increased to \$0.30 per annual kWh saved for this measure.

5.5.3 New or Retrofit Interior LED Fixtures

Incentive applies for the replacement or retrofit of existing interior light fixtures with new induction or LED light fixtures. LED fixtures must be listed on the Design Lights™ Consortium Qualified Products list at <http://www.designlights.org/>. Custom incentive is increased to \$0.30 per annual kWh saved for this measure.

5.5.4 De-lamp, Permanent Lamp Removal

Incentives are paid for de-lamping, permanent removal, of existing fluorescent lamps. De-lamp is the net reduction in the number of lamps in a fixture. Applicants are responsible for determining whether or not to use reflectors in combination with lamp removal in order to maintain adequate lighting levels. Lighting levels are expected to meet the Illuminating Engineering Society (IES) recommended light levels. Unused lamps, lamp holders, and ballasts must be permanently removed from the fixture and disposed in accordance with local regulations. This measure is applicable when retrofitting from T12 lamps to T8 lamps or reconfiguring a T8 fixture to reduce the number of lamps. Removing lamps from a T12 fixture that is not being retrofitted with T8 lamps are not eligible for this incentive. Pre-approval is required for lamp removal projects in order for ILPHA EEP to conduct a pre-retrofit inspection.

5.5.5 New T8/T5 Fluorescent Fixtures with Electronic Ballast

This measure consists of replacing one or more existing T12 fixtures with new fixtures containing T8 or T5 lamps and electronic ballasts. The T8 or T5 lamps must have a color rendering index (CRI) ≥ 80 . The electronic ballast must be high frequency (≥ 20 kHz), UL listed, and warranted against defects for 5 years. Ballasts must have a power factor (PF) ≥ 0.90 . Ballasts for 4-foot lamps must have total harmonic distortion (THD) $\leq 20\%$ at full light output. For 2- and 3-foot lamps, ballasts must have a THD $\leq 32\%$ at full light output. High output T5/T8 lamps also qualify for this incentive. Consider de-lamping and/or installing reflectors as part of this measure.

5.5.6 Photosensor / Daylighting Controls

This measure consists of installing photosensor controls that dim or turn off light fixtures when sufficient natural lighting is sensed by the sensor. Each sensor should control a significant amount of light fixtures so that the energy

savings justify the cost of the sensor.

5.5.7 Natural Gas Tankless Residential Water Heater

Incentive applies for the installation of new natural gas-fired residential tankless water heaters. Qualifying units must have a minimum energy factor (EF) of 0.82 and be on the CEE "Residential Natural Gas Water Heaters (Tankless) Qualifying Product" list available at <http://www.cee1.org/content/cee-program-resources>.

5.5.8 Ground Source Heat Pump (Geothermal)

Incentive applies for new or retrofit Ground Source Heat Pump (GSHP) systems with Energy Efficiency Ratio (EER) ≥ 15 and Coefficient of Performance (COP) ≥ 3.4 , based on the existing system:

1. Existing System: all electric HVAC (incentive is based on both heating and cooling annual savings).
2. Existing System: Electric Cooling, Gas Heating (incentive is based on annual cooling savings only).

Incentive applies for closed loop heat exchanger system including vertical closed loop field, horizontal closed loop field, slinky closed loop field, and closed pond loop. Heat pump EER will be the published full load values at standard test conditions in accordance with ANSI/AHRI/ASHRAE ISO Standard 13256-1, 2: 1998 (Ground Loop Heat Pump). (Entering water temperature from ground loop: 77 °F cooling, 32 °F heating). A manufacturer's specification sheet indicating the EER and COP must accompany the application.

**INITIAL APPLICATION & WORKSHEET FOR INCENTIVES/GRANTS IN COMMON AREAS &
RESIDENTIAL UNITS
June 1, 2013**

The Initial Application will provide basic information on the public housing authority, utility territory, and contact information. The Incentive/Grant Worksheet will provide basic information on the size and scope of the proposed lighting project and a general idea of the amount of incentive funds required. The submitted application and worksheet should include all of the information that is applicable to the public housing authority (to the best of their knowledge).

Public Housing Authority: _____ Number of Units: _____

Applicant Name: _____ Title: _____

Address: _____ City: _____ Zip: _____

Applicant Phone: (_____) _____

Fax Number: (_____) _____

Applicant E-mail Address: _____

Applicant FEIN (9 digits): _____

Alternate Name: _____ Title: _____

Alternate Phone: (_____) _____

Electric Territory (Pick One): ComEd Ameren Illinois Other _____

Natural Gas Territory (Pick One): Ameren Illinois Nicor Peoples North Shore Other _____

Have you previously received funding from the PHA Program or your Utility (Pick One)? Yes No

Have you received any other funding for the applied for project (Pick One)? Yes No

*ERCMS that are not listed in the tables below may be applicable for custom incentives at \$0.20 per kWh or \$3.00 per therm saved. The total issued incentives cannot exceed 100 percent of the total project cost.

Electricity Cost Reduction Measures					
Type	Replacement Item (ERCM)	Quantity	Unit	Incentive	Incentive Amount
Screw In Lamp	CFL Screw In (1-26W)		Lamps	\$2	\$
Screw In Lamp	CFL Screw In ($\geq 27W$)		Lamps	\$3	\$
Incandescent Fixture	CFL Fixture ($\leq 29W$)		Fixtures	\$45	\$
Incandescent Fixture	CFL Fixture ($\geq 30W$)		Fixtures	\$82	\$
4' 32W T8 Fluorescent Lamp	4' T8 Lamp ($\leq 28W$)		Lamps	\$2	\$
8' 59W T8 Fluorescent Lamp	8' T8 Lamp ($\leq 57W$)		Lamps	\$3	\$
4' T12 Fluorescent Lamp	4' T8 Lamp ($\leq 28W$) & Ballast		Lamps	\$18	\$
8' T12 Fluorescent Lamp	8' T8 Lamp ($\leq 57W$) & Ballast		Lamps	\$28	\$
2' T12 Fluorescent Lamp	2' T8 Lamp & Ballast		Lamps	\$10	\$
3' T12 Fluorescent Lamp	3' T8 Lamp & Ballast		Lamps	\$15	\$
U-Bend T12 Fluorescent Lamp	U-Bend T8 Lamp & Ballast		Lamps	\$18	\$
Incandescent Lamp/Fixture	LED Lamp/Fixture < 20W		Lamps	\$18	\$
Outdoor Lighting	Pulse Start or Ceramic Metal Halide ($\leq 100W$)		Lamps	\$70	\$
Outdoor Lighting	Pulse Start or Ceramic Metal Halide (101-200W)		Lamps	\$120	\$
Outdoor Lighting	Pulse Start or Ceramic Metal Halide (201-350W)		Lamps	\$150	\$
Exit Sign Replacement	LED Exit Sign		Signs	\$25	\$
Exit Sign Retrofit	LED Lamp		Lamps	\$15	\$
Bi-level Lighting Control for Stairwell, Hallway, or Garage	Bi-Level Fixtures with Integrated Sensors		Fixtures	\$230	\$
Occupancy Sensor Lighting Control	Wall-Mounted Sensor		Sensors	\$40	\$
Occupancy Sensor Lighting Control	Ceiling-Mounted or Wireless Sensor		Sensors	\$125	\$
Plug Load Control	Occupancy Sensor		Sensors	\$30	\$
Vending Machine Sensor	Beverage Machine Sensor		Machines	\$180	\$
Vending Machine Sensor	Snack Machine Sensor		Machines	\$120	\$
Vending Machine	ENERGY STAR Rated Vending Machine		Machines	\$200	\$
Commercial Washing Machine	CEE Tier 3 or Better (MEF ≥ 2.40 & WF ≤ 4.0)		Units	\$1,300	\$
Commercial Washing Machine	CEE Tier 2 or Better (MEF ≥ 2.20 & WF ≤ 4.5)		Units	\$975	\$

Residential Washing Machine	ENERGY STAR Rated or Better (MEF \geq 2.00 & WF \leq 6.0)		Units	\$550	\$
Refrigerator	ENERGY STAR Rated or Better		Units	\$550	\$
Ceiling Fan	ENERGY STAR Rated or Better with CFLs		Units	\$100	\$
Window A/C Unit	ENERGY STAR Rated (EER \leq 8.8 replaced with EER \geq 10.7)		Units	\$400	\$
Through-the-Wall A/C Unit	ENERGY STAR Rated (EER \leq 8.4 replaced with EER \geq 9.4)		Units	\$400	\$
Central A/C Unit with Programmable Thermostat	ENERGY STAR Rated or Better (SEER \geq 14.5)		Units	\$1,500 + \$250 x (SEER - 14.5) + \$200 per ton Maximum award: \$3,000/unit	\$
			SEER Value		
			Tons		
PTHP (replace PTAC)	Replacement unit EER > 13.08 - 0.2256*Capacity (in MBH)		Units	\$750	\$
Air Source Heat Pump	ENERGY STAR Rated or Better (SEER \geq 14.5)		Units	\$2,000 + \$250 x (SEER - 14.5) + \$200 per Ton Maximum award: \$4,000/unit	\$
			SEER Value		
			Tons		
Responsible Recycling of Mercury Thermostats (Electric Heating)	Replace with Programmable or Limited Range Thermostat		Thermostats	\$70	\$
Variable Speed Drive (VSD) on <200 HP Motors	VSDs which are installed on existing chillers, fans, and pumps are eligible		Controlled HP	\$200	\$
Electric Heat Pump Water Heater	ENERGY STAR Rated (EF \geq 2.0)		Units	\$1,500	\$
Interior/Exterior Air Conditioner Cover (Electric Heating)	Insulated cover for window A/C or through-the-wall A/C unit		Units	\$30	\$
Attic/Ceiling Insulation (Electric Heating)	Upgrade to R-45		Square Footage	\$0.50	\$
Duct Insulation (Electric Heating)	Uninsulated ducts in unconditioned space to R-6		Units	\$500	\$
Duct Sealing (Electric Heating)	Seal ducts to 6% loss		Units	\$500	\$
Low Flow Shower Heads (Electric Water Heater)	Replace standard showerheads with low flow unit \leq 1.5 gpm		Units	\$25	\$
Low Flow Faucet Aerators (Electric Water Heater)	Replace standard aerators with low flow unit \leq 1.5 gpm		Units	\$8	\$
Subtotal:					\$

Natural Gas Reduction Measures					
Type	Replacement Item (ERCM)	Quantity	Unit	Incentive	Incentive Amount
High Efficiency Natural Gas Space Heating Boiler	ENERGY STAR Rated or Better (AFUE ≥ 90%)		Units	\$4,000 + \$250 x (AFUE - 90) + \$20 x MBH	\$
			AFUE		
			MBH		
High Efficiency Natural Gas Domestic Hot Water Boiler	ENERGY STAR Rated or Better (AFUE ≥ 90%)		Units	\$2,000 + \$250 x (AFUE - 90) + \$20 x MBH	\$
			AFUE		
			MBH		
Natural Gas Boiler Control	Lockout/Reset Controls		Units	\$1,500	\$
High Efficiency Natural Gas Furnace w/ECM Motor (<225 MBH)	ENERGY STAR Rated or Better (AFUE ≥ 95%)		Units	\$1,500 + \$250 x (AFUE - 95) + \$10 x MBH Maximum award: \$3,500/unit	\$
			AFUE		
			MBH		
High Efficiency Natural Gas Furnace w/ECM Motor & A/C Combo	Both ENERGY STAR Rated or Better (AFUE ≥ 95% & SEER ≥ 14.5)		Units	\$3,500 + \$250 x (SEER - 14.5) + \$200 x A/C Tons + \$250 x (AFUE-95) + \$10 x Furnace MBH Maximum award: \$5,500/unit	\$
			SEER Value		
			AFUE		
			Tons		
			MBH		
Responsible Recycling of Mercury Thermostats (Natural Gas Heating)	Replace with Programmable or Limited Range Thermostat		Units	\$70	\$
Natural Gas Residential Storage Water Heater	ENERGY STAR Rated (EF ≥ 0.67 & FHR ≥ 67 gph) and ≤ 75 MBH		Units	\$800	\$
Natural Gas Residential Storage Water Heater	CEE Tier 2 Rated (TE ≥ 94%) and >75 MBH input capacity		Units	\$1,500	\$
Interior/Exterior Air Conditioner Cover (Natural Gas Heating)	Insulated cover for window A/C or through-the-wall A/C unit		Units	\$30	\$
Attic/Ceiling Insulation (Natural Gas Heating)	Upgrade to R-45		Square Footage	\$0.50	\$
Duct Insulation (Natural Gas Heating)	Uninsulated ducts in unconditioned space to R-6		Units	\$500	\$
Duct Sealing (Natural Gas Heating)	Seal ducts to 6% loss		Units	\$500	\$
Low Flow Shower Heads (Natural Gas Water Heater)	Replace standard showerheads with low flow unit ≤ 1.5 gpm		Units	\$25	\$
Low Flow Faucets Aerators (Natural Gas Water Heater)	Replace standard aerators with low flow unit ≤ 1.5 gpm		Units	\$8	\$
	Subtotal:				\$
Grand Total (Electric & Natural Gas Measures):					\$

Description of Existing or Proposed Program (Background Information, Current Status, Objectives and Changes with the PHA Efficient Living Energy Program Funding):

Comments/Questions:

Applicant hereby certifies that:

- All authorizations required to perform the project, described in its application, have either been obtained or will be obtained no later than 180 days following the start date set forth in the Notice of Grant Award issued by IL PHA Staff.
- The project complies with all applicable state, federal, and local environmental and zoning laws, ordinances, and regulations and that all required licenses, permits, etc., have either been obtained or will be obtained no later than 180 days following an award by IL PHA Staff.
- It is not in violation of the prohibitions against bribery of any officer or employee of the state of Illinois as set forth in 30 ILCS 505/10.1.
- It has not been barred from contracting with a unit of state or local government as a result of a Violation of Section 33E-3 or 33E-4 of the Criminal Code of 1961 (720 ILCS 5/33 E-3 and 5/33 E-4).
- It is not in violation of the Educational Loan Default Act (5 ILCS 385/3).
- As of the submittal date, the information provided in its application is accurate, and the individuals signing below are authorized to submit this application.
- All projects are located in the ComEd or Ameren electric service territory and/or Ameren, Nicor, Peoples, or North Shore natural gas territory and/or a municipal or cooperative utility service territory in the state of Illinois.
- The applicant is targeting households at or below 80% of the poverty level.

Signature: _____ Date: _____

Inventory Worksheets and Guidance

Inventory Notes

A detailed inventory will need to be completed in order to receive a grant for some of the energy improvement measures. This inventory does not need to be submitted with the initial application but will be required before any grant money is awarded.

Guidelines are listed below for some of the measures. Please consult these if you have applied for any lighting, refrigerator, washing machine, air conditioner, PTHP, furnace, boiler, or hot water heater upgrades. Example inventory tables are also listed. We encourage you to use the format given below, but if you have a preferred format you are welcome to use that as long as it includes all relevant information. However, please submit all inventories as Excel files.

Lighting Survey Guidance

- Light Survey for new fixtures to include: room/area, quantity of existing fixtures, description and wattage of existing fixtures, quantity of new fixtures, description and wattage of new fixtures.
- Light Survey for all lighting retrofits to include: room/area, quantity, description of existing fixtures, number of lamps in existing fixtures and number of lamps in retrofit fixtures. Lamp total shall match number of lamps indicated in the Lighting Incentive Spreadsheet. Retrofit lamps and ballasts shall be listed at: www.cee1.org
- Light Survey for Occupancy Sensors to include: room/area, wattage of fixtures controlled.
- Fixture Description should include lamp type, length, and wattage. For example 4' 40W T12 Fluorescent, 60W Incandescent, 400W Metal Halide, etc.

See Example Table Below:

Site or Building	Room or Unit #	Room Quantity	Existing Fixture Description	Fixture Quantity per Room	Lamp Wattage	Number of Lamps per fixture	Estimated Usage per day (in hours)	Number of Days Used per year

Refrigerator & Washing Machine Inventory Guidance

- In order to qualify for replacement, existing refrigerators must have been manufactured prior to 2000.
- Please include the make (manufacturer), model number, serial number, quantity, and location of each unit.
- If the age and capacity are known, please include that as well; otherwise, we can sometimes determine these from the make, model number, and serial number.

See Example Table Below:

Site or Building	Room or Unit #	Quantity	Manufacturer	Model Number	Serial Number	Capacity (in cubic ft.)	Age

Room A/C Unit, Central A/C, & PTAC Inventory Guidance

- In order to qualify for replacement, existing window A/C units must have an Energy Efficiency Ratio (EER) less than or equal to 9.0 and through-the-wall AC units must have an EER less than or equal to 8.4.
- In order to qualify for the PTHP incentive, existing unit must be a PTAC and replacement unit must be a PTHP. New PTHP units will need to meet a minimum EER; this EER value is dependent upon the capacity of the unit.
- Please include the make (manufacturer), model number, serial number, quantity, and location of each unit.
- If the age, EER, and capacity are known, please include that as well; otherwise, we can sometimes determine these from the make, model number, and serial number.

See Example Table Below:

Site or Building	Room or Unit #	Quantity	Make	Model Number	Serial Number	Age	Cooling Capacity (in BTUs/hour)	EER	SEER

Furnace/Boiler Inventory Guidance

- Replacement Furnace/Boiler must be ENERGY STAR rated or better.
- Please include the make (manufacturer), model number, serial number, quantity, and location of each unit.
- If the age, capacities, and AFUE are known, please include that as well; otherwise, we can sometimes determine these from the make, model number, and serial number.

See Example Table Below:

Site or Building	Room or Unit #	Quantity	Manufacturer	Model Number	Serial Number	Age	Input Capacity (in Btuh)	Output Capacity (in Btuh)	AFUE

Water Heater Inventory Guidance

- Replacement water heaters must be Energy Star rated or better.
- Please include the make (manufacturer), model number, serial number, quantity, location of each unit, and whether it is a natural gas or electric water heater.
- If the age, energy factor (EF) or thermal efficiency, and capacities are known, please include that as well; otherwise, we can sometimes determine these from the make, model number, and serial number.
- If the water heater is electric, please include columns that show the upper watts, lower watts, and total watts connected. If it is a natural gas heater, please include columns for input capacity (in BTUs/hr) and output capacity (in BTUs/hr).

See Example Table Below:

Site or Building	Room or Unit #	Qty.	Manufacturer	Model Number	Serial Number	Fuel Source	Capacity (in gallons)	Energy Factor (EF)	Thermal Efficiency	Age