Electricity Retrofit Incentive Program

Prescriptive Project Guideline

EVERY KILOWATT COUNTS FOR BUSINESS

Program Objective and Scope

The objective of this program is to leverage energy conservation and load management opportunities undertaken within existing buildings within the commercial, industrial, institutional and agribusiness sectors.

Interested parties are directed to the additional terms and conditions in the Project Application form.

Eligible Applicants

To be eligible to apply to this program, the following conditions must be met:

1. The Applicant must be a Cambridge and North Dumfries Hydro Inc. (CNDH) customer
2. The facility(ies) where the energy conservation or demand response initiative(s) is/are proposed/installed must be within the CNDH service territory and installed at a site serviced by CNDH
3. The energy efficiency project is installed within an existing building
4. Applications must include the Applicant's primary CNDH account number and the account numbers of all facilities as appropriate

Process and Forms

The Electricity Retrofit Incentive Program (ERIP) is made up of two incentive options:

1. Prescriptive Projects – where rebates are offered for predefined technologies on a per unit or performance basis.
2. Custom Projects – where all technology, equipment and systems are evaluated on the basis of their power and energy performance improvement and an incentive offered based specifically on the level of improvement

This Guideline, addresses the Prescriptive Projects option only. Please refer to the Custom Project Guideline and the Custom Project Worksheet for assistance under the Custom Project path.

An application under the Prescriptive path of this program consists of two parts:

1. Project Application, and
2. At least one prescriptive Application Worksheet. Currently this includes worksheets for:
    a. Energy Efficient Lighting Products
    b. 3-phase Premium Efficiency Motors up to 200 hp
    c. ENERGY STAR® qualified / CEE compliant Unitary Air-Conditioning
    d. Energy Efficient Equipment and Devices for Agribusiness
    e. Alternative Energy Measures for Space Cooling
    f. Alternative Energy Measures for Service Hot Water
    g. Alternative Energy Measures for Food Service

The Project Application is the same for both Prescriptive Project and Custom Project applications, and in fact can be used for applying to both at the same time, if applicable to the Applicant.

The applicable Prescriptive Project Application Worksheet is to be attached to the Project Application and completed as required. Both parts (Application and Worksheets), with supporting documentation as required, comprise the final Incentive Agreement between CNDH and the Applicant

Incentives

Incentives from CNDH will be determined solely from the applicable prescriptive worksheets **up to a maximum of 40% of the *energy efficient project cost***.

No other criteria are used to adjust the incentive value. The applicant is directed to the applicable worksheet(s) for the incentive calculation. The Applicant is to total the incentives from each worksheet to determine the total incentive being applied for and enter this amount on the Project Application form.

Prescriptive incentives may be applied for after purchase and installation of the eligible equipment or the Applicant may request pre-approval prior to purchase and installation. If a pre-approval is requested, CNDH will pay the incentive once the project equipment has been purchased, installed and verified.

The total minimum incentive available from CNDH under ERIP is $250 (except for Motors, see more detail below).

Complementary Energy Conservation Programs

While Eligible Project Measures that received are receiving or will receive funding in or from any other electricity ratepayer funded provincial, federal or local distribution company program are ineligible for Incentive Payments, the use of complementary programs and incentives is strongly encouraged to further defer the costs of project implementation beyond what the applicant may be eligible for under this program.

Technical Eligibility

Technical eligibility of equipment is specified on the applicable Worksheet. Only those products that comply will be considered for incentives under this program. If the equipment being specified by the Applicant is not eligible within one of the Prescriptive Project Worksheet(s), then the Applicant is directed to consider applying under the Custom Project path using the Custom Project Worksheet (see Custom Project Application Guideline document for assistance).

If the project under this application is solely for a product or technology covered under a prescriptive rebate, then the Applicant must submit their application using the appropriate Prescriptive Project Worksheet for financial support. Custom Project applications in this case will be rejected.

All technologies must meet applicable Code, standard, safety and regulatory requirements including, but not limited to, CSA/UL/cUL. It is the applicant's responsibility to ensure that the technology is suitable (properly sized, etc.) to its intended application.

Lighting System Worksheet

Exit Signs: Eligible signs shall be 5 watts or less, including LED retrofit kits, replacement fixtures and photo luminescent signs with no supplemental lighting. New construction projects do not qualify for an incentive.

Refrigerated Display Case LED Strip Lighting: Eligible units shall be between 48" and 70" in length and no more than 29W.

Compact Fluorescent Lights (CFLs): Eligible CFL products include non-dimmable self-ballasted screw-in/GU24 lamps, hard wired 2-pin and 4-pin pin socket lamps, self-ballasted non-dimmable parabolic aluminum reflector (PAR) lamps and all styles of dimmable self-ballasted lamps. Pin socket lamps shall be no more than 40W and shall have a minimum initial efficacy of 45 lumens / W for lamps up to 14W and 60 lumens / W for lamps from 15 to 40 W. Non-dimmable screw-in/GU24 lamps shall be no more than 40W. Self-ballasted non-dimmable parabolic aluminum reflector (PAR) lamps shall be no more than 40 W. Dimmable self-ballasted lamps shall be no more than 40 W.

T8 Fluorescent Fixtures: The incentive for fluorescent lighting systems applies only to the replacement of T12 lamps and ballast with T8 lamps using electronic ballasts for general T-8 applications (both standard and reduced wattage/high performance) and for the replacement of high intensity discharge (HID) lighting for medium bay applications. Medium bay applications are those where the height from the floor to the bottom of the luminaire is greater than 16 feet and below 25 feet.

T8 lamps without installation of electronic ballast(s) are not eligible. It is the Applicant's responsibility to confirm that light levels of the energy efficient design meet the minimum regulatory requirements and the suggested maximum

levels for the proposed use of the space. Projects that are under or over lit according to good professional practice for the intended application of the space are not eligible for incentives. In order to qualify for the Reduced Wattage/High Performance T-8 incentive, both the lamp and ballast must be on the Consortium for Energy Efficiency (CEE) Reduced Wattage or High Performance list.

In order to qualify for the High Performance Medium Bay incentive, both the lamp and ballast must be on the CEE High Performance list. The qualifying list for Reduced Wattage and High Performance T8 Lamps and Ballasts is available at http://www.cee1.org/com/com-lt/com-lt-main.php3. All standard T8 lamps and ballasts qualify under Standard Performance T8. All T8 lighting systems must have a minimum rated life of 20,000 hours for 4 foot lamps and 15,000 hours for 8 foot lamps.

T5 Fluorescent Fixtures: This measure will apply to T5 systems with lamps rated at 18W to 55W employing electronic ballasts in new or retrofit fixtures. Multi lamp ballasts qualify under this incentive. All ballasts must be dedicated to T5 technology. T5 Fixtures can only replace T12 lamps. Both general applications and medium / high bay applications (greater than 16 feet from the bottom of the luminaire to the floor) are eligible.

NOTE: Medium and High Bay T5 Fixtures can replace T12 lamps or High Intensity Discharge lighting.

Pulse Start Metal Halide (MH) Lamps and Fixtures: This measure applies to both interior and exterior applications for new and retrofit installations. Displaced lamps can be incandescent, T12 fluorescent, mercury vapour, standard metal halide, high pressure sodium (HPS) and low pressure sodium (LPS) lighting systems.

Lower Wattage High Intensity Discharge (HID) Lighting: Eligible lamps shall be a 360W MH lamp for the direct replacement of a 400W MH lamp, a 150W MH lamp for the direct replacement of a 175W MH lamp or a 225W high pressure sodium (HPS) lamp for the direct replacement of a 250W HPS lamp. Lamps must be used for indoor lighting in order to qualify for this incentive.

Halogens with Infrared (IR) Coating: Eligible lamps shall be an IR coated mirrored reflector (MR16) halogen of not more than 35W or a IR coated parabolic aluminum reflector (PAR) halogen of not more than 60W used for the direct replacement of standard halogen lamps.

Self-Ballasted Metal Halide Lamps: Eligible lamps shall be a self-ballasted metal halide lamp of not more than 30W used for the direct replacement of incandescent or halogen lighting.

Occupancy Sensors: Sensors shall be of commercial grade, either switch mounted or ceiling mounted. For medium and high bay applications, fixture mounted sensors are considered to be ceiling mounted for the purpose of this incentive. Installation shall be according to manufacturer's specifications and recommended layout. Sensors will have an OFF-AUTOMATIC selector switch with no ON setting conveniently located on the faceplate.

Motor Worksheet

Only 3-phase motors meeting or exceeding the NEMA Premium Nominal Efficiencies indicated on the Worksheet are eligible for incentives. Motors must operate a minimum of 2000 hours per year to be eligible for incentives. Manufacturers' cut sheets showing compliance efficiency testing and the applicable NEMA rated efficiency must be provided with the application. Motors greater than 200 Hp should apply for incentives under the Custom Project Worksheet.

Note that Customers applying for a prescriptive incentive for motors are exempt from the $250 minimum per application.

Unitary AC Worksheet

Only unitary air conditioners of the size and meeting or exceeding the ENERGY STAR® efficiency ratings shown on the Worksheet are eligible for incentives. Minimum operation must be 1000 hours per year. Applicant must attach manufacturer's technical cut sheets demonstrating that the equipment meets the program requirements on the Worksheet and is ENERGY STAR® qualified.

Agribusiness Worksheet

Creep Heat Pads: Only creep heat pads having a measured power requirement no greater than 100 watts are eligible for the incentive. In addition, creep heat pads or mats must meet all applicable Code, standard, safety and regulatory requirements.

Creep Heat High Temperature Cutout Thermostat: Only NEMA 4X line voltage thermostats having a temperature range of between 20°C and 40°C are eligible for the incentive. Must meet all applicable Code, standard, safety and regulatory requirements.

Creep Heat Controller: Only agricultural products designed for use in animal housing facilities are eligible. Must meet all applicable Code, standard, safety and regulatory requirements, including CSA/UL/CUL approved. Must be NEMA 4 or 4x rated.

High Efficiency and Ultra High Efficiency Ventilation Exhaust Fans: Only 18", 20", 24", 36", 48" and 50-53" fans tested at either BESS Laboratory or AMCA-certified labs are eligible for the incentive. All fans must meet all applicable Code, standard, safety and regulatory requirements including CSA/UL/cUL. Fans must be on the ERIP Agricultural Ventilation Exhaust Fans list and be identified as either High Efficiency (HE) or Ultra High Efficiency (UHE) in order to qualify for the ERIP HE or UHE incentive. All HE 24" fans must as a minimum meet the ASABE EP566 standard. All UHE 24" fans must surpass the ASABE EP566 VER standard by a minimum of 18% and demonstrate an AFR value of no less than 0.75.

High Volume Low Speed (HVLS) Recirculation Ventilation Fans: HVLS fans, for the purpose of this incentive must be vertically ceiling mounted with a minimum 8' diameter. HVLS fans are used for summer convective cooling of livestock and poultry personnel. HVLS fans must meet all applicable Code, standard, safety and regulatory requirements including CSA/UL/cUL.

Low Energy Livestock Waterers: Low-energy waterers for the purposes of this incentive are those having a total electrical power requirement no greater than 300 watts, including waterline heat tracing elements. In addition, waterers must be completely insulated with a minimum 2 inches of insulation, be equipped with an adjustable thermostat and the insulation must be completely protected from damage by rodents and insects in order to qualify for this incentive. Waterers must meet all applicable Code, standard, safety and regulatory requirements in order to be eligible for the incentive.

Lighting Photocells and Timers: Only photocells and timers which disengage lighting in livestock barns having sufficient access to natural daytime lighting as to typically provide sufficient illumination within the barn during the period May to October each year, such as naturally ventilated freestall buildings, are eligible for this incentive. Photocells and timers used in sealed or windowless livestock buildings which lack natural light are not eligible. Photocells and timers must meet all applicable Code, standard, safety and regulatory requirements. Units with non-resetting manual "ON" override are not eligible.

Dual and Natural Exhaust Ventilation: Natural exhaust ventilation systems for the purpose of this incentive are ventilation systems utilizing chimneys and sidewall openings with curtains or insulated panels. No mechanical ventilation shall be present for natural ventilation systems. The dual natural ventilation systems for the purpose of this incentive are hybrid systems utilizing chimneys and sidewall openings with adjustable curtains or sidewall insulated panels to provide ventilation during warm months. Ventilation fans are to be used during cold months only. For a dual ventilation system to be eligible for an incentive, the maximum installed ventilation capacity cannot exceed the sum of Stage 1 (continuous) and Stage 2 (moisture control) minimum ventilation requirements. Installed dual and natural ventilation system must meet all applicable Code, standard, safety and regulatory requirements.

Alternative Energy Measures – Space Cooling

Engine Driven and Absorption Chillers: Eligible chillers shall be non-electric engine driven or absorption with a minimum COP of 1.0 for the replacement or augmentation of electric cooling. Chillers must operate for a minimum of 1000 hours per year. Installed chillers must meet all applicable Code, standard, safety and regulatory requirements.

Ground Source Heat Pumps: Ground source heat pumps for the purpose of this incentive are heat pumps that use the ground or a body of water as a heat sink in the summer months. Acceptable system types include open and closed loop systems with vertical and horizontal ground heat exchangers. Eligible heat pumps shall have a minimum cooling COP of 3.5. The system must be installed by a Canadian Geo-Exchange Coalition (CGC) Accredited Installer. System must operate for a minimum of 1000 cooling hours per year. Installed heat pumps must meet all applicable Code, standard, safety and regulatory requirements.

Desiccant Dehumidifiers: Desiccant dehumidifiers for the purpose of this incentive are humidifiers that use a desiccant to meet part or all of the building's latent cooling load. System must operate for a minimum of 1000 cooling hours per year. Installed dehumidifier must meet all applicable Code, standard, safety and regulatory requirements.

Alternative Energy Measures – Service Hot Water

Solar Hot Water Collector: Eligible solar hot water collectors shall comply with the Government of Canada's ecoAction Qualified Solar Hot Water Collectors list available at http://ecoaction.gc.ca/ecoenergy-ecoenergie/. Installed solar hot water collectors must augment or replace existing electric service hot water heating equipment. Applicant must submit three photographs of the installed electric hot water heater clearly indicating the heater's front, back and nameplate. Installed collectors must meet all applicable Code, standard, safety and regulatory requirements.

Storage Tank Hot Water Heaters: Eligible storage tank hot water heaters must be non-electric, have a minimum thermal efficiency of 90% and must replace existing electric water heaters. Applicant must submit three photographs of the installed electric hot water heater clearly indicating the heater's front, back and nameplate. Installed hot water heaters must meet all applicable Code, standard, safety and regulatory requirements.

Tankless/Instantaneous Hot Water Heaters: Eligible tankless/instantaneous hot water heaters must be non-electric, have a minimum energy factor (EF) of 80% and must replace existing electric water heaters. Applicant must submit three photographs of the installed electric hot water heater clearly indicating the heater's front, back and nameplate. Installed tankless/instantaneous hot water heaters must meet all applicable Code, standard, safety and regulatory requirements.

Drain Water Heat Recovery: Eligible drain water heat recovery systems must have a minimum length of 60 inches for 3 inch diameter drain pipes or a minimum length of 48 inches for 4 inch diameter drain pipes and must be installed to recover heat from electrically heated hot water. The minimum efficiency for the drain water heat recovery system shall be 40%. Installed drain water heat recovery system must meet all applicable Code, standard, safety and regulatory requirements.

Alternative Energy Measures – Food Service

Gas Fryers: Gas fryers shall be ENERGY STAR® qualified and shall replace existing electric fryers. Applicant must submit three photographs of the installed electric fryer clearly indicating the fryer's front, back and nameplate. Installed fryers must meet all applicable Code, standard, safety and regulatory requirements.

Gas Griddles: Eligible gas griddles shall have a minimum cooking efficiency of 38 and must replace existing electric griddles. Applicant must submit three photographs of the installed electric griddle clearly indicating the griddle's front, back and nameplate. Installed fryers must meet all applicable Code, standard, safety and regulatory requirements.

All Worksheets

The manufacturer and model numbers must be clearly indicated on each Worksheet. In order to receive an incentive, the Applicant must submit purchase invoices indicating model numbers and quantities with proof of payment (required for incentive payment) or estimates (required for pre-approval) for purchased equipment. Proof of Payment will be required prior to release of incentive. Manufacturers' Technical Specification Sheets demonstrating that the equipment meets the program requirements must be attached to each Worksheet for approval.

In-service date of project

The Project Application must be submitted for approval prior to December 31, 2010. Applications submitted after this date will be returned to the Applicant unopened. (See Application Evaluation and Priority below.)

Eligible projects under this program must be completed (be in-service) and delivering kW savings on or before the earlier of (a) the date falling 12 months after the date on which this application is approved by CNDH, and (b) **December 1, 2011**.

Projects that are not completed and put into service prior to the project completion deadline will not be eligible to receive incentive payments.

Projects with an earlier in-service date will be given priority for approval. LDC's incentive budget is limited and project applications will draw down this budget as projects are approved.

Project Permanence

Projects must remain in service and delivering the projected savings for a period of at least 36 months. If the period of operation is less than 36 months, the Applicant shall be deemed to be in default and repayment of a portion of the incentive may be requested by CNDH. If the Project or its operation requires removal, changes or modifications during the 36 months specified above, the Applicant shall notify CNDH forthwith in writing. At that time an assessment of the change will be determined and if required CNDH may request a repayment of a portion of the incentive on a pro-rata time basis. Failure to promptly notify CNDH of any such changes shall constitute a default of the incentive agreement, and may result in CNDH requesting repayment of all or a portion of the Incentive.

Application Evaluation & Priority

Applications for Prescriptive incentives under the pre-approval option must be submitted prior to December 31, 2010. Applications submitted after purchase and installation must be submitted prior to December 31, 2010.

CLAIMS FORMS MUST BE MAILED WTIHIN 60 DAYS OF INSTALLATION

Applications will undergo a pre-screening process confirming that all conditions described in this guideline have been met. Any applications that fail to meet these criteria will be returned to the applicant with an explanation of the deficiency.

Those applications that meet all the criteria and pass the pre-screening process will undergo a detailed screening by CNDH. Applications will be prioritized using the following criteria:

1. Date of application – Projects submitted earlier will receive first consideration.
2. In-service date – The sooner the project will be in-service the higher likelihood the project will receive approval. Also, projects must be completed and in-service prior to December 1, 2011.
3. Magnitude of kW savings projected – Projects with larger savings will be given higher priority.

Customers will receive payment for prescriptive projects within 30 days after completing the project, assuming that the application has been approved and that all necessary and appropriate documentation has been provided with the application and there are adequate program funds still available, and provided that no incentives will be paid after December 31, 2011.

CNDH Support

For support regarding this program, obtaining application forms, submitting an application or obtaining information regarding any of CNDH's programs, please contact Sarah Colvin at CNDH at scolvin@camhydro.com. Please monitor www.camhydro.com for more information and program updates.

Checklist and Process

For Prescriptive Application:

1. Fill in the ERIP Applications form
2. Fill in the appropriate worksheets
    - Lighting
    - Unitary AC
    - Motors
    - Agribusiness
    - Alternative Energy Measures for Space Cooling
    - Alternative Energy Measures for Service Hot Water
    - Alternative Energy Measures for Food Service
3. Send the application, worksheet(s) and supporting documentation to CNDH at scolvin@camhydro.com