

Program Name: saveONenergy Existing Building Commissioning

## **1. Program Description**

The Existing Building Commissioning Program provides funding for Projects comprised of commissioning phases and the installation of Measures to reduce electricity consumption associated with Chilled Water Systems in existing industrial, commercial, institutional and multi-family residential buildings.

The Participants in the Existing Building Commissioning Program are building or system owners or lessees or their respective managers with the rights and authority to have the Measures installed.

This Existing Building Commissioning Program is offered under, and is subject to the terms of, the Energy Conservation Agreement.

All capitalized terms not defined in these Existing Building Commissioning Program Rules have the definitions given to them in the Energy Conservation Agreement between the LDC and the OPA.

## **2. Program Offer / Participant Incentives**

### **2.1 Standard (Provincially-Consistent) Incentives**

As detailed below, Participant Incentives are offered for the following phases of a Project, subject to the eligibility requirements set out in Section 3:

- (a) Scoping Study Phase;
- (b) Investigation Phase;
- (c) Implementation Phase; and
- (d) Hand-Off/Completion Phase.

For certainty, all calculations of Participant Incentives exclude applicable taxes.

#### **2.1.1 Scoping Study Phase**

The Participant Incentive will be calculated as the lesser of:

- (a) the actual cost of the Commissioning Agent for preparing the Scoping Study Phase Commissioning Report, less any third party contributions; and
- (b) \$2,500, less any third party contributions.

### 2.1.2 Investigation Phase

The Participant Incentive will be calculated as the lesser of:

- (a) the sum of:
  - (i) \$18 per ton of Chilled Water System cooling, not exceeding 75% of the actual cost of the Commissioning Agent for the Investigation Phase Commissioning Report, less any third party contributions; and
  - (ii) \$6 per ton of Chilled Water System cooling, not exceeding 75% of the eligible costs of the Investigation Phase Data Acquisition System;
- (b) \$30,000.

### 2.1.3 Implementation Phase

The Participant Incentive will be calculated as:

- (a) where Minor Measures and Major Measures are included, the lesser of:
  - (i) the actual cost of the Commissioning Agent for preparing the Implementation Phase Commissioning Report, less any third party contributions; and
  - (ii) \$5,000, less any third party contributions;
- OR
- (b) where only Major Measures are included, the lesser of:
  - (i) \$0.10 per kWh multiplied by the Implementation Phase Energy Savings, and \$800 per kW multiplied by the Implementation Phase Demand Savings, less any third party contributions;
  - (ii) 50% of the eligible costs of Major Measures.

### 2.1.4 Hand-Off/Completion Phase

The Participant Incentive will be calculated as the lesser of:

- (a) the actual cost of the Commissioning Agent for the Hand-Off/Completion Phase Commissioning Report, less any third party contributions; and
- (b) \$2,500, less any third party contributions.

## 2.2 Exceptions

None applicable.

### **3. Program Eligibility Criteria**

#### **3.1 Participant Eligibility**

Participants must be Non-Residential Distribution Customers or Recognized Farm Operations that have not previously entered into a binding commitment to acquire the Measures or services required to install the Measures, subject to the Participant evidencing the intent to apply, as determined by the LDC in its sole discretion.

The Participant must be an electricity consumer that is directly connected to, or behind the meter of another electricity consumer connected to, the LDC's distribution system and is in the LDC's service area.

The Participant must own the Chilled Water System or lease the Chilled Water System and have the right to conduct the Commissioning Phases, including implementing energy efficiency measures, either as a condition of the lease or with the consent or authorization of the owner or operator of the Chilled Water System.

#### **3.2 Facility Eligibility**

The Facility must have a Chilled Water System that:

- (a) is more than three-years old;
- (b) has not been retrofitted or refurbished within the past three years;
- (c) will not require full or partial replacement within the next two years, as determined by the Commissioning Agent;
- (d) must cool Facility (ies) that are individually or bulk metered by the LDC, and the subject of a General Service < 50 kW Account, a General Service > 50 kW Account or a Large User Account; or
- (e) has not previously been the subject of any OPA-funded programs for the Chilled Water System within the previous three years.

#### **3.3 Project and Measures Eligibility**

All reports required under this Existing Building Commissioning Program must be prepared by a Commissioning Agent that is at arm's length to the Participant and that has either:

- (a) a commissioning certificate from the Association of Energy Engineers, the American Society of Heating Refrigeration and Air Conditioning Engineers, or the Building Commissioning Association; or

- (b) project manager experience for a chilled water commissioning project: (i) in compliance with the *Leadership in Energy and Environmental Design* standard; or (ii) in compliance with the *Canadian Standards Association Z318 (Commissioning of Health Care Facilities)* standard; in each case evidenced by two letters of reference from an owner or lessor of a Chilled Water System.

The Implementation Phase Commissioning Report must be reasonably capable of being completed within six months after the end of the term of this Existing Building Commissioning Program.

### 3.4 Eligible Costs

The actual costs claimed in respect of the work of a Commissioning Agent must be evidenced by an invoice of the Commissioning Agent.

The actual costs claimed in respect of the Investigation Phase Data Acquisition System or Major Measures must:

- (a) be reasonably incurred and payable by the Participant to a third party;
- (b) be evidenced by invoices or receipts;
- (c) relate to the any of the following:
  - (i) cost of equipment purchased, including shipping, delivery and duties;
  - (ii) costs of labour for equipment installation;
  - (iii) costs to dispose, decommission or recycle residual matter;
  - (iv) costs of inspections required by applicable laws;
  - (v) costs of design, engineering and architecture, as applicable; or
  - (vi) costs of project management; and
- (d) not comprise the following:
  - (i) the Participant's internal costs;
  - (ii) financing costs;
  - (iii) insurance costs;
  - (iv) costs of spare parts, spare equipment or other inventories;
  - (v) costs of the purchase or lease of hand or power tools;

- (vi) HST; or
- (vii) third party contributions.

#### **4. Participant Agreement**

The Participant Agreement will include the terms and conditions specified in the Energy Conservation Agreement. In addition, it must address the following:

- (a) The Participant must progress sequentially through each phase of the Project, upon LDC notice to proceed.
- (b) The Participant must comply with the Meter Data Point Requirements.
- (c) The Scoping Study Phase Incentive will be payable where the Scoping Study Phase Commissioning Report: (i) satisfies the Scoping Study Phase Commissioning Report Minimum Requirements; and (ii) is executed by the Commissioning Agent.
- (d) The Investigation Phase Incentive will be payable when:
  - (i) the Investigation Phase Data Acquisition Phase System is installed to record data points;
  - (ii) the Investigation Phase Commissioning Report: (A) satisfies the Investigation Phase Commissioning Report Minimum Requirements, and (B) is executed by the Commissioning Agent;
  - (iii) the site visit confirms that: (A) the Chilled Water System equipment is in compliance with the Application; (B) the operating hours are reasonable; (C) the eligible costs of Minor Measures and Major Measures are reasonable; and (D) the Investigation Phase Energy Savings calculation is reasonable;
  - (iv) the Advanced Evaluation and Incentive Report completed by the Project Evaluator supports the Investigation Phase Energy Savings;
  - (v) the Project M&V Plan is approved by the Project Evaluator; and
  - (vi) the Investigation Phase is completed within twelve months of the completed Scoping Study Phase.
- (e) The Implementation Phase Incentive will be payable where:
  - (i) all Minor Measures are implemented;

- (ii) the Implementation Phase Commissioning Report: (A) satisfies the Implementation Phase Report Minimum Requirements; and (B) is executed by the Commissioning Agent;
  - (iii) the Implementation Phase Energy Savings are reasonable; and
  - (iv) the Final Evaluation and Incentive Report completed by the Project Evaluator supports the Implementation Phase Energy Savings.
- (f) The Hand-Off/Completion Phase Incentive will be payable where the Hand-Off/Completion Phase Commissioning Report: (i) satisfies the Hand-Off/Completion Phase Commissioning Report Minimum Requirements; and (ii) is executed by the Commissioning Agent.
- (g) Where the Facility is a Multi-Family Building, the Participant must evidence ownership or operation of a facility that permits tenants to occupy rental units subject to the *Residential Tenancies Act, 2006*, or any successor legislation, and will agree not use Participant Incentives to apply to the Landlord and Tenant Board for an increase in the annual rent amounts paid by tenants that exceed the annual rent-increase guideline permitted under the *Residential Tenancies Act, 2006*.
- (h) Any other provision required to give effect to these Program Rules.

## 5. QA/QC & Project M&V Minimum Requirements

A Project M&V Plan will be approved by the Project Evaluator. The Participant must implement the M&V Plan and report results to the LDC.

## 6. Minimum Record-Keeping Requirements

At a minimum, and subject to the Energy Conservation Agreement, the LDC will retain the following records:

- (a) Commissioning Reports;
- (b) Participant Incentive invoices;
- (c) Advanced Evaluation and Incentive Report, as applicable; and
- (d) Final Evaluation and Incentive Report, as applicable.

## 7. Other

Not applicable.

## 8. Program Specific Definitions

The following terms have the meaning stated below when used in these Existing Building Commissioning Program Rules:

***Advanced Evaluation and Incentive Report*** means a report prepared by a Project Evaluator in accordance with the template attached to the Project M&V Procedure in the form made available by the OPA, as updated from time to time, for the purpose of reporting estimated Energy Savings and Demand Savings prior to the installation of Measures.

***Baseline Electricity Consumption*** has the meaning given to it in the Investigation Phase Commissioning Report Minimum Requirements.

***Baseline Peak Demand*** has the meaning given to it in the Investigation Phase Commissioning Report Minimum Requirements.

***Chilled Water System*** means chillers, pumps, valves, and cooling towers used directly as part of the process to cool buildings, or for the purpose of distributed cooling or conditioning.

***Commissioning Agent*** means a person that satisfies the requirements specified in Section 3.3.

***Commissioning Phases*** means one or more of the Scoping Study Phase, Investigation Phase, Implementation Phase, and Hand-Off/Completion Phase.

***Data Points*** means the measurement points listed in the Metering Data Point Requirements.

***Demand Savings*** means the estimated, determined or actual kilowatt reduction in electricity demand (as the context may require), attributable implementation of the Measures. For certainty, demand savings will not be counted towards the LDC's CDM Target.

***Energy Savings*** means the estimated, determined or actual kilowatt hour reduction in energy consumption (as the context may require), attributable to implementation of the Measures.

***Facility*** means the eligible building structure where Measures are installed, as specified in Section 3.2.

***Final Evaluation and Incentive Report*** means a report prepared by a Project Evaluator in accordance with the template attached to the Project M&V Procedure in the form made available by the OPA, as updated from time to time, for the purpose of reporting an

update of estimated Energy Savings and Demand Savings after performance of the Commissioning Phases.

**General Service < 50 kW Account** has the meaning given to such term in the annual Yearbook of Electricity Distributors.

**General Service > 50 kW Account** has the meaning given to such term in the annual Yearbook of Electricity Distributors.

**Hand-Off/Completion Phase** means the fourth and final phase, where the Commissioning Agent visits and reviews the performance of the Chilled Water System for the next monitoring period after the implementation of the Measures, and produces the Hand-Off/Completion Phase Commissioning Report.

**Hand-Off/Completion Phase Commissioning Report** means a report detailing the elements set out in the Hand-Off/Completion Phase Commissioning Report Minimum Requirements.

**Hand-Off/Completion Phase Commissioning Report Minimum Requirements** means the minimum requirements to be met in the preparation and content of the Hand-Off/Completion Phase Commissioning Report, in the form made available by the OPA, as updated from time to time.

**Hand-Off/Completion Phase Incentive** means the Participant Incentive payable for the Hand-Off/Completion Phase, in the amount specified in Section 2.1.4.

**HST** means the harmonized sales tax payable pursuant to the *Excise Tax Act*, R.S.C. 1985, c. E-15.

**Implementation Phase** means the third phase, where the Participant implements the Measures and produces the Implementation Phase Commissioning Report.

**Implementation Phase Commissioning Report** means a report detailing the elements specified in the Implementation Phase Report Minimum Requirements.

**Implementation Phase Commissioning Report Minimum Requirements** means the minimum requirements to be met in the preparation and content of the Implementation Phase Commissioning Report, in the form made available by the OPA, as updated from time to time.

**Implementation Phase Incentive** means the Participant Incentive payable for the Hand-Off/Completion Phase, in the amount specified in Section 2.1.3.

**Investigation Phase** means the second phase, where the Commissioning Agent reviews the existing Chilled Water System and produces the Investigation Phase Commissioning Report.



***Investigation Phase Commissioning Report*** means a report detailing the elements specified in the Investigation Phase Commissioning Report Minimum Requirements.

***Investigation Phase Commissioning Report Minimum Requirements*** means the minimum requirements to be met in the preparation and content of the Investigation Phase Commissioning Report, in the form made available by the OPA, as updated from time to time.

***Investigation Phase Incentive*** means the Participant Incentive payable for the Hand-Off/Completion Phase, in the amount specified in Section 2.1.2.

***Investigation Phase Data Acquisition System*** means a system to record data from the Chilled Water System that is either an extension of an existing building automation system or a standalone data recorder that trend-records and stores data.

***Large User*** has the meaning given to such term as in the annual Yearbook of Electricity Distributors.

***Major Measure*** means an efficiency measure applicable to the Chilled Water System that reduces electricity consumption or peak demand and is not a Minor Measure.

***Measure*** means a Major Measure or a Minor Measure.

***Meter Data Point Requirements*** means the requirements for meter data, in the form made available by the OPA, as updated from time to time.

***Minor Measure*** means an efficiency measure applicable to the Chilled Water System that reduces electricity consumption or peak demand with a Project Payback of two years or less, as recommended in the Investigation Phase Commissioning Report.

***Monitoring Period*** means at the LDC's option either:

- (i) a period of 60 consecutive days during June, July, August or September while the Chilled Water System is operating; or
- (ii) a period of any 30 consecutive days provided that, during such 30 day period when the Chilled Water System is operating, one of such days reaches a high of the "Summer design dry-bulb temperature" (or, for certainty, the "Design Temperature" for "Dry, °C") for the location that is closest to the Chilled Water System, as provided in Table 1.2 (Design Data for Selected Locations in Ontario) in the 2012 Building Code Compendium, MMAH Supplementary Standard SB-1 (September 14, 2012).

***Multi-Family Building*** means a Facility that houses multiple residential tenants and is captured by the: (a) general service less than 50 kW account, (b) general service greater than 50 kW account, or (c) the large user account, as applicable.

***Non-Residential Distribution Customer*** means electricity customers in Ontario that: (a) are not classified as residential in the most recent *Yearbook of Electricity Distributors* published by the Ontario Energy Board, and (b) have a general service <50 kW account, general service >50 kW account, or a large user account.

***Project*** means one or more Measures that are expected to be undertaken pursuant to this Existing Building Commissioning Program.

***Project Evaluator*** means a person that is an employee of the LDC or a third party service provider to the LDC who is licensed or certified to practice in Ontario and is: (a) a professional engineer, (b) a certified engineering technologist, (c) a certified energy manager, or (d) an engineer-in-training under the supervision of a professional engineer or certified engineering technologist.

***Project M&V Plan*** means a plan to conduct measurements and verification of the Energy Savings and Demand Savings in respect of a Project in accordance with the Project M&V Procedure.

***Project M&V Procedure*** means the Project Measurement and Verification Procedure in the form made available by the OPA, as updated from time to time.

***Project Payback*** means the number of years it will take to recover the costs of implementing a Measure through the reduction in energy costs, reductions in operating and maintenance costs, and other avoided costs, excluding Participant Incentives, and calculated as follows:

$$(A - B) / C$$

A = the estimated costs of implementing the energy efficient measure,

B = the estimated financial incentives payable by ratepayers or taxpayers in Ontario for conducting the Implementation Phase other than Participant Incentives, and

C = the estimated reduction in annualized energy costs (electricity and other fuels), annualized reductions in operating and maintenance costs, and other annualized avoided costs, as a result of implementing the Measures.

***Recognized Farm Operation*** means a farm property that possesses a farm business registration number, being the six to seven digit number administered by Agricorp, an agency of the Government of Ontario, and housed by Agricorp, the Ontario Ministry of Food, Agriculture and Rural Affairs, the Municipal Assessment Corporation and the municipalities.

***Scoping Study Phase*** means the first phase, where the Commissioning Agent reviews the Chilled Water System and prepares a Scoping Study Commissioning Report.

***Scoping Study Phase Commissioning Report*** means a report detailing the elements specified in the Scoping Study Phase Commissioning Report Minimum Requirements.

***Scoping Study Phase Commissioning Report Minimum Requirements*** means the minimum requirements to be met in the preparation and content of the Scoping Phase Commissioning Report, in the form made available by the OPA, as updated from time to time.

***Scoping Study Phase Incentive*** means the Participant Incentive payable for the Hand-Off/Completion Phase, in the amount specified in Section 2.1.1.

## **9. Pay for Performance**

The pay-for-performance rate for the Existing Building Commissioning Program is \$0.