

Ontario Energy Board (Board Staff) INTERROGATORY #1 List 1

Interrogatory

General Application Inquires

Reference: Exhibit C, Tab 1, Schedule 2, Page 1 – 67

Preamble: HONI has proposed to implement six different CDM initiatives from 2011-2014 in an effort to supplement the OPA-Contracted Province-Wide CDM Programs it anticipates it will offer to its customers.

- a) If available, please provide the approved and finalized Master Agreement for OPA-Contracted Province-Wide CDM Programs.
- b) If the Master Agreement is not available from the OPA, please discuss the rationale and appropriateness for making this application with the Board prior to having the finalized details of the OPA-Contracted Province-Wide CDM Programs available.
- c) Please discuss and provide the projected energy consumption (kWh) and peak demand (kW) savings that HONI anticipates it will achieve through the delivery of OPA-Contracted Province-Wide CDM Programs.
- d) Please provide any and all documentation HONI has received from the OPA that supports the energy consumption and peak demand savings projections discussed in your response to 1(c).
- e) If the answers to 1(c) and 1(d) do not support the determination of a credible deficiency in terms of needing additional Board-Approved CDM Programs to offset OPA-Contracted Province-Wide CDM Programs to achieve HONI's CDM Targets, please discuss the appropriateness for making this application to the Board.
- f) Please provide the funding level details the OPA has provided to HONI for participation in the OPA-Contracted Province-Wide CDM Programs. In your response, please include the finalized funding formula for OPA-Contracted Province-Wide CDM Programs and any other additional documentation the OPA has made available to HONI in regards to funding of OPA-Contracted Province-Wide CDM Programs.
- g) If finalized funding information is not currently available from the OPA, please discuss the appropriateness of making this application with the Board at this time and requesting a total of \$32M for Board-Approved CDM Programs.
- h) Please describe the process for how HONI can receive additional funding from the OPA for OPA-Contracted Province-Wide CDM Programs throughout the 2011-2014 program term.

Response

- a) The approved finalized Master Agreement has been attached (Attachment 1).
- b) We considered the OPA programs were “established” after they were approved by the OPA Board of Directors in June of 2010, in compliance with the CDM Code.
- c) The projected energy consumption and peak demand savings that HONI anticipates it will achieve through the delivery of OPA-Contracted Province-Wide CDM Programs are:

OPA Annual Peak and Energy Savings from OPA-Contracted Programs					
Savings	2011	2012	2013	2014	Total 2011 - 2014
Peak (kW) cumulative savings	31,000	70,000	114,000	161,000	161,000
Annual Energy Savings (MWh)	77,354	173,990	270,714	371,942	894,000

* These are Hydro One estimates

- d) We have been part of all of the working groups working closely with the OPA and we have a good understanding of the OPA-contracted province-wide programs. The following tables are based on information included on slides 2 and 3 of an OPA presentation to stakeholders on October 19, 2010 (OPA 2011-2014 Province-Wide CDM Programs Symposium). The complete presentation is attached as Attachment 2. This information supports the energy consumption and peak demand savings projections discussed in our response to c).

1 Slide 2

	Consumer Program	Commercial & Institutional Program	Industrial Program
2014 Demand Reductions (MW)	319	498	214
2011-2014 Energy Savings (GWh)	1,905	2,495	880

2
3 Total MW demand reduction: 1,031 MW)
4 Total GWh Energy Savings: 5,280 GWh)

5
6 Slide 3

- Based on designs and expected participation levels, OPA Contracted Province-Wide Programs are forecasted to achieve and will be funded to:
 - 78% of Provincial LDC Aggregate Demand Reduction Target
 - 91% of Provincial LDC Aggregate Energy Savings Target

8
9
10 e) Based on HONI responses to c) and d) above, HONI believes that there is a credible
11 deficiency in meeting the target by relying only on OPA-Contracted programs as they
12 are projected to satisfy approximately 80% of the LDCs targets.
13
14 f) Hydro One has been participating in the OPA/EDA Funding Working Group,
15 working closely with the OPA since the summer of 2010. Based on our
16 understanding of this work, the OPA has allocated, just over \$50M to Hydro One for
17 the Program Administration Budget (PAB), as shown in the following table:

Local Distribution Company	LDC Program Administration Budgets (PAB)			
	Consumer	Commercial & Industrial	Industrial	Total Portfolio Budget
Hydro One Networks Inc.	22,958,510	24,839,453	2,916,530	50,714,493

19

20 With respect to Participant Based Funding and Customer Incentives, the OPA has not
21 allocated funding for these categories to the LDCs as these budget categories are

1 considered to be pass-through costs - i.e., LDCs are required to submit invoices on a
2 monthly basis for these expenses in order to receive payment by the OPA. Based on
3 the best information provided through the Funding Working Group, Hydro One has
4 estimated the preliminary budget as presented in Exhibit B, Tab 1, Schedule 2 page 9
5 of 24.

6 g) HONI's projected budget for the three OPA-contracted programs (\$166 Million
7 excluding the Low Income Program) is a near final figure and the Company is not
8 expecting any material change before this figure is finalized.

9

10 As stated in Exhibit B, Tab 1, Schedule 2, Page 6, line 28, "The OPA is in the process
11 of finalizing the funding mechanism. Any potential changes to the funding
12 mechanism are not expected to be material. "

13

14 Therefore HONI submits that it is appropriate to make this application with the Board
15 at this time and request a total of \$32 Million for Board-Approved CDM Programs.

16

17 h) The current OPA Funding Framework has variable components (Participant Based
18 Funding and Customer Incentives) to address the potential difference between actual
19 spending and projected spending.

MASTER CDM PROGRAM AGREEMENT

BETWEEN

ONTARIO POWER AUTHORITY

- and -

LDC
(as defined herein)

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Schedule C-3	Direct Install Lighting and Water Heating Initiative

MASTER CDM PROGRAM AGREEMENT

This Master CDM Program Agreement is made as of the 1st day of January, 2011 (the “**Effective Date**”).

BETWEEN:

ONTARIO POWER AUTHORITY, a corporation incorporated pursuant to the laws of the Province of Ontario,

(the “**OPA**”)

- and -

THE LOCAL DISTRIBUTION COMPANY THAT BECOMES LEGALLY BOUND HEREBY PURSUANT TO THE ELECTRONIC CONTRACTING AND REGISTRATION PROCESS SET OUT ON THE OPA WEBSITE, a corporation incorporated pursuant to the laws of the Province of Ontario,

(the “**LDC**”)

(each of the OPA and the LDC may be referred to as a “**Party**” and, collectively, the “**Parties**”)

WHEREAS:

1. The OPA was established by the *Electricity Restructuring Act, 2004* (Ontario) for the purpose, among others, of engaging in activities that promote electricity conservation and the efficient use of electricity.
2. The LDC is the Local Distribution Company for its service area.
3. The OPA received a directive dated April 23, 2010 from the Minister of Energy and Infrastructure (the “**Directive**”) to, among other things, design, deliver and fund province-wide CDM programs to be made available for participation by Local Distribution Companies in accordance with the criteria set out in the Directive.
4. In collaboration with the Local Distribution Companies, the OPA has designed the OPA-Contracted Province-Wide CDM Programs to assist the Local Distribution Companies in meeting their OEB-approved CDM targets. The OPA, in offering the OPA-Contracted Province-Wide CDM Programs, is required to meet its province-wide targets.

5. The LDC is required to meet its OEB-approved CDM targets and has Registered to participate in the Registered CDM Programs and the Registered Initiatives. During the Term, the LDC may choose to participate in other CDM Programs and Initiatives (including Additional Initiatives).
6. The OPA-Contracted Province-Wide CDM Programs consist of four programs that each target a different customer sector: Industrial, Commercial and Institutional, Residential and Low Income. Each CDM Program consists of several Initiatives.
7. Funding for the CDM Programs is recovered from electricity consumers in the Province of Ontario and, as such, is required to be delivered on a cost-effective basis.
8. The OPA and the LDC share a common goal and each acknowledges that cooperation with the intention of achieving such goal will be mutually beneficial. The LDC wishes to implement and deliver to its customers in its service area each of the Registered CDM Programs and each of the Registered Initiatives, and the OPA wishes to make available and fund each of the Registered CDM Programs and each of the Registered Initiatives, on a collaborative and cost-effective basis.
9. The LDC has strong relationships with its customers and, pursuant to the Directive and as and where specified in the Initiative Schedules, will play a primary role in delivering the Registered Initiatives to electricity consumers. The electricity consumers in the LDC's service area are electricity distribution customers of the LDC.
10. The rights and obligations of the OPA and the LDC in respect of each Initiative, in addition to those set out in the body of this Master Agreement, are specified in the Initiative Schedules attached to this Master Agreement, as this Master Agreement may be amended from time to time in accordance with the terms and conditions herein.

NOW THEREFORE FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which are acknowledged by the Parties, the Parties agree as follows:

ARTICLE 1 DEFINITIONS AND INTERPRETATION

1.1 Definitions

In addition to the terms defined elsewhere in this Master Agreement, capitalized terms used in this Master Agreement will have the meanings ascribed to them in Schedule A-1.

1.2 Currency

Unless otherwise indicated, all dollar amounts referred to in this Master Agreement are expressed in Canadian funds.

1.3 Headings

The insertion of headings and a table of contents is for convenience of reference only and will not affect the interpretation of this Master Agreement. The terms "hereof", "hereunder", and similar expressions refer to this Master Agreement and not to any particular Article, Section or other part of this Master Agreement. Unless otherwise indicated, any reference in this Master Agreement to an Article, Section, Schedule or Exhibit refers to the specified article or section of or schedule or exhibit to this Master Agreement.

1.4 Number and Gender

In this Master Agreement, words importing the singular number only will include the plural and vice versa and words importing gender will include all genders. The word "including" means "including without limitation", and the words "include" and "includes" have a corresponding meaning.

1.5 Entire Agreement

This Master Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions, whether written or oral. There are no conditions, covenants, agreements, representations, warranties or other provisions, express or implied, collateral, statutory or otherwise, relating to the subject matter hereof except as herein provided.

1.6 Governing Law and Attornment

This Master Agreement will be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein. For the purpose of all legal proceedings, this Agreement will be deemed to have been made and performed in the Province of Ontario and the courts of the Province of Ontario will have exclusive jurisdiction to entertain any action arising under this Master Agreement. OPA and LDC each hereby attorns to the jurisdiction of the courts of the Province of Ontario.

1.7 Amendments

Except as otherwise expressly permitted or specified herein, this Master Agreement will not be amended or supplemented except by a written agreement that: (a) is entered into by an authorized signatory of each of the Parties which, in the case of the OPA, must be an individual at the vice president level or above; and (b) expressly states that it is intended to amend or supplement, as the case may be, this Master Agreement. For greater certainty, all Additional Initiative Schedules will, once effective in accordance with the provisions of this Master Agreement, form part of this Master Agreement and the Master Agreement will be deemed to be amended accordingly.

1.8 Waivers

No waiver of any obligation or any remedy for breach of any provision of this Master Agreement will be effective or binding unless made in writing and agreed to by an authorized signatory of the Party purporting to give the same and, unless otherwise provided, will be limited to the specific obligation or breach waived. The failure of either Party at any time to require performance by the other Party of any provision of the Master Agreement will not affect in any way the full right to require such performance at any subsequent time; nor will a waiver by either Party of a breach of any provision of this Master Agreement be taken or held to be a waiver of the provision itself.

1.9 Preparation of Agreement

Notwithstanding the fact that this Master Agreement was drafted by the OPA and its legal and other professional advisors, the Parties acknowledge and agree that any doubt or ambiguity in the meaning, application or enforceability of any term or provision of this Master Agreement will not be construed or interpreted against the OPA or in favour of the LDC when interpreting such term or provision, by virtue of such fact.

1.10 Paramountcy

The provisions of the body of this Master Agreement, any Initiative Schedule and any other Schedule are to be read and interpreted together in relation to the Registered Initiative to which such Initiative Schedule and other Schedule applies. Except as expressly provided otherwise in this Master Agreement, any inconsistency between the provisions of the body of this Master Agreement, the Initiative Schedules and any other Schedule, will be resolved by giving meaning and effect to such provisions in the following order of precedence (in descending order):

- (i) the body of this Master Agreement and each Schedule that is not an Initiative Schedule; and
- (ii) the Initiative Schedule applicable to a Registered Initiative.

1.11 Laws and Regulations

Unless otherwise provided, any reference in this Master Agreement to any Laws and Regulations will be a reference to the Laws and Regulations as amended, restated, re-enacted or replaced from time to time.

1.12 Schedules

The following Schedules are attached to, and are to be read with and form part of this Master Agreement:

Schedule A-1	- Definitions
Schedule A-2	- CDM Programs and Initiatives
Schedule A-3	- Contract Administration
Schedule A-4	- Change Terms
Schedule A-5	- Funding Amounts
Schedule A-6	- Reporting Requirements
Schedule A-7	- Ministry Marks
Schedule B-1	- Residential CDM Program Initiatives 2011-2014
Schedule B-2	- Residential New Construction and Major Renovation Initiative 2011-2014
Schedule C-1	- Energy Audit Initiative
Schedule C-2	- Efficiency: Equipment Replacement Incentive Initiative
Schedule C-3	- Direct Install Lighting and Water Heating Initiative

ARTICLE 2 CDM PROGRAM ELEMENTS

2.1 Undertaking of Initiatives

Subject to the terms and conditions of this Master Agreement, during the Term, each Party will undertake and perform its respective obligations set forth in each Initiative Schedule pertaining to the Registered Initiatives. To the extent not provided in the body of this Master Agreement, the terms and conditions of each Registered Initiative will be as set forth in the Initiative Schedule relating thereto.

2.2 Duty of Care, Relationship of Parties

- (a) Each of the Parties acknowledges the accuracy of the recitals to this Master Agreement to the extent that such recitals apply to it and the intentions of the Parties.
- (b) Each Party agrees that its relationship with the other Party is an independent business relationship and in no way does this Master Agreement contemplate or create a relationship of employer and employee, partners, joint venturers, fiduciaries, principal and agent or any other relationship between the Parties. Without limiting the generality of the foregoing, each Party acknowledges that it is not a service provider to the other and that, subject to the terms and conditions of this Agreement, it will at all times be entitled to discharge its duties hereunder in a manner it determines in its sole discretion to be necessary or desirable in order to implement and deliver the Registered Initiatives.

2.3 Marketing

- (a) The OPA will:
 - (i) develop a marketing and communication plan and marketing materials for Registered Initiatives in collaboration with the EDA Representative but as determined by the OPA;
 - (ii) communicate such marketing and communication plan to the LDC;
 - (iii) market the Registered Initiatives throughout Ontario using the Marketing Standards and providing appropriately balanced “air cover support” between urban and rural areas;
 - (iv) in connection with any changes to the Marketing Standards that could affect the LDC’s obligations hereunder, following reasonable efforts to collaborate with the EDA Representative on such changes and the timing of such changes, provide a reasonable period of advance notice to the LDC, in each case having regard to the nature of such changes;
 - (v) create, develop and host a website (the “**Microsite**”) that:
 - (A) includes content describing the Initiatives; and
 - (B) enables the LDC, in its discretion, to engage in customization of specifically identified portions of certain pages of the Microsite to include LDC Marks and some custom content for display to the LDC’s customers; and

- (vi) include as part of its publicly available website a mechanism to link an electricity consumer to the LDC Microsite Pages or LDC Custom Microsite, as applicable.
- (b) The LDC:
- (i) will market each Registered Initiative to the relevant target sector, accurately describing each such Registered Initiative and accurately outlining the terms and conditions applicable to such Registered Initiatives in a manner that permits Persons to readily identify the Initiatives applicable to them;
 - (ii) will, in a manner it sees fit and having regard to the Initiative Schedule, develop and manage relationships with Eligible Persons for the purposes of identifying and undertaking CDM opportunities and promoting participation in the Registered Initiatives or other CDM projects to other Eligible Persons;
 - (iii) may, in its discretion, engage in customization of specifically identified portions of certain pages of the Microsite set aside for the LDC (the “**LDC Microsite Pages**”) to include an LDC Mark and some custom content for display to the LDC’s customers. If the LDC elects to engage in such customization, it will do so through the Program Management System. The LDC acknowledges that, should it not engage in such customization, then the LDC Microsite Pages will include the non-customized content provided by the OPA as part of the Microsite from time to time;
 - (iv) will ensure, if the LDC is engaged in customization of the LDC Microsite Pages and any other content generated by the LDC relating to the CDM Programs, that such content generated by the LDC is current, complete and accurate, and will immediately correct any such content that does not meet these requirements upon being advised of or otherwise becoming aware of any such issue;
 - (v) will include, as part of its publicly available website and in the manner specified in the Marketing Standards, a link to the Microsite or LDC Microsite Pages as applicable; and
 - (vi) will, in performing its obligations under this Master Agreement, including this Section 2.3 comply with the Marketing Standards. Without limiting the generality of the preceding sentence, the LDC will not use any marketing materials that do not comply with the Marketing Standards (including any use of a marketing template that has not been approved by the OPA) without first submitting to the OPA for, and obtaining from the OPA, approval to use such marketing materials. The OPA agrees to respond to any request for approval by the LDC within five (5) Business Days.

- (c) As an alternative to using the Microsite or LDC Microsite Pages for displaying content describing the Initiatives on a website, the LDC may seek the OPA's approval, which approval will not be unreasonably withheld, to implement a customized website to describe the Initiatives, and to display LDC Marks and some custom content to the electricity consumers in the LDC's service area (the "**LDC Custom Microsite**"). If the LDC implements such a customized website, the LDC agrees that it will be responsible for: (i) hosting the LDC Custom Microsite; (ii) creating the content for the LDC Custom Microsite to describe all CDM Programs and Initiatives; and (iii) ensuring that the LDC Custom Microsite complies with the Marketing Standards. The LDC further agrees that the LDC Custom Microsite will utilize and be integrated with the Program Management System for the purposes of Applications and other processes in the same way that the Microsite or LDC Microsite Pages utilize and are integrated with the Program Management System. If the OPA approves such request, the OPA will use Commercially Reasonable Efforts to assist the LDC to link the LDC Custom Microsite with the Program Management System and to ensure that the Program Management System is built to function in such manner so as to allow the LDC Custom Microsite to be linked to it, provided that the LDC will be responsible for the LDC's costs associated with the implementation of the LDC Custom Microsite, including, for greater certainty, all costs associated with the integration of the LDC Custom Microsite with the Program Management System and any third party licensing costs that apply to the LDC Custom Microsite and not the Microsite or LDC Microsite Pages.

2.4 Communication with Electricity Consumers

The Party that is primarily responsible for interaction with the public in the LDC's service area in respect of the Registered Initiatives will be identified in the applicable Initiative Schedule. If a Party receives any inquiries or complaints regarding any issue relating to or arising out of a Registered Initiative that is the responsibility of the other Party, including with respect to any of such other Party's third party service providers, such inquiries and complaints will be directed by the Party receiving such inquiry or complaint to the contact person of such other Party listed in Schedule A-3.

2.5 Technology Requirements

- (a) The OPA will use Commercially Reasonable Efforts to, by January 3rd, 2011 or as soon as possible thereafter, implement and operate the Program Management System and provide the LDC with access to the Program Management System in accordance with Sections 2.5(a) and 2.5(b). The OPA will use Commercially Reasonable Efforts to ensure that the Program Management System will be designed to facilitate necessary functions relating to the operation and administration of the CDM Programs, including the submission of Applications, transmittal of reports and other information, reporting, and data storage and retrieval. Without limiting the generality of the foregoing:

- (i) the OPA will use Commercially Reasonable Efforts to have available the functions necessary for consumer interface by January 3, 2011 in respect of the Registered Programs available as at such date;
 - (ii) the Program Management System will provide the LDC with access to unverified results achieved by the LDC for each Registered Initiative; and
 - (iii) the Program Management System will enable the LDC to access and export then-current data stored in the Program Management System that relates to Participants who are located in the LDC's service area.
- (b) Following the implementation of the Program Management System, the OPA will use Commercially Reasonable Efforts to:
 - (i) operate, support and maintain the Program Management System for the duration of the Term, including maintaining appropriate security and integrity safeguards within the Program Management System for the purposes of maintaining the confidentiality of data in accordance with the provisions of Article 12;
 - (ii) target that the Program Management System will be available for 98% of the Term; and
 - (iii) target remediation of incidents that affect the Program Management System within a period of twenty-four (24) hours or such other reasonable period of time taking into account the severity of the incident.
- (c) The OPA will:
 - (i) be responsible for any data entered into the Program Management System by the OPA, any OPA Other Service Provider, or any other third party acting on behalf of the OPA (which, for certainty, will not include any Local Distribution Company or any LDC Other Service Provider);
 - (ii) not insert or permit any third party for whom it is responsible at law (which, for certainty, does not include the LDC or any LDC Other Service Provider) to insert any Disabling Code into the Program Management System nor modify information on the Program Management System related to any Participant without such Participant's consent;
 - (iii) provide to the LDC forty-eight (48) hours advance notice of any scheduled (as opposed to emergency) maintenance to be performed on the Program Management System that will result in the Program Management System being unavailable along with an estimate of the duration of such unavailability; and

- (iv) provide to the LDC prompt notice of an event or circumstance occurring that results, or is likely to result, in the Program Management System being unavailable.
- (d) Following the implementation of the Program Management System, the LDC will use the functions available through the Program Management System for purposes relating to the delivery, operation, administration, processing of and reporting on Registered Initiatives. Without limiting the generality of the preceding sentence, the LDC will:
 - (i) follow and implement the Program Management System interface guidelines or other instructions, as may be amended or modified from time to time, received from the OPA and reasonably required or reasonably desirable to ensure the proper administration by the LDC of the Registered Initiative and the LDC's performance of its obligations under the Master Agreement using the Program Management System;
 - (ii) use the Program Management System to submit Applications, Participant Agreements, assessments, reports, and all other documentation or information required to be completed or provided by the LDC to the OPA in connection with each Registered Initiative; and
 - (iii) otherwise use the functionality that is available as part of the Program Management System from time to time during the Term for purposes relating to the delivery, operation, administration, processing of and reporting on Registered Initiatives by the LDC.
- (e) With respect to the use of the Program Management System, including, for greater certainty, any applicable LDC Microsite Pages or LDC Custom Microsite:
 - (i) the LDC will:
 - (A) control access to and use of the Program Management System by LDC users, including LDC employees, contractors, agents and LDC Other Service Providers, including the management of user logon IDs and passwords and compliance with third party licence restrictions (where the OPA has advised the LDC of such third party licence restrictions), such as user limitations in respect of Microsoft or other third party licenses procured by the OPA for use by or on behalf of the LDC;
 - (B) ensure that all links and all other interfaces to each of its LDC Microsite Pages are compatible with the Program Management System;

- (C) not insert or permit any third party for whom it is responsible at law (which, for certainty, does not include the OPA or any OPA Other Service Provider) to insert any Disabling Code into the Program Management System nor modify information on the Program Management System related to any Participant without such Participant's consent;
- (D) use Commercially Reasonable Efforts to cooperate with the OPA and OPA Other Service Providers at the OPA's request with respect to the testing, operation, support and maintenance of the Program Management System, including, if applicable, participation in contingency planning tests or failovers and testing of fixes, updates, enhancements to and new releases for the Program Management System;
- (E) in respect of any problem or suspected problem with the Program Management System:
 - (1) if such problem is discovered by the LDC, promptly notify the OPA of such problem; and
 - (2) use Commercially Reasonable Efforts where applicable and given the nature of the problem to cooperate with and assist the OPA to achieve resolution of such problems;
- (ii) the LDC will be responsible for any data entered into the Program Management System by the LDC, any LDC Other Service Provider, or any other third party acting on behalf of the LDC (which, for certainty, will not include any other Local Distribution Company or OPA Other Service Provider); and
- (iii) the LDC agrees that the OPA may, in its discretion, for emergency maintenance or reasons relating to suspected security breaches, fraud or unauthorized access or misuse, suspend access to any portion of the Program Management System, including, for greater certainty, any portion of the LDC Microsite Pages, without prior written notice to the LDC.
- (f) If the Program Management System is out of service for more than a 48-hour period but less than ten (10) Business Days, the OPA will devise a reasonable work-around and the LDC will use Commercially Reasonable Efforts to comply with such work-around instructions provided by the OPA from time to time.
- (g) If the Program Management System is out of service for greater than ten (10) Business Days, the OPA will devise a reasonable work-around and the LDC will use Commercially Reasonable Efforts to comply with such work-around instructions

provided by the OPA from time to time. The OPA shall be responsible for all reasonable incremental expenses directly related to the LDC complying with such work around instructions.

2.6 OPA Third Party Service Providers

- (a) The OPA may, in its discretion, retain third party service providers (each, an “**OPA Other Service Provider**”) to perform any of its responsibilities under this Master Agreement. The OPA will require that each OPA Other Service Provider is suitably qualified, licensed and experienced, assumes responsibility and liability for the quality of all work and materials in relation to Eligible Measures that it supplies, and carries insurance consistent with applicable industry standards.
- (b) At the OPA’s request, the LDC will cooperate with and assist OPA Other Service Providers in order to coordinate the OPA’s performance with the performance of the obligations of the LDC, including to the extent necessary for the foregoing purpose: (i) making available and providing information to the OPA and OPA Other Service Providers regarding any Registered Initiative; and (ii) upon the OPA’s request, complying with the instructions of OPA Other Service Providers to the extent relevant to the proper implementation of the Registered CDM Programs.
- (c) Except as contemplated by the terms of a Registered Initiative, the LDC will not provide instructions to any OPA Other Service Provider. If the LDC reasonably requires amendments to the duties performed by an OPA Other Service Provider or if the LDC has complaints regarding such OPA Other Service Provider, the LDC will submit all such requests and complaints in writing to the OPA. The OPA will assess such requests and complaints and determine the corrective action, if any, required, after considering input from the LDC.
- (d) The retention of an OPA Other Service Provider will not relieve the OPA from any obligation or liability under this Master Agreement. The OPA will remain responsible for the performance of all or any part of its obligations set out in this Master Agreement performed by any OPA Other Service Provider to the same extent as if such obligations were performed by the OPA. Any breach of this Master Agreement by any OPA Other Service Provider will be deemed to be a breach of this Master Agreement by the OPA.

2.7 Subcontracting by LDC

- (a) The LDC may subcontract any of its responsibilities under this Master Agreement to an Affiliate or a third party (each, an “**LDC Other Service Provider**”). In procuring goods or services for purposes relating to any CDM Program or otherwise to the performance by the LDC of its obligations under this Master Agreement, the LDC will comply with the applicable requirements set forth in Section 4.1.

- (b) The LDC will require that each LDC Other Service Provider is suitably qualified, licensed and experienced, assumes responsibility and liability for the quality of all work and materials in relation to Eligible Measures that it supplies and carries insurance consistent with applicable industry standards. Except as contemplated by the terms of a Registered Initiative, the OPA will not provide instructions to any LDC Other Service Provider.
- (c) The LDC will use Commercially Reasonable Efforts to:
 - (i) obtain industry standard warranties from any LDC Other Service Provider with which it subcontracts for the installation of Eligible Measures and in respect of any materials or equipment installed in connection with an Eligible Measure; and
 - (ii) engage subcontractors and material or equipment suppliers jointly or otherwise in cooperation with other Local Distribution Companies in order to achieve cost efficiencies.
- (d) The subcontracting of all or any part of the LDC's obligations set out in this Master Agreement to any LDC Other Service Provider will not relieve the LDC from any obligation or liability under this Master Agreement. The LDC will remain responsible for the performance of all or any part of its obligations set out in this Master Agreement performed by any LDC Other Service Provider to the same extent as if such obligations were performed by the LDC. Any breach of this Master Agreement by any LDC Other Service Provider will be deemed to be a breach of this Master Agreement by the LDC.

2.8 Participant Agreements

- (a) Subject to Section 2.8(b), where the Initiative Schedule for a Registered Initiative requires that the LDC enter into a Participant Agreement with an Eligible Person:
 - (i) such requirement will be stated in such Initiative Schedule;
 - (ii) a form of Participant Agreement will be provided by the OPA as an exhibit to such Initiative Schedule; and
 - (iii) the LDC will not modify in any way such Participant Agreement prior to entering into it with an Eligible Person.
- (b) If the applicable Initiative Schedules expressly permit it, the LDC may opt not to use the form of Participant Agreement provided by the OPA for a Registered Initiative, in which case, the LDC will enter into its own form of Participant Agreement; provided, however, that:

- (i) such form of Participant Agreement will contain, at a minimum and without modification, all of the provisions that are contained in the form of Participant Agreement provided by the OPA and identified as being mandatory provisions by the applicable Initiative Schedule; and
- (ii) the LDC will not include in its own form of Participant Agreement any provisions that could reasonably be expected to conflict or be inconsistent with a provision identified as mandatory pursuant to Section 2.8(b)(i).
- (c) The LDC will administer each Participant Agreement in accordance with the terms and conditions thereof and will use Commercially Reasonable Efforts to enforce its rights and perform its obligations thereunder.
- (d) Except in the case of a breach or default by a Participant under a Participant Agreement pursuant to which the LDC has decided, acting reasonably, to terminate such Participant Agreement, the LDC will not cause, consent to, or permit, any termination of a Participant Agreement or any material amendment, modification, variance or waiver of timely compliance with any terms or conditions of a Participant Agreement, other than amendments or modifications to cure any defective provisions contained therein. For certainty, any proposed amendment or variance of a provision identified as mandatory pursuant to Section 2.8(b) is deemed to be material.

2.9 Compliance with Laws and Regulations

- (a) The LDC will at all times during the Term be a Local Distribution Company and be licensed by the OEB as an electricity distributor.
- (b) The OPA will at all times during the Term be licensed by the OEB to exercise its powers and perform its duties under the *Electricity Act, 1998*.
- (c) Each Party will comply, in all material respects, with all Laws and Regulations required to be complied with in the performance of its obligations hereunder.
- (d) Each Party will obtain and maintain in good standing, each licence, permit, certificate, registration, authorization, consent or approval of any Governmental Authority, as applicable, to the extent necessary or appropriate to carry out its obligations hereunder.

2.10 Company Representative

The LDC and the OPA will each, by notice to the other, appoint, from time to time, a representative (a “**Company Representative**”), who will be duly authorized to act on behalf of the Party that has made the appointment, and with whom the other Party may consult at all reasonable times, and whose instructions, requests and decisions, provided the same are in writing signed by the respective Company Representative, will be binding on the appointing Party as to all matters

pertaining to this Master Agreement; provided, however, that the Company Representatives will not have the power or authority to amend this Master Agreement except as provided in Section 1.7. Except as otherwise provided herein, the Company Representatives will be the first point of contact between the Parties. The initial Company Representative for each Party is set forth in Schedule A-3, and in the case of the LDC, such initial Company Representative is deemed to be the LDC's conservation officer.

ARTICLE 3 CHANGE MANAGEMENT PROCESS

3.1 Change Terms

- (a) Except as provided in Section 3.1(b) and Section 3.1(c), the terms and conditions set out in Schedule A-4 (the "**Change Terms**") will apply to each request for the following:
 - (i) any Minor Change, and
 - (ii) any Major Change, including any addition of a CDM Program or any Additional Initiatives.
- (b) The Change Terms will not apply to any of the following:
 - (i) the termination of any existing Initiative, Registered Initiative, CDM Program or Registered CDM Program or the deletion of any existing Initiative Schedule applicable to a Registered Initiative in any of the foregoing cases in accordance with Section 3.3(a)(ii), Section 7.3 or any provision of Article 10; or
 - (ii) any addition of Registered Initiatives or Registered CDM Programs pursuant to Section 3.2 or Section 3.3(a)(i).
- (c) Unless otherwise expressly provided in this Master Agreement, all other amendments or supplements to this Master Agreement will be made in accordance with Section 1.7.
- (d) Each Party acknowledges and agrees that it will be bound by any rights and obligations that it may become entitled to and liable to perform pursuant to the Change Terms. Each Party will take all actions within its control to cause the EDA Representative to implement the Change Terms. It is the intention of the Parties that the Change Terms and the terms of Section 3.1 will be binding upon the OPA and all Participating LDCs that participate in a Registered CDM Program or a Registered Initiative.

3.2 C&I, Industrial and Low Income Programs

- (a) The Parties acknowledge that the Energy Audit Initiative, the Efficiency: Equipment Replacement Incentive Initiative and the Direct Install Lighting and Water Heating Initiative are the initial Initiatives forming the C&I Program (the “**Initial C&I Initiatives**”). In order to finalize the remaining Initiatives forming the C&I Program and the Industrial Program, the OPA will, and the LDC will cause the EDA Representative to:
 - (i) take all necessary steps to collaborate to finalize the Initiative Schedule for the New Construction Initiative and the form of the Participant Agreements applicable thereto as soon as possible but in any event no later than January 31, 2011;
 - (ii) take all necessary steps to collaborate to finalize the Initiative Schedules for the Direct Service Space Cooling Initiative and the Building Commissioning Initiative (the “**Remaining C&I Initiatives**”) and the form of the Participant Agreements applicable thereto as soon as possible but in any event no later than February 18, 2011; and
 - (iii) take all necessary steps to collaborate to finalize the Initiative Schedules for the Industrial Program and the forms of the Participant Agreements applicable thereto as soon as possible but in any event no later than February 28, 2011.

If the C&I Program is already a Registered CDM Program in respect of the LDC, the Remaining C&I Initiatives, when finalized, will be deemed to be Registered Initiatives that are part of such Registered CDM Program following notice by the OPA to the LDC of such finalization.

- (b) If and when the OPA introduces the Industrial Program or the Low Income Program, it will notify the LDC of the method by which the LDC may be Registered in respect of such CDM Program. If the LDC chooses to deliver any such CDM Program it will submit a Registration in accordance with such notification. Once Registered, each Additional Initiative Schedule will be duly entered into as an amendment to this Master Agreement in accordance with Section 1.7 and the Initiative described therein will be deemed to be a Registered Initiative that is part of such CDM Program, which will be deemed to be a Registered CDM Program. Until such time as the Remaining C&I Initiatives and the Industrial Program Initiatives are available, the Parties will use Commercially Reasonable Efforts to devise a reasonable work-around for the Program Management System functions that are not yet available in order to implement the C&I Program Initiatives and the Industrial Program Initiatives.

3.3 Changes by LDC

- (a) No more frequently than once a calendar year of the Term, the LDC may:
 - (i) if it has not Registered for participation in such CDM Program pursuant to Section 3.2 (or has so Registered but subsequently terminated its participation pursuant to Section 3.3(a)(ii)), effective as of the first day of a calendar month, Register for participation in a CDM Program by providing the OPA with notice of its intention to Register for such CDM Program at least thirty (30) days prior to the intended effective date; and
 - (ii) effective as of January 1, terminate its participation in a Registered CDM Program, provided that it has participated in such Registered CDM Program for at least one year (or part thereof in the case of a Registered CDM Program that the LDC participates in pursuant to Section 3.2), by providing the OPA with notice no later than the December 1 immediately preceding the intended January 1 effective date of its intention to terminate its participation in such Registered CDM Program, and the provisions of Section 10.3(b) will become effective, *mutatis mutandis*, as if the OPA had terminated the Registered CDM Programs or Initiative Schedules pursuant to Section 10.3(a).
- (b) Once the LDC has Registered to participate in a CDM Program in accordance with Section 3.3(a), each Initiative pertaining to such CDM Program will become a Registered Initiative, the Initiative Schedules for which will be deemed to form part of this Master Agreement. For greater certainty, the submission of a Registration by the LDC in respect of such CDM Program after the Effective Date will not reduce or increase the amount of the Program Administration Budget of the LDC but will result in the payment schedule for such CDM Program in Table 1 of Schedule A-5 being revised by the OPA to proportionately increase the remaining semi-annual advances on the remaining first Business Days of January and July in the remainder of the Term to permit such amount to be paid in full during the remaining Term. The first semi-annual payment will be made no later than twenty (20) days after the date that the LDC is so Registered and the LDC has delivered an invoice for such payment in accordance with Section 4.6, and the remaining payments will be made on the remaining first Business Days of January and July.

ARTICLE 4 FUNDING AND PAYMENT TERMS

4.1 General Principles Applicable to LDC's Use of OPA-Provided Funding

- (a) The LDC represents, warrants and covenants that it has, and will at all times during the Term maintain, internal by-laws, policies or other binding rules designed to ensure prudent use by the LDC of ratepayer funds, including rules relating to: (A) the LDC's procurement of products and services from third party service providers; and (B) expenses that, if incurred by or on behalf of the LDC, its employees or representatives, are properly incurred and therefore eligible for reimbursement by the LDC (collectively, the "**LDC Expenditure Policies**") that:
 - (i) are consistent with Laws and Regulations; and
 - (ii) have been approved by the LDC's board of directors (or equivalent) or an individual or committee authorized by such board.
- (b) The LDC will use the funds provided to it by the OPA hereunder in good faith and in a reasonable and prudent manner in accordance with the LDC Expenditure Policies and only for purposes solely related to the OPA-Contracted Province-Wide CDM Programs. Without limiting the generality of the preceding sentence, the LDC will:
 - (i) use the Program Administration Budget only for LDC Eligible Program Administration Expenses;
 - (ii) not exceed the permitted amounts for an LDC Eligible Program Administration Expense provided for in the LDC Expenditure Policies; and
 - (iii) follow competitive procurement processes unless a competitive procurement process is not required for a specific transaction pursuant to the LDC Expenditure Policies.

4.2 Program Administration Budget Amounts

- (a) The OPA will provide pre-funding in accordance with Table 1 of Schedule A-5 to the LDC for LDC Eligible Program Administration Expenses incurred by the LDC during the Term in the performance of its obligations in respect of each Registered CDM Program. The total of such pre-funding in respect of a Registered CDM Program will not exceed such CDM Program's Program Administration Budget, as set forth in Section 1 of Schedule A-5, as such amount may be adjusted in accordance with the terms hereof.
- (b) Except as provided in this Section 4.2 for the C&I Program, the OPA will advance to the LDC semi-annually, but not earlier than the first Business Day of each January

and July of the Term, an amount calculated as the percentage of the Program Administration Budget for each applicable Registered CDM Program for the applicable six-month period as set forth in Table 1 of Schedule A-5; provided, however, that the OPA will only be required to advance funds pursuant to this Section 4.2(b) in respect of a CDM Program from the time that such CDM Program is Registered as provided in Section 3.2 or Section 3.3, as applicable. If the LDC has Registered to deliver the C&I Program when it comprises only the Initial C&I Initiatives, the OPA will advance on or before the 20th day following the C&I Program becoming a Registered CDM Program and receipt by the OPA of the invoice required by Section 4.6 half of the Program Administration Budget pre-funding amount payable for the first six-month period of the Term as set forth in Table 1 of Schedule A-5. On or before the 20th day following the Remaining C&I Initiatives becoming Registered Initiatives pursuant to Section 3.2(a) and receipt by the OPA of the invoice required by Section 4.6, the OPA will advance the remaining half of such first Program Administration Budget pre-funding amount. The LDC may only use the funds advanced pursuant to this Section 4.2(b) to pay LDC Eligible Program Administration Expenses as they become due. The LDC will not use any part of the Program Administration Budget for a Registered CDM Program to pay LDC Eligible Program Administration Expenses incurred in connection with another Registered CDM Program or any other matter.

4.3 Participant Based Funding and Participant Incentives Payments

The OPA will pay to the LDC monthly in accordance with the applicable Initiative Schedule the Participant Based Funding Amount and Participant Incentives, if any, for each Registered Initiative. For certainty, not all Initiatives provide for Participant Based Funding Amounts or Participant Incentives.

4.4 Capability Building Funding Payments

The OPA will pay to the LDC monthly in accordance with the applicable Initiative Schedule the Capability Building Funding Amount, if any, for each Registered Initiative. For certainty, not all Initiatives provide for Capability Building Funding Amounts.

4.5 Cost Efficiency Incentive

For each Registered CDM Program, the LDC is entitled to receive and retain from the funds of such Registered CDM Program's Program Administration Budget that remain unspent and not payable as incurred but unpaid LDC Eligible Program Administration Expenses at the end of the Term, an incentive (the "**Cost Efficiency Incentive**") as calculated pursuant to Schedule A-5, provided that:

- (a) no LDC Event of Default has occurred and is continuing;

- (b) LDC Eligible Program Administration Expenses are less than the Program Administration Budget for such Registered CDM Program;
- (c) the LDC has used Commercially Reasonable Efforts to achieve the Electricity Savings Target and the Peak Demand Savings Target for such Registered CDM Program; and
- (d) such Registered CDM Program has not been terminated pursuant to Article 10 or otherwise.

4.6 Payment Procedure and Invoicing

- (a) The OPA will not be obligated to pay any amount pursuant to Sections 4.2 to 4.5, inclusive, unless it has received from the LDC invoices issued in accordance with this Section 4.6 with respect to Program Administration Budget pre-funding, Participant Based Funding Amounts, Capability Building Funding Amounts and Participant Incentives (in each case, plus Applicable Taxes) payable to the LDC by the OPA, as applicable.
- (b) The OPA will use Commercially Reasonable Efforts to provide functionality in the Program Management System to enable the creation and administration of billing reports for each Registered CDM Program (“**Billing Reports**”). Following notice from the OPA of the implementation of this functionality, the LDC will use the functions relating to the creation and administration of Billing Reports pursuant to the reasonable instructions received from the OPA, as such instructions may be reasonably amended or modified from time to time.
- (c) The LDC will invoice the OPA with respect to all Program Administration Budget pre-funding, Participant Based Funding Amounts, Capability Building Funding Amounts and Participant Incentives, and each invoice (other than for Program Administration Budget amounts) must attach the Billing Report that is generated by the Program Management System pertaining to such invoiced amounts. For certainty, invoices for Program Administration Budget pre-funding are for administration purposes and supporting information is not required to be submitted therewith by the LDC.
- (d) Prior to the implementation of the Billing Report functionality of the Program Management System, or if the OPA notifies the LDC that the Program Management System is not in service, the LDC will prepare invoices for submission to the OPA and will attach all supporting documentation and information to the invoice, all in form and substance acceptable to the OPA, acting reasonably, pursuant to this Section 4.6 and as may be further provided in the respective Initiative Schedules.
- (e) The LDC is entitled to invoice the OPA at any time for the period of time set forth in the invoice (the “**Billing Period**”) for:

- (i) payment of the percentage of the Program Administration Budget for each Registered CDM Program payable to the LDC in the Billing Period (which must correspond with the payment schedule in Table 1 of Schedule A-5);
- (ii) payment of the Participant Based Funding Amount or the Capability Building Funding Amount, if any, for the Registered Initiatives for which the LDC performed its obligations in such Billing Period;
- (iii) advanced funding of the Participant Incentives that the LDC is required to pay to Participants pursuant to a Participant Agreement entered into by the LDC in respect of the Registered Initiatives; and
- (iv) funding of the Participant Incentives that the LDC is required to pay to Participants, or that the LDC directs the OPA to pay to a Participant or third party, pursuant to a Participant Agreement following the implementation of Eligible Measures pursuant to the Participation Agreement entered into by the LDC in respect of the Registered Initiatives,

(the total of such amounts being the “**Funding Amount**”). The LDC will provide one invoice to the OPA in respect of each Registered CDM Program for the Funding Amount for such Billing Period, clearly stating the Registered Initiatives and the types of payments pursuant to Sections 4.2 to 4.5, inclusive, comprising such Funding Amount, and as such invoice and the invoicing requirements in respect thereof, if any, may be provided for in the applicable Initiative Schedule.

- (f) The LDC will be paid by the OPA on or before the twentieth day (the “**Payment Date**”) following receipt of an Invoice in accordance with this Section 4.6.
- (g) The OPA will have no obligation to pay any amount invoiced if the invoice was delivered to the OPA more than one hundred and fifty (150) days following the date on which the LDC’s right to invoice the OPA for such payment arose, regardless of the invoice date.
- (h) The OPA may dispute any part of an invoice or withhold payment of any portion of any amounts due to the LDC under this Master Agreement if the OPA asserts in good faith that:
 - (i) any of the amounts requested for payment are not LDC Eligible Program Administration Expenses, Participant Based Funding Amounts, Capability Building Funding Amounts, Participant Incentives or are otherwise not in compliance with this Master Agreement; or
 - (ii) an invoice or supporting materials submitted by the LDC are not in accordance with the criteria specified in this Master Agreement.

- (i) The OPA will provide notice to the LDC of any such dispute or withholding within ten (10) Business Days of receipt of such invoice together with reasons for such rejection. The LDC will provide any additional information requested or take such other steps necessary to substantiate the invoice or correct any deficiency or error therein. The OPA may withhold payment of the disputed amount until the dispute or failure is resolved in accordance with this Section 4.6(i) and, for greater certainty, any such withholding will not thereby constitute or be deemed to constitute a default or breach by the OPA of this Master Agreement. If within twenty (20) Business Days of the LDC's receipt of such notice the Parties have not resolved the dispute or failure or the OPA has not notified the LDC that it will pay the withholding, the Parties will refer the dispute for resolution in accordance with the process set out in Article 13. Failure by the OPA to give notice of a dispute or failure or the payment by the OPA of an amount invoiced will not affect the OPA's right to later initiate a Dispute with respect to such amount, provided the OPA exercises the foregoing right within one hundred and twenty (120) days after having actual knowledge (including through the exercise of its audit rights pursuant to Section 7.1) that such amount should be the subject of a Dispute.

4.7 Representations in Invoices

- (a) Upon submission by the LDC of each invoice submitted pursuant to Section 4.6(a), such invoice will be deemed to contain the following representations from the LDC:

“LDC hereby represents to the Ontario Power Authority and acknowledges that the Ontario Power Authority is relying on such representations:

 1. This invoice is in relation to a Registered CDM Program.
 2. This invoice and the information provided herein are true and complete in all materials respects.
 3. The amounts in this invoice are all Program Administration Budget advances, Participant Based Funding Amounts, Capability Building Funding Amounts or Participant Incentives payable to the LDC in accordance with the terms and conditions of such Registered CDM Program and/or Registered Initiative.
 4. The LDC is in compliance with all of its obligations under the Master Agreement.”
- (b) If the LDC is unable to provide the representation contemplated by 4.7(a), it will provide notice to the OPA with a reasonably detailed explanation.

4.8 Responsibility for Taxes

- (a) In addition to any amounts payable to the LDC under this Agreement and in connection with the performance of its obligations or a Participant Incentive hereunder, the OPA will pay to the LDC any applicable HST and any other applicable sales or use taxes ("**Applicable Taxes**"). Where mandated, any Applicable Taxes collected by the LDC under this Section 4.8 will be held in trust and timely accounted for in a return filed by it with the Canada Revenue Agency, or other appropriate Governmental Authority, for the reporting period in which the liability for such Applicable Taxes arose. The LDC will provide to the OPA sufficient supporting documentation, as requested by the OPA, to facilitate and support the OPA in claiming input tax credits in respect of such amounts paid. In addition, if the OPA has reasonable grounds to challenge whether Applicable Taxes should be paid by the OPA on any such amounts, the LDC will use Commercially Reasonable Efforts to provide assistance to the OPA with such challenge.
- (b) The LDC will be responsible for all Taxes and amounts exigible on, imposed in respect of or relating to the revenues earned by the LDC in the performance of its obligations hereunder or attributable to any payments pursuant to Sections 4.2 to 4.5, inclusive, Taxes based on its own capital or net income, employment Taxes in respect of the LDC's personnel, and Taxes on any property owned by the LDC. In addition, the LDC will be responsible for all Applicable Taxes incurred by the LDC in the performance of its obligations hereunder. The LDC will be responsible for the arrangements to pay all such Taxes and Applicable Taxes in a timely manner when due and payable.

4.9 Funding Payment Recovery

If the LDC recovers funds from a Participant pursuant to a Participant Agreement or any other arrangement relating to a Registered Initiative, including by the enforcement of the LDC's rights pursuant to a Participant Agreement or otherwise, such funds will be repaid by the LDC to the OPA forthwith following receipt by the LDC.

4.10 Post-Termination Administration Costs

- (a) Following the expiration of the Term, the LDC will provide to the OPA on or before February 28, 2015, together with its accounting of the LDC Eligible Program Administration Expenses contemplated by Section 8.1(a)(i), an estimate of its Post-Termination Administration Costs from and after December 31, 2014 (the **"2015 Estimate"**). Upon the OPA's receipt and approval of the LDC's 2015 Estimate, the Cost Efficiency Incentive will be calculated pursuant to Section 4.5 and Schedule A-5 and the LDC shall repay to the OPA the positive difference, if any, between the aggregate Program Administration Budget amounts advanced to the LDC for all Registered CDM Programs less the aggregate of the Cost Efficiency Incentives and LDC Eligible Program Administration Expenses for such Registered CDM Programs.
- (b) As a final reconciliation of the Post-Termination Administration Costs, the LDC will provide to the OPA after December 31, 2015 and on or before February 28, 2016 an accounting of its actual Post-Termination Administration Costs incurred during the preceding calendar year and an updated estimate of the remaining Post-Termination Administration Costs (the **"2016 Estimate"**), if any. Upon the OPA's receipt of the foregoing information and approval of the LDC's 2016 Estimate, the Cost Efficiency Incentive calculation will be recalculated pursuant to Section 4.5 and Schedule A-5 using the actual Post-Termination Administration Costs incurred during 2015 and the approved 2016 Estimate instead of the 2015 Estimate. If as a result of this reconciliation the calculation of the Cost Efficiency Incentive produces a different result than the calculation conducted in Section 4.10(a), the relevant Party will pay to the other Party the difference, subject to Section 4.10(d).
- (c) In the event a Registered CDM Program was terminated prior to the end of the Term, the LDC will provide to the OPA after December 31, 2015 and on or before February 28, 2016, together with the information contemplated in Section 4.10(b), if any, an accounting of its actual Post-Termination Administration Costs for the period commencing on the effective date of the termination of such Registered CDM Program and ending December 31, 2015, together with an estimate of any remaining Post-Termination Administration Costs relating to such Registered CDM Program. Upon the OPA's receipt of the foregoing information and approval of the LDC's estimate, if any, if the LDC's original estimated Post-Termination Administration Costs is greater than the actual Post-Termination Administration Costs and updated estimate, the LDC shall repay to the OPA the difference.
- (d) For certainty, nothing in this Section 4.10 will result in the OPA providing funding in excess of such CDM Program's Program Administration Budget.

ARTICLE 5 OWNERSHIP AND LICENCE

5.1 Ownership of OPA Property

- (a) As between the LDC and the OPA, the OPA and its licensors are and will be the exclusive owner of all of the following and all Intellectual Property Rights therein (collectively, the “**OPA Property**”):
 - (i) all hardware, software, systems, documentation, content, Trade-marks, Confidential Information or other information or intellectual property (including business rules and business processes) that is or has been procured, created or developed: (A) by the OPA (whether alone or jointly with one or more Persons, including the LDC and the OPA Other Service Providers, and whether such activities occurred prior to or after the Effective Date and independent of or in connection with the CDM Programs), including the Program Management System; or (B) by the LDC or any LDC Other Service Provider that relates to the CDM Programs and uses funding provided to the LDC by the OPA pursuant to this Master Agreement including case studies prepared by the LDC or LDC Other Service Providers and marketing materials developed by the LDC or LDC Other Service Providers for any Registered Initiatives (other than LDC Marks used in such marketing materials);
 - (ii) all OPA Marks; and
 - (iii) all reports and other information created, generated, output or displayed by the Program Management System or as a result of the delivery of the CDM Programs.
- (b) All right, title and interest, including all Intellectual Property Rights, in OPA Property will vest in the OPA, immediately upon creation and regardless of the state of completion of such OPA Property.
- (c) The LDC will acquire no rights to any OPA Property other than the licence rights expressly granted in Section 5.4.

5.2 Notice, Assignment and Waiver

- (a) The LDC will notify the OPA of any OPA Property procured, created or developed by the LDC or any LDC Other Service Provider, including case studies prepared by the LDC or LDC Other Service Providers and marketing materials developed by the LDC or LDC Other Service Providers for any Registered Initiatives (other than LDC Marks used in such marketing materials).

- (b) As partial consideration for the payments described in Article 4, the LDC:
 - (i) hereby assigns and transfers to the OPA;
 - (ii) agrees to assign and transfer to the OPA; and
 - (iii) agrees to require LDC Other Service Providers to assign and transfer to the OPA,

as and when created, all right, title and interest, including Intellectual Property Rights, throughout the world in and to all OPA Property to the extent any right, title, interest or Intellectual Property Right in OPA Property does not automatically and immediately vest in the OPA.

- (c) The LDC will require all LDC personnel and personnel of LDC Other Service Providers to waive, for the benefit of the OPA, their respective moral rights in and to the OPA Property.

5.3 Ownership of LDC Property

- (a) The LDC is and will be the exclusive owner of all of the following and all Intellectual Property Rights therein (collectively, the “**LDC Property**”):
 - (i) all hardware, software, systems, documentation, content, Trade-marks, Confidential Information or other documentation or intellectual property (including business rules and business processes) that is or has been procured, created or developed by the LDC and that was not procured, created or developed using funding provided to the LDC by the OPA pursuant to this Master Agreement (whether alone or jointly with one or more Persons, other than the OPA or an OPA Other Service Provider, and whether such activities occurred prior to or after the Effective Date and independent of or in connection with the CDM Programs), other than OPA Property;
 - (ii) all LDC Marks; and
 - (iii) all marketing collateral or other materials containing any LDC Marks and no OPA Marks.
- (b) All right, title and interest, including all Intellectual Property Rights, in the LDC Property will vest in the LDC, immediately upon creation and regardless of the state of completion of such the LDC Property.
- (c) The OPA will acquire no rights to any LDC Property other than the licence rights expressly granted in Section 5.5.

5.4 Grant of Licences by OPA to the LDC

- (a) The OPA grants to the LDC, during the Term, a fully paid-up, royalty-free, non-exclusive, non-transferable licence to:
 - (i) access, use and copy OPA Property (other than any OPA Marks), to the extent required by the LDC in order to market, support, implement and deliver the Registered Initiatives; and
 - (ii) allow LDC Other Service Providers to exercise the rights referred to in Section 5.4(a)(i) for the purposes set out in Section 5.4(a)(i).
- (b) The OPA grants to the LDC, during the Term, a non-exclusive, non-transferable, royalty-free licence to display the OPA Marks solely in connection with the performance by the LDC of its obligations in Section 2.3(b). All such displays of the OPA Marks must comply with the applicable Marketing Standards.

5.5 Grant of Licences by the LDC to the OPA

- (a) The LDC grants to the OPA, an irrevocable, fully paid-up, royalty-free, non-exclusive licence during the Term to:
 - (i) access, use and copy all LDC Property (other than LDC Marks) to the extent required by the OPA in order to design, develop, market, support, implement and deliver the CDM Programs and Initiatives; and
 - (ii) allow OPA Other Service Providers to exercise the rights referred to in Section 5.5(a)(i) for the purposes set out in Section 5.5(a)(i).
- (b) The LDC grants to the OPA, during the Term, a non-exclusive, non-transferable, royalty-free licence to display the LDC Marks solely in connection with the performance by the OPA of its obligations in Section 2.3(a). All such displays of the LDC Marks will comply with the reasonable guidelines with respect to the display of the LDC Marks provided by the LDC to the OPA from time to time.

5.6 Grant of Sublicence by the OPA to the LDC

In addition to the terms set forth in Section 5.4(b), the following terms apply with respect to the Ministry Marks:

- (a) The OPA hereby grants to the LDC a fully paid-up, royalty-free, non-exclusive, non-transferable sublicence (the “**Sublicence**”) to use, advertise and display the Ministry Marks in association with the CDM Programs.
- (b) The Ministry Marks are key visual identifiers of the CDM Programs. The form of each of the Ministry Marks is set out in the attached Schedule A-7. The

specifications of each of the Ministry Marks, including colour and font, are also set out in Schedule A-7. The Ministry Marks must be identified with the footnote "A mark of Her Majesty the Queen in right of Ontario and protected under Canadian trademark laws. Used under sublicense." or such other footnote set forth in the Marketing Standards from time to time.

- (c) The LDC acknowledges that the Ministry Marks and the whole of the goodwill associated therewith, whether now existing or arising in the future, are the exclusive property of Her Majesty the Queen in right of Ontario, as represented by the Ministry of Energy. The LDC will acquire no right, title or interest in or to the Ministry Marks, and any and all goodwill associated therewith will enure exclusively to the benefit of the Ministry of Energy.
- (d) Each and every use by the LDC of one or more of the Ministry Marks must comply with all of the conditions set out below:
 - (i) the use of the Ministry Marks must be in accordance with the form and specification set out in Schedule A-7 (unless otherwise directed under Section 5.6(f)). Any modification of the Ministry Marks is specifically prohibited, except that the Ministry Marks, when used as word marks, may appear in any form;
 - (ii) the LDC will not register, or apply for the registration of, any trade-mark, corporate name, trading style or domain name integrating, in whole or in part, the Ministry Marks, or any confusingly similar trade-marks, corporate names, trading styles or domain names;
 - (iii) the LDC will not use the Ministry Marks in a manner which could, in the OPA's reasonable opinion, bring the Ministry Marks, the OPA, or the Ministry of Energy into disrepute or which could otherwise damage the goodwill attaching to the Ministry Marks;
 - (iv) the use of the Ministry Marks must be in a context that is factually correct and not misleading;
 - (v) the Ministry Marks may be used solely for the purposes of advertising and promotional activities that are related to the CDM Programs; and
 - (vi) the use of the Ministry Marks must comply with all federal, provincial and municipal laws and regulations.
- (e) From time to time, if requested by the OPA, the LDC will provide to the OPA samples of any advertising, promotional materials, signs, displays or other materials on which the Ministry Marks are used or displayed in connection with the offering for performance or performance of any services. From time to time, if requested by

the OPA, upon reasonable advance notice from the OPA, the LDC will allow the OPA to inspect the premises of the LDC, or any other premises where wares bearing the Ministry Marks are being distributed or where services are being performed in association with the Ministry Marks to ensure that the LDC is maintaining the standard and quality of products and services required by the OPA.

- (f) If directed to do so by the Ministry of Energy, the OPA or its authorized representative may give directions to the LDC relating to the colour, font, proportion and correct usage standards of the Ministry Marks, and all such directions will be followed promptly by the LDC after a reasonable notice period to be agreed on between the LDC and the OPA.
- (g) The LDC will keep proper records related to each use of the Ministry Marks in accordance with Section 7.1 for the term of the Sublicence and for the following three (3) years, and the records will be open to audit and inspection by the OPA in accordance with that Section.
- (h) The LDC will promptly notify the OPA in writing of: (i) any actual, suspected or threatened infringement of the Ministry Marks of which the LDC becomes aware; and (ii) any allegation or complaint made to the LDC by any third party that the Ministry Marks are invalid, that use of the Ministry Marks infringes any third party rights, or that the Ministry Marks are confusingly similar to any other trade-mark or trade name. The LDC will not make any admissions in respect of these matters other than to the OPA and will, in each case, provide the OPA with all relevant information in its possession at the sole cost and expense of the OPA. The LDC may not institute any proceedings with respect to any actual or suspected infringement of the Ministry Marks without the prior written consent of the OPA.
- (i) The OPA may, on five (5) months prior notice to the LDC, terminate the Sublicence at any time for any reason.
- (j) On the expiration or termination of this Agreement or the Sublicence, as the case may be, the LDC will cease to use all the Ministry Marks, and will destroy all copies of the Ministry Marks in its possession or under its control.

5.7 Use of Program Personal Information

Each Party will have the right to use Program Personal Information (in individual or aggregate form) in connection with the exercise of its rights or performance of its obligations under this Master Agreement. In addition, the OPA will have the right to use Program Personal Information for internal purposes in connection with the fulfilment of its mandate and objectives relating to electricity systems in Ontario.

5.8 Mutual Representations and Warranties

- (a) The OPA represents and warrants that it has obtained from third parties all authority, power and right to grant to the LDC the licences set forth in Section 5.4 and the Sublicence.
- (b) The LDC represents and warrants that it has obtained from third parties all authority, power and right to grant to the OPA the licences set forth in Section 5.5.

ARTICLE 6 ENVIRONMENTAL ATTRIBUTES

6.1 Environmental Attributes

- (a) Except with the prior written consent of the OPA, such consent not to be unreasonably withheld, all Environmental Attributes arising in respect of Electricity Savings for which a Participant Incentive has been paid or in respect of equipment or appliance replacement or decommissioning funded by the OPA, whether existing now or arising in the future (the “**OPA Environmental Attributes**”) will be owned by the OPA, and neither the LDC nor the Participant will have an entitlement to any such OPA Environmental Attributes. It will not be unreasonable for the OPA to withhold its consent in order to comply with Laws and Regulations, which for the purposes of this Section only includes any written policy instructions provided by the Ontario provincial government, including the Ministry of Energy. All other Environmental Attributes arising in relation to a Participant will be owned by the Participant and neither the LDC nor the OPA will have an entitlement thereto. The OPA will respond to a written request for consent under this Section 6.1(a) within 20 Business Days of receipt thereof.
- (b) The LDC hereby transfers and assigns to, or to the extent transfer or assignment is not permitted, holds in trust for, the OPA such OPA Environmental Attributes, and the OPA thereafter will own all rights, title, and interest in and to all such OPA Environmental Attributes.
- (c) The LDC will, and each Participant Agreement will provide that the Participant will, from time to time, upon written direction of the OPA, take all such actions and do all such things necessary to effect the transfer and assignment to, or holding in trust for, the OPA, all rights, title, and interest in all such OPA Environmental Attributes.
- (d) The LDC will, and each Participant Agreement will provide that the Participant will, from time to time, upon written direction from the OPA, take all such actions and do all such things necessary to certify, obtain, qualify, and register with the relevant authorities or agencies such OPA Environmental Attributes that are created and allocated or credited pursuant to applicable Laws and Regulations from time to time for the purposes of transferring such OPA Environmental Attributes to the OPA in

accordance with this Article 6. The LDC will, and each Participant Agreement will provide that the Participant will, be entitled to reimbursement of the cost of complying with a direction under this Section 6.1(d), provided that the OPA or the LDC, as the case may be, acting reasonably, has approved such cost in writing prior to the cost being incurred by the LDC or the Participant, respectively.

ARTICLE 7 GOOD GOVERNANCE

7.1 Audit Rights and Record Keeping

- (a) For a period of seven (7) years or such other period of time specified by Laws and Regulations, where applicable, the LDC will, for purposes of confirming that the LDC has performed its obligations in accordance with this Master Agreement keep complete and accurate books, accounts, and records and all other data required for the purpose of proper administration, monitoring and verification of this Agreement and all of the Registered Initiatives, including records of its revenue received and expenses incurred and paid in connection with each Registered Initiative, all Applications, Participant Agreements, work orders, reports and supporting documents, invoices, receipts, other vouchers and all information received from Participants related to a Registered Initiative.
- (b) The LDC will on reasonable notice from the OPA, at any time during normal business hours: (i) permit the OPA or its designate to examine and audit and take copies of such documents and make extracts of the same; and (ii) use Commercially Reasonable Efforts to make available to the OPA or its designate LDC personnel and the personnel of the LDC Other Service Providers involved in the performance of this Master Agreement as reasonably requested by the OPA for purposes of Section 7.1(a).
- (c) In conducting an audit pursuant to Section 7.1(a) the OPA shall:
 - (i) not unreasonably interfere with the operations of the LDC; and
 - (ii) provide copies of and review and discuss with the LDC the results and findings of any audit conducted hereunder prior to the finalization thereof, and the LDC may prepare and submit a response to such results and findings within fifteen (15) days of receipt thereof from the OPA for consideration and consultation by the OPA prior to finalizing the audit.
- (d) Without limiting any other remedies of a Party hereunder, if an audit conducted and finalized pursuant to Section 7.1(a) discloses that there has been an overpayment or underpayment by the OPA or a misappropriation or misuse of funds by the LDC, the amount of the overpayment, underpayment, misappropriation or misuse will be payable or repayable to the OPA or to the LDC, as the case may be, promptly

following such disclosure. The cost of an audit will be an expense of the OPA; provided, however that if the result of such audit indicates a material misappropriation or misuse of funds paid by the OPA to the LDC, then, the OPA may demand immediate repayment of, or may set-off or deduct from any subsequent payment, any such misappropriation or misuse as determined by such audit and the LDC will pay the entire reasonable cost of such audit. Without limitation of the foregoing, if such audit reveals a misuse of Program Administration Budget funds that is not material, the OPA may elect to disqualify such amounts as LDC Eligible Program Administration Expenses and will notify the LDC of such election.

7.2 Quality Assurance Inspections

- (a) The LDC will on at least five (5) Business Days' prior notice, during normal business hours, but no more frequently than once a calendar year in respect of any Registered Initiative or the provisions, collectively, in the body of the Master Agreement, provide reasonable access to the OPA or its designate to its premises for the purpose of performing an inspection or technical audit to confirm that the LDC has performed its obligations in respect of such Registered Initiative in accordance with this Master Agreement and/or for purposes of implementing the OPA EM&V Protocols. The LDC will notify the OPA ahead of time of, and the OPA will comply with, any and all security and safety measures currently prescribed by the LDC at the LDC's premises at the time of such audit.
- (b) In conducting an inspection or audit under Section 7.2(a) that reveals any failure by the LDC to perform its obligations hereunder, the OPA will provide copies of and review and discuss with the LDC the results and findings of any inspection or audit conducted hereunder prior to the finalization thereof, and the LDC may prepare and submit a response to such results and findings within fifteen (15) days of receipt thereof from the OPA.
- (c) Any inspection or audit under Section 7.2(a) by or on behalf of the OPA shall not relieve the LDC of any of its obligations to comply with the terms of this Master Agreement. In no event will any inspection or audit by the OPA hereunder be an acknowledgement by the OPA that there has been or will be compliance with this Master Agreement.

7.3 Program Administration Spending and Monitoring

- (a) If at any time after the date eighteen (18) months after the Effective Date, in either Party's opinion, acting reasonably and in good faith, any report, invoice, CDM Annual Report, audit, review or other evidence indicates that: (i) the amount of the Program Administration Budget spent by the LDC is materially higher or lower than the expected amount of spending up to such time; (ii) the verified or unverified Peak Demand Savings or Electricity Savings of the LDC achieved up to such time in respect of a Registered CDM Program are materially lower than the Savings

Milestones expected to be achieved up to such time (as compared to the Savings Milestones as at the Effective Date or as otherwise determined by a Party, acting reasonably); or (iii) the Savings Milestones, Peak Demand Savings Target or Electricity Savings Target have changed from the Savings Milestones, Peak Demand Savings Target or Electricity Savings Target as at the Effective Date or the LDC's CDM Target has changed from the LDC's CDM Target as at the Effective Date, then within thirty (30) days of receipt of notice from either Party, a Senior Conference will be convened.

- (b) Either Party may table at such Senior Conference, and the Parties will act reasonably and in good faith to achieve agreement in respect of, a plan to normalize the spending of the Program Administration Budget, to achieve the Peak Demand Savings Target or Electricity Savings Target or to remedy the shortfalls in achieving the Savings Milestones, as applicable (a "**Remediation Plan**"). A Remediation Plan may propose the reallocation of the Program Administration Budgets between Registered CDM Programs, modifications to the delivery or design of any Initiative or CDM Program, the development of new Initiatives or CDM Programs, provided that any obligation on the OPA to implement or undertake any Remediation Plan will be at the sole discretion of the OPA. The LDC will provide any information specified by the OPA for the purposes of evaluating the LDC's proposed Remediation Plan or to prepare or modify its own Remediation Plan. The OPA will provide any reasonably available information regarding the LDC's implementation of each Registered Initiative in question, as requested by the LDC. If during such Senior Conference the Parties are unable to agree upon a Remediation Plan or any other solution to the subject matter of the Senior Conference, then the OPA may terminate such Registered CDM Program pursuant to Section 10.6 or 10.7 (without the application of Section 10.6(c) or 10.7(c), as applicable). In the event of such termination, the OPA will provide an explanation as to the reason therefor.
- (c) Notwithstanding the provisions of Section 7.3(a), if any CDM Program becomes a Registered CDM Program pursuant to Section 3.2 or Section 3.3(a)(i) more than six (6) months after such Initiative or CDM Program became available for Registration, the OPA may require the LDC to promptly participate in a Senior Conference pursuant to Section 7.3(a).

ARTICLE 8

REPORTING REQUIREMENTS

8.1 LDC Reporting Requirements

- (a) The LDC will provide to the OPA:
 - (i) on or before February 28 of each year commencing on February 28, 2012 and ending on February 28, 2015, an accounting of the LDC Eligible Program Administration Expenses incurred by the LDC for the preceding calendar

year in respect of each Registered Initiative with expenses broken down as specified in Schedule A-6;

- (ii) the data and reports as specified in each Initiative Schedule for each Registered CDM Program; and
 - (iii) any information relating to this Agreement reasonably requested by the OPA that is available to the LDC using Commercially Reasonable Efforts.
- (b) The LDC will provide to the OPA (if it is not explicitly addressed in its CDM Strategy or CDM Annual Report) within 30 days of it becoming Registered for a CDM Program, its Savings Milestones for such Registered CDM Program.

8.2 Reporting Requirements

- (a) Provided that the LDC has complied with its obligations pursuant to Sections 2.5, 8.1 and 9.1, the OPA, based upon the best information then available to it, will provide to the LDC:
- (i) if requested by the LDC, by the end of each calendar quarter the unverified Electricity Savings and Peak Demand Savings estimates (in kWh and kW) of the LDC arising from each Registered Initiative for the immediately preceding calendar quarter;
 - (ii) by August 1 of the second year of the Term and by August 1 of each of the three years thereafter, drafts of the report contemplated by Section 8.2(a)(iii) to the extent available; and
 - (iii) by September 1 of the second year of the Term, and by September 1 of each of the three years thereafter, a report listing the estimated Electricity Savings and Peak Demand Savings of the LDC arising from each Registered Initiative during the immediately preceding calendar year reported by rate class.

ARTICLE 9 EVALUATION, MEASUREMENT AND VERIFICATION

9.1 Evaluation, Measurement and Verification

- (a) Each CDM Program and Initiative will be subject to the OPA EM&V Protocols. The OPA EM&V Protocols will include evaluations of:
- (i) the effectiveness of each CDM Program in meeting its objectives and achieving Electricity Savings and Peak Demand Savings;

- (ii) the effectiveness of each Initiative, including, if practicable, the components of each such Initiative, in meeting its objectives and achieving Electricity Savings and Peak Demand Savings; and
 - (iii) the actual Electricity Savings and Peak Demand Savings of the LDC arising from each Registered Initiative.
- (b) In furtherance of the OPA EM&V Protocols, the LDC will cooperate with the OPA and will collect information as may be reasonably prescribed by the OPA in respect of each Registered Initiative and make available such information to the OPA in the form and with the frequency as may be reasonably prescribed by the OPA. Without limitation of the generality of the foregoing, the LDC will:
 - (i) provide the OPA at its request the following information:
 - (A) for all Participants, name, account number, address and phone number;
 - (B) for all Participants, rate class; and
 - (C) for a sampling of Participants sufficient for the OPA to evaluate a Registered Initiative pursuant to the OPA EM&V Protocols, historical consumption data as is reasonably required by the OPA to establish a baseline of electricity consumption for such Participants provided that such historical consumption data is reasonably available;
 - (ii) collaborate with the OPA to establish a baseline of electricity consumption for non-Participants or other representative control group sufficient for the OPA to evaluate a Registered Initiative pursuant to the OPA EM&V Protocols, including by using Commercially Reasonable Efforts to provide access to historical consumption data in anonymized form for such representative control group; and
 - (iii) for three (3) years from the date of collection, keep proper and accurate records of such information prescribed by the OPA in this Section 9.1 and make available such records and applicable personnel in accordance with the provisions of Section 7.1; and
 - (iv) make available all books, accounts and other records contemplated by Section 7.1 in accordance with the provisions of Section 7.1.
- (c) The LDC will appoint a knowledgeable individual who will cooperate with the OPA and participate in the conduct of the OPA EM&V Protocols as reasonably required by the OPA.

- (d) Subject to the provisions of Article 12, the OPA may publish the results arising from the OPA EM&V Protocols from time to time.
- (e) The OPA will issue the OPA EM&V Protocols by March 31, 2011 and will consult with the EDA from time to time with respect to the determination of Peak Demand Savings and Electricity Savings for purposes of the OPA EM&V Protocols.

ARTICLE 10 TERM, DEFAULT AND REMEDIES

10.1 Term

- (a) This Master Agreement will commence on the Effective Date and terminate on December 31, 2014 unless terminated prior thereto pursuant to the terms hereof (the “**Term**”). For certainty, no Participant Incentives will be paid by the OPA for Projects completed after December 31, 2014 and, accordingly, the LDC will not enter into any Participant Agreement that may require that a Participant Incentive be paid for a Project completed after December 31, 2014 unless the LDC will pay such Participant Incentive from its own funds.
- (b) An Initiative Schedule may set out the term of such Initiative and any terms and conditions relating to the termination or extension of such Initiative (the “**Initiative Term**”). If the Initiative Term of an Initiative Schedule extends past the termination or expiration of the Term, then such Initiative Schedule, including the terms and conditions of this Master Agreement applicable to such Initiative Schedule, will survive the termination or expiration of the Term.
- (c) Unless the OPA notifies the LDC otherwise, a notice pursuant to Section 10.6(a) will be deemed to have been given effective as of June 30, 2014 with a Cessation Period ending on December 31, 2014, and the provisions of Sections 10.6(a) and 10.6(b) will become effective as of June 30, 2014, *mutatis mutandis*.

10.2 Events of Default by the LDC

Each of the following will constitute an event of default by the LDC (each, an “**LDC Event of Default**”):

- (a) The LDC fails to make any payment required under this Master Agreement or any Participant Agreement when due and such failure is not remedied within the Cure Period.
- (b) The LDC fails to perform or observe any of its obligations under this Master Agreement in any material respect (except to the extent constituting a separate LDC Event of Default) and such failure is not remedied within the Cure Period.

- (c) The LDC is in breach of any obligation under Article 5 and such breach is not remedied within ten (10) days from the date the OPA provides notice to the LDC of such breach.
- (d) The LDC is in breach of its OEB licence in a manner that materially adversely affects the LDC's ability to perform its obligations under this Master Agreement and such breach is not remedied within the Cure Period.
- (e) By agreement, decree, judgment or order of a Governmental Authority, the LDC agrees to be treated as or is adjudicated bankrupt or insolvent or any substantial part of the LDC's property is sequestered or subject to the appointment of any third party and such agreement, decree, judgment, order or appointment continues in effect unrevoked, undischarged and unstayed for a period of thirty (30) days after the entry or implementation thereof.
- (f) The LDC dissolves, winds up or liquidates, or makes an assignment for the benefit of its creditors generally under any Insolvency Legislation, or consents to the appointment of a receiver, manager, receiver-manager, monitor, trustee in bankruptcy, or liquidator for all or part of its property or files a petition or proposal to declare bankruptcy or to reorganize pursuant to the provision of any Insolvency Legislation.
- (g) The LDC makes a material misrepresentation, misstatement or omission in any report, invoice or any other information submitted by the LDC to the OPA and such misrepresentation, misstatement or omission is not made true or correct or otherwise remedied within the Cure Period; provided, however, if such misrepresentation, misstatement or omission is in relation to the LDC's obligations under Section 5.6, any such misrepresentation, misstatement or omission, whether material or not, will not be subject to the Cure Period but must be corrected within thirty (30) days from the date the OPA provides notice to the LDC of such breach.
- (h) The LDC misappropriates, or uses in a manner not expressly provided herein, any funding provided to the LDC by the OPA hereunder, and such misappropriation or misuse is not remedied within ten (10) days from the date the OPA provides notice to the LDC of such breach.
- (i) The LDC is in breach of any obligation under Article 12 and such breach is not remedied within five (5) days from the date the OPA provides notice to the LDC of such breach.

10.3 Remedies of the OPA

- (a) If any LDC Event of Default occurs and is continuing, upon written notice to the LDC, the OPA may, in addition to and not in substitution for any other remedies available at law or equity:

- (i) by declaring a termination date not later than thirty (30) days from the date of such notice terminate this Master Agreement;
 - (ii) by declaring a termination date not later than thirty (30) days from the date of such notice terminate the LDC's ability to participate in any Registered CDM Program or Registered Initiative by declaring that the Initiative Schedule(s) in respect of which the LDC Event of Default is continuing is terminated;
 - (iii) suspend payment of any amounts owing hereunder to the LDC until such time as the LDC Event of Default has been remedied to the satisfaction of the OPA, acting reasonably;
 - (iv) set off any amounts owing to the LDC hereunder against any amounts then or thereafter owing to the OPA by the LDC;
 - (v) terminate the Sublicence if the LDC Event of Default arises in relation to the LDC's obligations under Section 5.6;
 - (vi) only in connection with an LDC Event of Default arising in respect of the LDC's obligations related to a Program Administration Budget, prescribe any additional conditions on the use by the LDC of the Program Administration Budget, including (A) requiring the LDC to implement more stringent quality control measures, (B) pre-authorization by the OPA of the payment by the LDC of amounts that the LDC intends to categorize as LDC Eligible Program Administration Expenses, (C) reduction of amounts payable in respect of expenses that the LDC has previously characterized as LDC Eligible Program Administration Expenses and (D) disqualification from future spending of any LDC Eligible Program Administration Expenses; or
 - (vii) demand the prompt repayment of the Program Administration Budget held by the LDC and not yet spent on, or incurred and payable but not yet paid in respect of, LDC Eligible Program Administration Expenses.
- (b) If the OPA exercises any of its remedies identified in Section 10.3(a)(i) or Section 10.3(a)(ii), then with respect to the Registered CDM Program or Registered Initiatives terminated and without limitation of the OPA's remedy pursuant to Section 10.3(a)(iv):
- (i) the LDC will immediately stop marketing, soliciting, accepting Applications, entering into Participant Agreements or otherwise increasing any Person's obligations or liabilities in respect of such Registered Initiatives;
 - (ii) the OPA will, subject to its receipt of the LDC's invoices in accordance with Section 4.6:

- (A) pay to the LDC the amounts the LDC has spent, or that it has incurred and that are payable, under this Master Agreement as LDC Eligible Program Administration Expenses in respect of such Registered Initiatives up to and including the date of termination of such Initiative, including, subject to Section 4.6(g), payment of invoices in respect of such incurred amounts where the invoices are dated after the date of such termination;
 - (B) pay to the LDC any Participant Based Funding Amounts or Capability Building Funding Amounts in respect of such Registered Initiatives that were payable by the OPA to the LDC up to and including the date of termination of such Initiative but that remain unpaid to the date of termination of such Initiative; and
 - (C) for so long as the LDC continues to perform its obligations pursuant to Section 2.8 and to provide invoices in accordance with Section 4.6 in respect thereof, pay to the LDC Participant Incentives for Participant Agreements in good standing duly entered into and in effect prior to or on the date of termination of such Initiative; and
- (iii) if such termination results in the termination of a Registered CDM Program in its entirety:
- (A) subject to Section 4.10(c), the LDC will be entitled to retain from any remaining amounts held by the LDC as part of the Program Administration Budget for such Registered CDM Program the Post-Termination Administration Costs in respect of such Registered CDM Program;
 - (B) the OPA will not be obligated to continue to make any payments in respect of such Registered CDM Program other than those provided in Section 10.3(b)(ii)(C); and
 - (C) the Parties will true-up the Program Administration Budget for such Registered CDM Program as at the date of such termination such that: (x) any remaining amounts held by the LDC as part of the Program Administration Budget for such Registered CDM Program will be promptly repaid to the OPA; or (y) other than as provided in Section 10.3(b)(ii)(C), instead of making any payments contemplated by this Section 10.3(b) the OPA may net the amount of any such payments against any such remaining amounts of the Program Administration Budget held by the LDC. For certainty, the operation of this Section 10.3(b)(iii) will not result in the OPA paying to the LDC any amount in excess of the Program Administration Budget for such Registered CDM Program nor result in the LDC repaying to the

OPA any amount duly spent or incurred in respect of LDC Eligible Program Administration Expenses in respect of such Registered CDM Program.

10.4 Events of Default by the OPA

Each of the following will constitute an Event of Default by the OPA (each, an “**OPA Event of Default**”):

- (a) The OPA fails to make any payment required under this Master Agreement when due and such failure is not remedied within the Cure Period.
- (b) The OPA is in breach of its OEB licence in a manner that materially adversely affects the OPA’s ability to perform its obligations under this Master Agreement and such breach is not remedied within the Cure Period.
- (c) The OPA fails to perform or observe any of its material obligations under this Master Agreement in any material respect (except to the extent constituting a separate OPA Event of Default) and such failure is not remedied within the Cure Period.
- (d) The OPA is in breach of any obligation under Article 5 and such breach is not remedied within ten (10) days from the date the LDC provides notice to the OPA of such breach.
- (e) The OPA is in breach of any obligation under Article 12 and such breach is not remedied within five (5) days from the date the LDC provides notice to the OPA of such breach.

10.5 Termination by the LDC for Default

- (a) If any OPA Event of Default occurs and is continuing, then, upon written notice to the OPA, the LDC may by declaring a termination date not later than thirty (30) days from the date of such notice:
 - (i) terminate this Master Agreement; or
 - (ii) terminate the Initiative Schedule for any Registered Initiative pursuant to which the OPA Event of Default occurred.
- (b) Subject to the provisions of Section 10.3, upon any such termination:
 - (i) the OPA will, subject to its receipt of the LDC’s invoices in accordance with Section 4.6:
 - (A) pay to the LDC the amounts the LDC has spent, or that it has incurred and that are payable, under this Master Agreement as LDC Eligible

Program Administration Expenses in respect of such Registered Initiative up to and including the date of termination of such Initiative, including, subject to Section 4.6(g), payment of invoices in respect of such incurred amounts where the invoices are dated after the date of such termination;

- (B) pay to the LDC any Participant Based Funding Amounts or Capability Building Funding Amounts in respect of such Registered Initiative that were payable by the OPA to the LDC up to and including the date of termination of such Initiative but that remain unpaid to the date of termination of such Initiative; and
 - (C) for so long as the LDC continues to perform its obligations pursuant to Section 2.8 and to provide invoices in accordance with Section 4.6 in respect thereof, pay to the LDC Participant Incentives for Participant Agreements in good standing duly entered into and in effect prior to or on the date of termination of such Initiative.
- (c) If any OPA Event of Default set out in Sections 10.4(a), 10.4(b) or 10.4(c) has occurred and has been continuing for a period of one hundred and twenty (120) days, then, upon written notice to the OPA, the LDC may immediately:
- (i) terminate this Master Agreement; or
 - (ii) terminate any Initiative Schedule pursuant to which the OPA Event of Default occurred,

and the provisions of Section 10.7(b) will become effective, *mutatis mutandis*, as if the OPA had terminated the Registered CDM Programs or Initiative Schedules listed in such notice of termination.

10.6 Cessation of Registered CDM Program or Registered Initiative

- (a) Upon receipt by the LDC of notice from the OPA requesting that the Parties commence the cessation of a Registered CDM Program or Registered Initiative, the LDC will work in good faith with and assist the OPA to the extent required to cease providing the Registered CDM Program or Registered Initiative within a period ending no earlier than six months from the date of receipt of such notice (the "**Cessation Period**"), which will include, at a minimum:
 - (i) the development of a plan for the cessation of the Registered CDM Program or Registered Initiative that sets out, at a minimum (the "**Cessation Plan**"):
 - (A) each Party's responsibilities for the performance of the obligations set out in the plan;

- (B) the plan and time line for the cessation of the Registered CDM Program;
 - (C) the steps to be taken for minimizing any impact to Participants caused by the cessation of the Registered CDM Program;
 - (D) details relating to any incremental reporting to be provided during the Cessation Period; and
- (ii) the performance of the obligations of the each of the Parties set out in the Cessation Plan.
- (b) During the Cessation Period, the LDC will take steps to wind down in an orderly manner the marketing, solicitation, and acceptance of Applications and the entering into of Participant Agreements, and will take any other reasonable steps to avoid increasing any Person's obligations or liabilities in respect of such Registered CDM Program or Registered Initiative following the Cessation Period. On the last day of the Cessation Period:
 - (i) the Registered CDM Program or Registered Initiative shall terminate; and
 - (ii) subject to Section 4.10(c), the provisions of Section 10.3(b)(ii) or 10.3(b)(iii), as applicable, will apply *mutatis mutandis*.
- (c) If the Registered CDM Program or Registered Initiative is terminated under this Section 10.6, except in the case where the Registered CDM Program or Registered Initiative is required to be terminated pursuant to Laws and Regulations, if the LDC still must achieve during the remainder of the Term its Electricity Savings Target and Peak Demand Savings Target, the OPA will use Commercially Reasonable Efforts to work with the LDC to introduce a replacement CDM Program or Initiative.

10.7 Immediate Termination by the OPA of Registered CDM Program or Registered Initiative

- (a) The OPA may, at its option, terminate any Registered CDM Program or Registered Initiative with immediate effect by providing written notice to the LDC.
- (b) If the OPA terminates any Registered CDM Program or any Initiative Schedule for a Registered Initiative pursuant to Section 10.7(a), then with respect to the Registered Initiatives terminated:
 - (i) the OPA will, subject to its receipt of the LDC's invoices in accordance with Section 4.6:
 - (A) pay to the LDC the amounts the LDC has spent, or that it has incurred and that are payable, under this Master Agreement as LDC Eligible

Program Administration Expenses in respect of such Registered Initiatives up to and including the date of termination of such Initiative, including, subject to Section 4.6(g), payment of invoices in respect of such incurred amounts where the invoices are dated after the date of such termination;

- (B) pay to the LDC any Participant Based Funding Amounts or Capability Building Funding Amounts in respect of such Registered Initiatives that were payable by the OPA to the LDC up to and including the date of termination of such Initiative but that remain unpaid to the date of termination of such Initiative; and
 - (C) for so long as the LDC continues to perform its obligations pursuant to Section 2.8 and to provide invoices in accordance with Section 4.6 in respect thereof, pay to the LDC Participant Incentives for Participant Agreements in good standing duly entered into and in effect prior to or on the date of termination of such Initiative; and
- (ii) if such termination results in the termination of a Registered CDM Program in its entirety:
- (A) subject to Section 4.10(c), the LDC will be entitled to retain from any remaining amounts held by the LDC as part of the Program Administration Budget for such Registered CDM Program the Post-Termination Administration Costs in respect of such Registered CDM Program;
 - (B) the OPA will pay to the LDC the Immediate Wind-down Costs in respect of such Registered CDM Program;
 - (C) the OPA will not be obligated to continue to make any payments in respect of such Registered CDM Program other than those provided in Section 10.7(b)(i)(C); and
 - (D) the Parties will true-up the Program Administration Budget for such Registered CDM Program as at the date of such termination such that: (x) any remaining amounts held by the LDC as part of the Program Administration Budget for such Registered CDM Program will be promptly repaid to the OPA; or (y) other than as provided in Section 10.7(b)(i)(C), instead of making any payments contemplated by this Section 10.3(b) the OPA may net the amount of any such payments against any such remaining amounts of the Program Administration Budget held by the LDC. For certainty, the operation of this Section 10.7(b)(ii) will not result in the OPA paying to the LDC any amount in excess of the Program Administration Budget for

such Registered CDM Program nor result in the LDC repaying to the OPA any amount duly spent or incurred in respect of LDC Eligible Program Administration Expenses in respect of such Registered CDM Program.

- (c) If the Registered CDM Program or Registered Initiative is terminated under this Section 10.7, except in the case where the Registered CDM Program or Registered Initiative is required to be terminated pursuant to Laws and Regulations, if the LDC still must achieve during the remainder of the Term its Electricity Savings Target and Peak Demand Savings Target, the OPA will use Commercially Reasonable Efforts to work with the LDC to introduce a replacement CDM Program or Initiative.

10.8 Survival

- (a) Neither the expiration of the Term nor the earlier termination of this Master Agreement will release either of the Parties from any obligation or liability incurred prior to such expiration or termination.
- (b) The provisions of this Master Agreement requiring performance or fulfilment after the expiration or earlier termination of this Master Agreement, including Section 2.8(c), Section 2.8(d), Section 4.6(i), Section 4.8, Section 4.9, Section 5.4, Section 5.5, Section 5.6, Article 6, Section 7.1, Section 8.2(a), Section 9.1, Article 11, Article 12, Article 13, Section 14.4 and this Section 10.8, such other provisions as are necessary for the interpretation thereof and any other provisions hereof, the nature and intent of which is to survive termination or expiration of this Master Agreement, will survive the expiration or earlier termination of this Master Agreement.
- (c) For certainty, the continued existence of materials distributed to third parties during the Term that bear the OPA Marks or the Ministry Marks will not constitute infringement of the other Party's Intellectual Property Rights, provided that the appearance of the OPA Marks or the Ministry Marks, as applicable, complies with the applicable Marketing Standards and licence requirements and restrictions set forth in Article 5.

ARTICLE 11 LIMITATION OF LIABILITY AND INDEMNIFICATION

11.1 No Warranty

Except as specifically set forth or referenced in this Master Agreement, there are no representations, warranties, or conditions of either Party, express, implied, statutory or otherwise, regarding any matter. Without limiting the generality of the foregoing, the LDC acknowledges that its participation in any CDM Program hereunder is based on its own assessment of such CDM Program and the Initiatives comprising it and not on any reliance on anticipated or projected results, and that such participation may not result in the achievement of any Electricity Savings, Peak

Demand Savings or the LDC's OEB-approved CDM targets, each of which is expressly disclaimed by the LDC.

11.2 Exclusion of Certain Damages

Notwithstanding anything contained herein to the contrary:

- (a) in no event will a Party be entitled to recover from the other Party for any liabilities, damages, obligations, payments, losses, costs, or expenses under this Master Agreement or in relation to this Master Agreement:
 - (i) any amount in excess of the actual compensatory direct damages, court costs and reasonable lawyers' and other advisor fees suffered or incurred by such Party; or
 - (ii) damages (whether direct or indirect, consequential or otherwise) for (x) loss of profit, or (y) diminution of value or loss of use of any property;
- (b) neither Party will be liable to the other Party for any special, indirect, incidental, punitive, exemplary or consequential damages, which may arise under or in relation to this Master Agreement, regardless of whether such liability arises under contract, tort or any other legal theory;

provided, however:

- (A) a Party will be entitled to recover from the other Party the types of damages described in Sections 11.2(a)(ii) and (b) where such damages arise in respect of a breach by a Party of its obligations contained in Article 12; and
- (B) Sections 11.2(a)(ii) and (b) will not limit the indemnity provided by an Indemnifying Party pursuant to Section 11.3 or Section 11.4 for damages suffered by a third party and claimed against an Indemnified Party.

11.3 Indemnification by the LDC

The LDC (the "**LDC Indemnifying Party**") will be liable for and will indemnify, defend and hold the OPA, the Government of Ontario, the members of the Government of Ontario's Executive Council and their respective Affiliates, and each of the foregoing Person's respective directors, officers, employees, shareholders, advisors, and agents (including contractors and their employees and which, for greater certainty, does not include other Local Distribution Companies) (in this context, collectively, the "**OPA Indemnified Party**") harmless from and against any and all claims, demands, suits, losses, damages, liabilities, penalties, obligations, payments, costs and expenses and accrued interest thereon (including the costs and expenses of, and accrued interest on, any and all

actions, suits, proceedings for personal injury (including death) or property damage, assessments, judgments, settlements and compromises relating thereto and reasonable lawyers' fees and reasonable disbursements in connection therewith) (each, an "**Indemnifiable Loss**"), asserted by a third party against or suffered by the OPA Indemnified Party relating to, in connection with, resulting from, or arising out of (i) the negligence or wilful misconduct of the LDC Indemnifying Party or (ii) the breach by the LDC of any provision of this Master Agreement; except to the extent that such Indemnifiable Loss is attributable to the negligence or wilful misconduct of the OPA Indemnified Party or any Person for whom the OPA is responsible hereunder or at law or the breach by the OPA of any provision of this Master Agreement. For greater certainty, in the event of contributory negligence or breach of the OPA Indemnified Party, then such OPA Indemnified Party will not be indemnified hereunder in the proportion that the OPA Indemnified Party's negligence or breach contributed to any Indemnifiable Loss.

11.4 Indemnification by the OPA

The OPA (the "**OPA Indemnifying Party**") will be liable for and will indemnify, defend and hold the LDC, its Affiliates, and each of the foregoing Person's respective directors, officers, employees, shareholders, advisors, and agents (including contractors and their employees and which, for greater certainty, does not include other Local Distribution Companies) (in this context, collectively, the "**LDC Indemnified Party**") harmless from and against any and all Indemnifiable Losses, asserted by a third party against or suffered by the LDC Indemnified Party relating to, in connection with, resulting from, or arising out of (i) any activity conducted by the LDC in carrying out its obligations with respect to the transfer, assignment, holding, certification, procurement, qualification or registration of the OPA Environmental Attributes required by Article 6, (ii) the negligence or wilful misconduct of the OPA Indemnifying Party or (iii) the breach by the OPA of any provision of this Master Agreement, except to the extent that such Indemnifiable Loss is attributable to the negligence or wilful misconduct of the LDC Indemnified Party or any Person for whom the LDC is responsible hereunder or at law or the breach by the LDC of any of the terms of this Master Agreement. For greater certainty, in the event of contributory negligence or breach of the LDC Indemnified Party, then such LDC Indemnified Party will not be indemnified hereunder in the proportion that the LDC Indemnified Party's negligence or breach contributed to any Indemnifiable Loss. For certainty, the provisions of this Section 11.4 do not apply to any Environmental Attributes retained by a Participant.

11.5 Defence of Claims

- (a) Promptly after receipt by the Indemnified Party of any claim or notice of the commencement of any action, administrative or legal proceeding, or investigation as to which an indemnity provided for in Section 11.3 or Section 11.4 may apply, the Indemnified Party will notify the Indemnifying Party in writing of such fact. The Indemnifying Party will assume the defence thereof with counsel designated by the Indemnifying Party and satisfactory to the affected Indemnified Party, acting reasonably; provided, however, that if the defendants in any such action include both the Indemnified Party and the Indemnifying Party and the Indemnified Party has reasonably concluded that there may be legal defences available to it which are

different from or additional to, or inconsistent with, those available to the Indemnifying Party, the Indemnified Party will have the right to select separate counsel satisfactory to the Indemnifying Party acting reasonably (at no additional cost to the Indemnified Party) to participate in the defence of such action on behalf of the Indemnified Party. The Indemnifying Party will promptly confirm that it is assuming the defence of the Indemnified Party by providing written notice to the Indemnified Party. Such notice will be provided no later than five (5) days prior to the deadline for responding to any claim relating to any Indemnifiable Loss.

- (b) Should any Indemnified Party be entitled to indemnification under Section 11.3 or Section 11.4, and the Indemnifying Party fails to assume the defence of such claim (which failure will be assumed if the Indemnifying Party fails to provide the notice prescribed by Section 11.5(a)), the Indemnified Party will, at the expense of the Indemnifying Party, contest (or, with the prior written consent of the Indemnifying Party, acting reasonably, settle) such claim, provided that no such contest need be made and settlement or full payment of any such claim may be made without consent of the Indemnifying Party (with the Indemnifying Party remaining obligated to indemnify the Indemnified Party under Section 11.3 or Section 11.4, as the case may be, if, in the written opinion of an independent third party counsel chosen by the Parties, such claim is meritorious. If the Indemnifying Party is obligated to indemnify any Indemnified Party under Section 11.3 or Section 11.4, the amount owing to the Indemnified Party will be the amount of such Indemnified Party's actual out-of-pocket loss net of any insurance proceeds received or other recovery.

ARTICLE 12 CONFIDENTIALITY AND PRIVACY

12.1 Confidentiality Covenant

- (a) Each Party will, in its capacity as a Receiving Party:
 - (i) not use or reproduce Confidential Information of the Disclosing Party for any purpose, other than as and to the extent expressly permitted under this Master Agreement or as may be reasonably necessary for the exercise of its rights or the performance of its obligations set out in this Master Agreement;
 - (ii) not disclose, provide access to, transfer or otherwise make available any Confidential Information of the Disclosing Party except as expressly permitted in this Master Agreement; and
 - (iii) take all measures reasonably required to maintain the confidentiality and security of all Confidential Information of the Disclosing Party that it Handles.
- (b) The Receiving Party may disclose Confidential Information of the Disclosing Party:

- (i) to a third party that is not a Representative of the Receiving Party if and to the extent required by a Governmental Authority or otherwise as required by Laws and Regulations, provided that such Party must first give the Disclosing Party notice of such compelled disclosure (except where prohibited by Laws and Regulations from doing so) and must use Commercially Reasonable Efforts to provide the Disclosing Party with an opportunity to take such steps as it desires to challenge or contest such disclosure or seek a protective order. Thereafter, the Receiving Party may disclose the Confidential Information of the Disclosing Party, but only to the extent required by Laws and Regulations and subject to any protective order that applies to such disclosure; and
- (ii) to:
 - (A) its accountants, internal and external auditors and other professional advisors if and to the extent that such Persons need to know such Confidential Information in order to provide the applicable professional advisory services relating to such Party's business;
 - (B) potential permitted assignees or successors of the Receiving Party if and to the extent that such Persons need to know such Confidential Information in connection with a potential sale, merger, amalgamation or other transaction or transfer involving the business, assets or services provided by the Receiving Party; and
 - (C) employees of each Party and the OPA Other Service Providers or LDC Other Service Providers, as applicable, if and to the extent that such Persons need to know such Confidential Information to perform their respective obligations under this Master Agreement;

provided that any such Person is aware of the provisions of this Section 12.1 and has entered into a written agreement with the Receiving Party that includes confidentiality obligations in respect of such Confidential Information that are no less stringent than those contained in this Section 12.1.

- (c) The OPA may disclose Confidential Information of the LDC to the OEB, IESO, the Minister of Energy and the Environmental Commissioner's Office or their respective successors for Handling by such Persons provided that the OPA has in place with any such Person a written agreement that includes confidentiality obligations in respect of such Confidential Information that are comparable to those contained in this Section 12.1.
- (d) Without limiting the foregoing, each Party acknowledges and agrees that:

- (i) this Master Agreement and all Confidential Information in the possession or control of the OPA or the LDC are subject to Laws and Regulations that include the access provisions of FIPPA or MFIPPA, and that as a result, third parties may obtain access to each Party's Confidential Information; and
- (ii) each Party is responsible for ensuring that its agreements with Other Service Providers contemplate and permit such potential access, and will be fully liable to any such Other Service Provider for any Claim arising out of or relating to such access.

12.2 Privacy

- (a) Each Party acknowledges that all Personal Information collected by or accessible to such Party in the course of administering or offering the CDM Programs or otherwise complying with the terms and conditions of this Master Agreement ("**Program Personal Information**") constitutes not only Personal Information of the individual to whom the information relates but also Confidential Information of such Party to which the provisions of Section 12.1 and Privacy Laws apply, except to the extent such provisions are inconsistent with this Section 12.2, which prevails in the case of any such inconsistency. In addition to the obligations set out in Section 12.1(a), and notwithstanding the disclosure rights set out in Section 12.1(b), each Party will:
 - (i) Handle all Program Personal Information in accordance with all applicable Privacy Laws;
 - (ii) perform its obligations under this Agreement in a manner that will enable the other Party to comply with Privacy Laws;
 - (iii) promptly notify the other Party if such Party receives notice from any Governmental Authority alleging that either Party has failed to comply with Privacy Laws in connection with the performance of this Master Agreement, or if such Party otherwise becomes aware that either Party may have failed or may in the future fail to comply with Privacy Laws in connection with the performance of this Master Agreement;
 - (iv) cooperate and comply with any requests or instructions issued by any privacy or data protection authority, including the Canadian privacy commissioner and any other Governmental Authority applicable to such Party; and
 - (v) provide reasonable assistance to the other Party in responding to and addressing any complaint relating to the Handling of Program Personal Information.
- (b) Without limiting the obligations set forth in Section 12.2(a), the Party responsible for approving an Application of an Eligible Person will, prior to approving such

Application, ensure that such Application contains the consents required by Laws and Regulations in order to enable the Party receiving or approving such Application to permit each Party to Handle Program Personal Information in order to (i) deliver the CDM Programs or as contemplated in Sections 5.7 and 9.1 and (ii) otherwise comply with the terms and conditions of this Master Agreement and Laws and Regulations. The Parties acknowledge that such approving Party will have met its obligation if (x) such Application is an Application submitted through the Program Management System that cannot be modified or altered without the consent of the OPA, or (y) if such Eligible Person submitting an Application submits a form of Application or executes a form of Participant Agreement prescribed by the applicable Initiative Schedule, without amendment.

- (c) If a Person refuses to provide the consents referred to in Section 12.2(b), each Party will ensure that such Person is not able to submit an Application for, or become a Participant under, the applicable Registered Initiatives for which the Party is responsible for obtaining the consents referred to in Section 12.2(b).

12.3 Injunctive Relief

Each Party acknowledges that any violation of the provisions of this Article 12 may cause irreparable damage or injury to the other Party, the exact amount of which may be impossible to ascertain, and that, for such reason, in addition to any other remedies available to such Party, such Party is entitled to proceed immediately to court in order to obtain, and the other Party will consent to, interim, interlocutory, and final injunctive relief restraining the other Party from breaching, and requiring the other Party to comply with, its obligations under this Article 12, without a requirement that a finding of irreparable harm or other criteria for the awarding of injunctive relief be made. Nothing in this Section 12.3 will be construed to limit the right of a Party to obtain injunctive relief in any other circumstance in which it may be otherwise entitled to such relief.

ARTICLE 13 DISPUTE RESOLUTION

13.1 General

Any controversy, dispute, difference, question or claim (collectively, a “**Dispute**”) arising between the Parties in connection with the interpretation, performance, construction or implementation of this Master Agreement that cannot be resolved by a director or manager from each Party within ten (10) Business Days after the Dispute has arisen will be settled in accordance with this Article 13.

13.2 Senior Officers

The aggrieved Party will send the other Party written notice identifying the Dispute, the amount involved, if any, and the remedy sought, and invoking the procedures of this Section. Senior officers with authority to bind the Party, as selected by each Party in its discretion, will confer in an

effort to resolve the Dispute (a “**Senior Conference**”). If the Dispute cannot be resolved by a Senior Conference within thirty (30) days of the date the Dispute arose or such later date as agreed to by the Parties, the Dispute will be resolved by arbitration in accordance with Sections 13.3, 13.4 and 13.5 below.

13.3 Arbitrators

The Parties will submit any arbitration under this Master Agreement to a single arbitrator agreed upon by both Parties. If the Parties cannot agree upon a single arbitrator within ten (10) days after the Dispute is referred to arbitration, each Party will within ten (10) more days choose one individual who will sit on a three-member arbitration panel. The two arbitrators appointed will name the third arbitrator within ten (10) days or, if they fail to do so within that time period, either Party may make an application to a court of competent jurisdiction for appointment of the third arbitrator. Any arbitrator selected to act under this Master Agreement will be qualified by education, training and experience to pass on the particular question in Dispute and will have no connection to either of the Parties other than acting in previous arbitrations.

13.4 Procedures of Arbitration

The arbitrator or arbitration panel selected pursuant to Section 13.3 (hereinafter referred to as the “**arbitrator**”) will not have any current or past business or financial relationships with any Party (except prior to arbitration). The arbitrator will provide each of the Parties an opportunity to be heard and will conduct the arbitration hearing in accordance with the provisions of the Arbitration Act. Unless otherwise agreed by the Parties, the arbitrator will render a decision within ninety (90) days after the end of the arbitration hearing and will notify the Parties in writing of such decision and the reasons therefor. The arbitrator will be authorized only to interpret and apply the provisions of this Master Agreement and will have no power to modify or change this Master Agreement in any manner. The decision of the arbitrator will be conclusive, final and binding upon the Parties. The decision of the arbitrator may be appealed solely on the grounds that the conduct of the arbitrator, or the decision itself, violated the provisions of the Arbitration Act or solely on a question of law as provided for in the Arbitration Act. The Arbitration Act will govern the procedures to apply in the enforcement of any award made. If it is necessary to enforce such award, all costs of enforcement will be payable and paid by the Party against whom such award is enforced. Unless otherwise provided in the arbitral award to the contrary, each Party will bear (and be solely responsible for) its own costs incurred during the arbitration process, and each Party will bear (and be solely responsible for) its equal share of the costs of the arbitrator. Each Party will otherwise be responsible for its own costs incurred during the arbitration process.

13.5 Disclosure/Confidentiality

All proceedings and the making of the award in respect of Section 13.4 will be in private and the Parties will ensure that the conduct of the arbitration and the terms of the award will, subject to registration of the award in any court, be kept confidential unless the Parties otherwise agree; provided, however, that such obligation to maintain confidentiality will not prohibit any Party from complying with Laws and Regulations. All information disclosed, including all statements made and

documents produced, in the course of the arbitration will be held in confidence and no Party will rely on, or introduce as evidence in any subsequent proceeding, any admission, view, suggestion, notice, response, discussion or position of either Party or any acceptance of a settlement proposal or recommendation for settlement made during the course of the arbitration, except (i) as required by Laws and Regulations; or (ii) to the extent that disclosure is reasonably necessary for the establishment or protection of a Party's legal rights against a third party or to enforce the award of the arbitrator or to otherwise protect a Party's rights under the arbitration.

13.6 Exclusion

This Article 13 will not apply to an arbitration arising pursuant to Schedule A-4 except as expressly provided in Schedule A-4.

ARTICLE 14 MISCELLANEOUS

14.1 Further Assurances

Each of the Parties will, from time to time, on written request of the other Party, do all such further acts and execute and deliver or cause to be done, executed and delivered all such further things as may be reasonably required in order to fully perform and to more effectively implement the terms of this Master Agreement.

14.2 Severability

The invalidity, unenforceability or illegality of any provision in this Master Agreement as finally determined pursuant to Section 13.4 will not, to the extent permitted by law, affect the validity, enforceability or legality of any other provision of this Master Agreement, which will remain in full force and effect.

14.3 Binding Agreement

This Master Agreement will enure to the benefit of and will be binding on and enforceable by the Parties and, where the context so permits, their respective successors and permitted assigns.

14.4 Independent Legal and Tax Advice

- (a) The LDC acknowledges that it has entered into this Agreement willingly with full knowledge of the obligations imposed by the terms hereof. The LDC, by execution hereof, acknowledges that it has been afforded the opportunity to obtain independent legal and other advice and confirms by the execution hereof that it has either done so or waived its right to do so and agrees that this Agreement constitutes a binding legal obligation and that it is estopped from raising any claim on the basis that it has not obtained such advice.

- (b) In particular, the LDC acknowledges that it understands the meanings of the provisions of the Participant Agreements or the meanings of the provisions stipulated as mandatory, as applicable, and further acknowledges that the OPA is not providing any legal or tax advice in respect of the Participant Agreements to be entered into by the LDC.

14.5 Third Party Beneficiaries

Except as otherwise set out in this Master Agreement, this Master Agreement will not confer upon any other person except the Parties and their respective successors and permitted assigns, any rights, interests, obligations or remedies under this Master Agreement.

14.6 Assignment

Neither Party may assign this Master Agreement, in whole or in part, without the prior written consent of the other Party, which consent may not be unreasonably withheld.

14.7 Notices

Any notice to be given under this Master Agreement unless expressly provided otherwise herein must be in writing and will be given by facsimile or e-mail or by hand-delivery as provided. Any notice, if sent by facsimile or e-mail, will be deemed to have been received on the Business Day following the day of sending, or if delivered by hand will be deemed to have been received on the Business Day it is delivered to the applicable address noted below. Either Party may, by notice of change of address to the other Party, change its address to which notices are to be sent. Notices and other communications must be addressed as set forth in Schedule A-3.

IN WITNESS WHEREOF, the Parties have entered into this Master Agreement as of the date first written above.

SCHEDULE A-1

DEFINITIONS

In this Master Agreement the following terms shall have the following meanings:

“Additional Initiative” means an Initiative applicable to a Registered CDM Program but that is not a Registered Initiative (i) as at the Effective Date or (ii) pursuant to Section 3.2 or Section 3.3(a)(ii).

“Additional Initiative Notice Period” has the meaning given to it in Schedule A-4.

“Additional Initiative Schedule” means a Schedule setting forth the terms and conditions of: (i) a Registered Initiative, as attached to this Master Agreement in accordance with the provisions of Section 3.2 or Section 3.3(a)(ii); or (ii) an Additional Initiative, as attached to this Master Agreement in accordance with the Change Terms.

“Affiliate” has the meaning given to it in the *Business Corporations Act* (Ontario).

“Applicable Taxes” has the meaning given to it in Section 4.8(a).

“Application” means, in respect of an Initiative, any form of request that must be completed by a Person (as prescribed by the applicable Initiative) in order to participate in such Initiative, including a completed application form.

“Arbitration Act” means the *Arbitration Act, 1991* (Ontario).

“Billing Period” has the meaning given to it in Section 4.6(e).

“Billing Report” has the meaning given to it in Section 4.6(b).

“body” means, in respect of this Master Agreement, this Master Agreement excluding the Schedules.

“Business Day” means a day, other than a Saturday or Sunday or statutory holiday in the Province of Ontario or any other day on which banking institutions in Toronto, Ontario are not open for the transaction of business.

“Capability Building Funding Amount” means, in respect of an Initiative, a funding amount payable to the LDC or a Participant to assist with the implementation of organizational measures that facilitate the delivery of CDM generally or certain CDM Programs specifically, as specified in the Initiative Schedule for such Initiative.

“CDM” means electricity conservation and demand management.

“CDM Annual Report” means the LDC’s “Annual Report” as defined in the CDM Code.

“CDM Code” means the Conservation and Demand Management Code for Electricity Distributors, as approved by the OEB.

“CDM Program” or **“OPA-Contracted Province-Wide CDM Program”** means a group of Initiatives designed by the OPA pursuant to the Directive and directed at one of the Commercial and Institutional, Industrial, Low-Income or Residential electricity consumer groups, as set forth in Schedule A-2. The specific names of the CDM Programs are set forth in Schedule A-2.

“CDM Strategy” means the LDC’s “CDM Strategy” as defined in the CDM Code.

“CDM Target” has the meaning given to it in the CDM Code.

“Cessation Period” has the meaning given to it in Section 10.6(a).

“Cessation Plan” has the meaning given to it in Section 10.6(a)(i).

“Change Management Parties” means the EDA Representative and the OPA.

“Change” means an amendment, modification or supplement of this Master Agreement made or proposed other than pursuant to Section 3.1(b).

“Change Dispute” has the meaning given to it in Section 6(d) or 9(f) of Schedule A-4, as the context may require.

“Change Request” means a Notice of Minor Change, an LDC Change Request or a Major Change Request, as the context may require.

“Change Response” has the meaning given to it in Section 6(a) of Schedule A-4.

“Change Terms” has the meaning given to it in Section 3.1(a).

“Claim” means any actual, threatened or potential civil, criminal, administrative, regulatory, arbitral or investigative demand, allegation, action, suit, investigation or proceeding or any other claim or demand, whether in contract, tort or otherwise.

“Collaboration Process” has the meaning given to it in Section 1 of Schedule A-4

“Commercial and Institutional” or **“C&I”** means, with respect to a particular group composed of electricity consumers, General Service < 50 kW Accounts, General Service > 50kW Accounts or Large Users, and not electricity consumers defined as Residential or Industrial.

“Commercially Reasonable Efforts” means all efforts which may be required to enable a Person, directly or indirectly, to satisfy, consummate, complete or achieve a condition, transaction, activity, obligation or undertaking contemplated by this Master Agreement and which do not require such Person to expend any funds or assume liabilities other than expenditures and liabilities which are

reasonable in nature and amount in the context of the purpose of, and the Initiatives contemplated by, this Master Agreement.

“Company Representative” has the meaning given to it in Section 2.10.

“Confidential Information” of a Party means any and all information of such Party or any of its Affiliates, licensors, Participants, customers (including information regarding a customer that is a consumer, wholesaler or generator), and employees or Other Service Providers, and information on Applications, and, in the case of the OPA, Governmental Authorities (the **“Disclosing Party”**) that has or will come into the possession or knowledge of the other Party or any of its Affiliates or Other Service Providers (the **“Receiving Party”**) in connection with or as a result of entering into this Agreement, including information concerning the Disclosing Party’s past, present or future customers, suppliers, technology, or business. Notwithstanding the foregoing, “Confidential Information” does not include information that is:

- (a) publicly available when it is received by or becomes known to the Receiving Party or that subsequently becomes publicly available other than through a direct or indirect act or omission of the Receiving Party (but only after it becomes publicly available);
- (b) established by evidence to have been already known to the Receiving Party at the time of its disclosure to the Receiving Party and is not known by the Receiving Party to be the subject of an obligation of confidence of any kind;
- (c) independently developed by the Receiving Party without any use of or reference to the Confidential Information of the Disclosing Party as established by evidence that would be acceptable to a court of competent jurisdiction; or
- (d) received by the Receiving Party in good faith without an obligation of confidence of any kind from a third party who the Receiving Party had no reason to believe was not lawfully in possession of such information free of any obligation of confidence of any kind, but only until the Receiving Party subsequently comes to have reason to believe that such information was subject to an obligation of confidence of any kind when originally received;

provided, however, that, for the purposes of this Master Agreement, all Personal Information concerning any Participant or Person submitting an Application for a Registered Initiative will constitute Confidential Information, whether or not it falls into one of the exceptions set out in clause (a) through (d) of this definition.

“Cost Efficiency Incentive” has the meaning given to it in Section 4.5.

“Cure Period” means a period of thirty (30) Business Days following delivery by a Party to the other Party of written notice of a failure or breach described in Section 10.2 (in the case of a failure or breach of the LDC) and Section 10.4 (in the case of a failure or breach of the OPA) or such longer period of time as the notifying Party may determine in its sole discretion.

“Directive” has the meaning set forth in the recitals hereto.

“Disabling Code” means any virus, Trojan horse, worm, logic bomb, drop-dead device, backdoor, shutdown mechanism or similar software, hardware, system or combination of any of the foregoing that is intended or designed to, is operable to, is likely to or has the effect of disabling, deleting, erasing, denying authorized access to, permitting unauthorized access to, repossessing, damaging, destroying, corrupting or otherwise affecting or interfering with the Program Management System or the normal use of any of OPA’s hardware, software or systems or any data or files on or used in conjunction with any of the aforementioned.

“Disclosing Party” has the meaning given to it in the definition of Confidential Information.

“Dispute” has the meaning given to it in Section 13.1.

“Distribution Consumer” means an electricity consumer, whether or not a customer of the LDC, 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.

“Distribution System” means a system connected to the IESO-Controlled Grid for distributing electricity at voltages of 50 kV or less and includes any structures, equipment or other thing used for that purpose.

“EDA” means the Electricity Distributors Association, or such successor thereto as the EDA or such successor may notify the OPA from time to time.

“EDA Representative” means the board of directors of the EDA or any individual or committee of the EDA appointed by the board of directors of the EDA for the purpose of this Agreement and of which the OPA has received written notice.

“Effective Date” has the meaning first set forth in the preamble to this Master Agreement.

“Electricity Savings” means electricity savings determined pursuant to the OPA EM&V Protocols.

“Electricity Savings Target” means, for a specific Registered CDM Program, the portion of the LDC’s CDM Target that relates specifically to a reduction of electricity consumption that the LDC expects to result from such Registered CDM Program (and, for certainty, not from Board-Approved CDM Programs (as defined in the CDM Code)) as stated in the LDC’s CDM Strategy or CDM Annual Report, as such CDM Target may change from time to time in accordance with Laws and Regulations.

“Eligibility Criteria” means, in respect of an Initiative, the criteria set out in the applicable Initiative Schedule that a Person must meet in order to be eligible to participate in such Initiative.

“Eligible Costs” means, in respect of an Initiative, costs and expenses of a Participant payable or reimbursable to such Participant as provided in the applicable Initiative Schedule.

“Eligible Measures” means, in respect of an Initiative, Measures as defined or described in the applicable Initiative Schedule.

“Eligible Person” means, in respect of an Initiative, a Person that meets the applicable Eligibility Criteria.

“Environmental Attributes” means all benefits and entitlements associated with a Measure or a Facility having decreased environmental impacts resulting from the implementation of an Eligible Measure, including:

- (a) all rights to any fungible or non-fungible attributes, whether arising from a Facility itself, from the interaction of a Facility with a Distribution System or the IESO-Controlled Grid or because of applicable Laws and Regulations or voluntary programs established by any Governmental Authority;
- (b) all rights relating to the nature of the energy source as may be defined and awarded through applicable Laws and Regulations or voluntary programs; and specific Environmental Attributes include ownership rights to any applicable credits, entitlements or other instruments resulting from the interaction of a Facility or an Eligible Measure with a Distribution System or the IESO-Controlled Grid or as specified by applicable Laws and Regulations or voluntary programs;
- (c) all rights to quantify and register the foregoing with competent authorities; and
- (d) all revenues, entitlements, benefits, and other proceeds arising from or related to the foregoing.

“Facility” means the buildings, premises or lands, or part thereof, owned or occupied by an Eligible Person or a Participant and in respect of which such Eligible Person intends to participate, or such Participant is participating, in an Initiative.

“FIPPA” means the *Freedom of Information and Protection of Privacy Act* (Ontario).

“Funding Amount” has the meaning given to it in Section 4.6(e).

“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.

“Good Industry Practice” means, in respect of any aspect of any Eligible Measure, care and disposal of materials, or other actions or obligations contemplated in this Master Agreement or an Initiative Schedule, in each case, that have been or ought to have been performed by a Person, and subject always to Laws and Regulations, the exercise of the degree of skill, diligence, prudence and foresight and practice which could reasonably and ordinarily be expected from a skilled and

experienced Person engaged in: (i) carrying out the same type of responsibilities of such Person in performing such actions or obligations as contemplated in this Master Agreement or an Initiative Schedule; or (ii) carrying out responsibilities, whether individually or as a package of responsibilities, which could reasonably be regarded as being comparable to the responsibilities of such Person as contemplated in this Master Agreement or an Initiative Schedule; in each case, performing its obligations under the same, reasonably comparable or similar circumstances and utilizing all the information available at the relevant time.

“Governmental Authority” means any federal, provincial, or municipal government, parliament or legislature, or any regulatory authority, agency, tribunal, commission, board or department of any such government, parliament or legislature, or any court or other law, regulation or rule-making entity, having jurisdiction in the relevant circumstances, including the IESO, the OEB, the Electrical Safety Authority, the Electricity Commissioner’s Office, and any Person acting under the authority of any of the foregoing, but excluding the OPA.

“Handle” or **“Handling”** means to access, receive, collect, use, store, process, record, disclose, transfer, retain, dispose of, destroy, manage or otherwise handle.

“HST” means any tax payable under Part IX of the *Excise Tax Act* (Canada).

“IESO” means the Independent Electricity System Operator of Ontario established under Part II of the *Electricity Act, 1998* (Ontario), or its successor.

“IESO-Controlled Grid” has the meaning given to it in the IESO Market Rules.

“IESO Market Rules” means the rules made under Section 32 of the *Electricity Act, 1998* (Ontario), together with all market manuals, policies, and guidelines issued by the IESO or its successor.

“Immediate Wind-down Costs” means the costs of the LDC directly related to immediately winding up a Registered CDM Program, being:

- (a) in respect of each agreement between the LDC and LDC Other Service Providers that the LDC has entered into specifically for the purposes of performing its obligations under this Master Agreement, and which the LDC has demonstrated that, after using Commercially Reasonable Efforts, it is unable to use for itself or transfer or assign to another Person, the amount of the accrued or committed expenses, costs and termination fees, if any, that the LDC is required to pay pursuant to such LDC Other Service Provider agreement in order to terminate such agreement;
- (b) any unrecoverable up-front expenditures made by the LDC in order to perform its obligations under this Master Agreement in respect of such Registered CDM Program; and

- (c) any other reasonable costs incurred by the LDC in assisting the OPA to terminate such Registered CDM Program,

but not including forgone revenue or profit, or any costs or expenses that could have been mitigated.

“Indemnifiable Loss” has the meaning given to it in Section 11.3.

“Indemnified Party” means an LDC Indemnified Party or an OPA Indemnified Party.

“Indemnifying Party” means an LDC Indemnifying Party or an OPA Indemnifying Party.

“Industrial” means, with respect to a particular group composed of electricity consumers, General Service > 50 kW Accounts or Large Users that carry on an activity in the Province of Ontario falling into North American Industry Classification System categories 31, 32 and 33 (Manufacturing) or subcategories 113 (Forestry and Logging), 1153 (Support Activities for Forestry) and 212 (Mining, except Oil and Gases).

“Initial C&I Initiatives” has the meaning given to it in Section 3.2(a).

“Initiating Party” has the meaning given to it in Schedule A-4.

“Initiative” means one or more Measures, and the activities pursuant to which such Measure or Measures are delivered, and **“Initiatives”** means each such Initiative, collectively. The specific names of certain Initiatives are set forth in Schedule A-2.

“Initiative Schedule” means a Schedule that sets forth the terms and conditions of one or more Initiatives and, for greater certainty, includes each Additional Initiative Schedule.

“Initiative Term” has the meaning given to it in Section 10.1(b).

“Insolvency Legislation” means the *Bankruptcy and Insolvency Act* (Canada), the *Winding Up and Restructuring Act* (Canada) and the *Companies’ Creditors Arrangement Act* (Canada) or any analogous legislation, and the bankruptcy, insolvency, creditor protection or similar laws of any other jurisdiction (regardless of the jurisdiction or competence of such law).

“Intellectual Property Rights” means:

- (a) any and all proprietary rights anywhere in the world provided under: (i) patent law; (ii) copyright law (including moral rights); (iii) trade-mark law; (iv) design patent or industrial design law; (v) semi-conductor chip or mask work or integrated circuit topography law; or (vi) any other statutory provision or common law principle applicable to this Agreement, including trade secret law, that may provide a right in either hardware, software, content, documentation, Confidential Information, Trade-marks, ideas, formulae, algorithms, concepts, inventions, processes or know-how generally, or the expression or use of such hardware, software, content,

documentation, Confidential Information, Trade-marks, ideas, formulae, algorithms, concepts, inventions, processes or know-how; and

- (b) any and all applications, registrations, licences, sub-licences, franchises, agreements or any other evidence of a right in any of the foregoing.

“**kV**” means kilovolt.

“**kW**” means kilowatt.

“**kWh**” means kilowatt hour.

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

“**Laws and Regulations**” means:

- (a) applicable multi-national, international, federal, provincial or municipal laws, orders-in-council, by-laws, codes, rules, policies, regulations and statutes;
- (b) applicable orders, decisions, codes, manuals, interpretation bulletins, judgments, injunctions, decrees, awards, directives and writs of any court, tribunal, arbitrator, Governmental Authority or other Person having jurisdiction;
- (c) applicable rulings and conditions of any licence, permit, certificate, registration, authorization, consent and approval issued by a Governmental Authority; and
- (d) any requirements under or prescribed by applicable common law.

“**LDC**” has the meaning given to it in the preamble of this Master Agreement.

“**LDC Custom Microsite**” has the meaning given to it in Section 2.3(c).

“**LDC Eligible Program Administration Expenses**” means expenses of the LDC:

- (a) that comprise reasonable costs of the LDC incurred prior to the Effective Date associated with preparing for the launch of the CDM Programs in 2011;
- (b) are incurred after the Effective Date and are directly related to a Registered CDM Program;
- (c) are Immediate Wind-down Costs; or
- (d) are Post-Termination Administration Costs,

and that:

- (i) have been actually incurred by the LDC (except in the case of estimated Post-Termination Administration Costs), including by payment to an LDC Other Service Provider;
- (ii) do not include any LDC fees or mark-ups (which prohibited mark-ups include, for example, profit margin, management or other service fees, but do not include fully-burdened overhead allocated by the LDC in accordance with Ontario Energy Board's report of November 28, 2007, *Application of Cost Allocation for Electricity Distributors* (EB-2005-7-0667); and
- (iii) in the case of an expense for the purchase of a capital asset, include only the applicable yearly cost of such asset attributable to the asset during the period that is the shorter of the Term and the life of the asset, based on an amortization of the asset over its life in accordance with the approach to the amortization of comparable assets applied to the LDC by the OEB in connection with the LDC's regulated operations,

and, for certainty, are not Participant Incentives, supplements of Participant Incentives or expenses of the LDC for which the LDC has been paid a Capability Building Funding Amount or a Participant Based Funding Amount.

"LDC Event of Default" has the meaning given to it in Section 10.2.

"LDC Expenditure Policies" has the meaning given to it in Section 4.1.

"LDC Indemnified Party" has the meaning given to it in Section 11.4.

"LDC Indemnifying Party" has the meaning given to it in Section 11.3.

"LDC Marks" means the LDC marks that are provided by the LDC to the OPA from time to time.

"LDC Microsite Pages" has the meaning given to it in Section 2.3(b)(iii).

"LDC Other Service Provider" has the meaning given to it in Section 2.7(a).

"LDC Property" has the meaning given to it in Section 5.3(a).

"Local Distribution Company" means the owner or operator of a Distribution System that is licensed by the OEB as an electricity distributor.

"Low Income" means, with respect to a particular group of electricity consumers, electricity consumers that are below specified household income levels, are recipients of specified social benefits, are social and assisted housing residents or that satisfy other criteria established in an Initiative Schedule.

"Major Change" means a Change that is not a Minor Change.

“Major Change Acceptance” has the meaning given to it in Section 9(c) of Schedule A-4.

“Major Change Notice Period” has the meaning given to it in Section 9(b) of Schedule A-4.

“Major Change Request” has the meaning given to it in Section 9(a) of Schedule A-4.

“Marketing Standards” means in respect of the CDM Programs, the branding standards developed by the OPA, as modified from time to time pursuant to Section 2.3(a)(iv), setting out the requirements, standards and protocols applicable to the marketing of the CDM Programs and the Initiatives across all marketing channels.

“Master Agreement” means this Master CDM Program Agreement, including all recitals and Schedules, and Exhibits and Appendices attached to Schedules from time to time, as it or they may be amended, restated or supplemented from time to time.

“Measures” means: (i) any activity undertaken for the primary purpose of obtaining or effecting, directly or indirectly, CDM, including the installation, retrofit, replacement, modification or commissioning of equipment, systems, processes or behaviours that consume or result in the consumption of electricity; or (ii) any equipment, system or product related to the foregoing.

“MFIPPA” means *the Municipal Freedom of Information and Protection of Privacy Act* (Ontario).

“Microsite” has the meaning given to it in Section 2.3(a)(v).

“Ministry Marks” means the following trade-marks:

- (i) Cleaner Ontario in English
- (ii) Cleaner Ontario in French
- (iii) Phrase “Our Province. Our Future” in English
- (iv) Phrase “Our Province. Our Future” in French
- (v) Cleaner Ontario Logo in English
- (vi) Cleaner Ontario Logo in French

“Ministry of Energy” means Her Majesty the Queen in right of Ontario, as represented by the Minister of Energy.

“Minor Change Notice Period” has the meaning given to it in Schedule A-4.

“Minor Changes” has the meaning given to it in Section 2(b) of Schedule A-4.

“Notice of Additional Initiative” has the meaning given to it in Section 5(b) of Schedule A-4.

“Notice of Intention to Change” has the meaning given to it in Section 3(a) of Schedule A-4.

“Notice of Minor Change” has the meaning given to it in Section 5(b) of Schedule A-4.

“OEB” means the Ontario Energy Board or its successor.

“OPA” has the meaning given to it in the preamble of this Master Agreement.

“OPA EM&V Protocols” means the methods and processes that the OPA develops for the evaluation, measurement and verification of OPA-Contracted Province-Wide CDM Programs and each of the Initiatives, as such methods and processes may be amended from time to time.

“OPA Environmental Attributes” has the meaning given to it in Section 6.1(a).

“OPA Event of Default” has the meaning given to it in Section 10.4.

“OPA Indemnified Party” has the meaning given to it in Section 11.3.

“OPA Indemnifying Party” has the meaning given to it in Section 11.4

“OPA Marks” means the marks identifying the CDM Programs and Initiatives provided in the Marketing Standards other than the Ministry Marks and “peaksaver”.

“OPA Other Service Provider” has the meaning given to it in Section 2.6(a).

“OPA Property” has the meaning given to it in Section 5.1(a).

“OPA’s Cost Effectiveness Tests” has the meaning given to it in the CDM Code.

“Other Service Provider” means either an LDC Other Service Provider, an OPA Other Service Provider or both, as applicable.

“Participant” means, in respect of an Initiative, an Eligible Person whose Application has been accepted by the LDC or the OPA, or an Eligible Person receiving a Participant Incentive and party to a Participant Agreement, as applicable, and in each case that has met all applicable requirements for participation in such Initiative as set out in the applicable Initiative Schedule, including the entering into of any required Participant Agreement.

“Participant Agreement” means, in respect of an Initiative, any one or more agreements that an Eligible Person entitled to receive a Participant Incentive must enter into in order to participate in such Initiative or to receive such Participant Incentive.

“Participant Based Funding Amount” means, in respect of an Initiative, a funding amount payable by the OPA to the LDC directly or as reimbursement for an LDC Other Service Provider for the performance of delivery tasks pertaining to such Initiative as specified in the Initiative Schedule for such Initiative.

“Participant Incentives” means, in respect of an Initiative, the financial incentive paid or payable to, or a discount received or receivable by, the Participant or a third party, as applicable, pursuant to the applicable Initiative Schedule or Participant Agreement.

“Participating LDCs” means all Local Distribution Companies prescribed an OEB-approved CDM target for their respective service areas.

“Party” and **“Parties”** have the meanings given to them in the preamble of this Master Agreement.

“Payment Date” has the meaning given to it in Section 4.6(f).

“Peak Demand Savings” means electricity peak demand savings determined pursuant to the OPA EM&V Protocols.

“Peak Demand Savings Target” means, for a specific CDM Program, the portion of the LDC’s CDM Target that relates specifically to peak electricity demand savings that the LDC expects to result from such Registered CDM Program (and, for certainty, not from Board-Approved CDM Programs (as defined in the CDM Code)) as stated in the LDC’s CDM Strategy or updated in the LDC’s CDM Annual Report, as such CDM Target may change from time to time in accordance with Laws and Regulations.

“Person” means a natural person, firm, trust, partnership, association, unincorporated organization, limited partnership, company or corporation (with or without share capital), joint venture, sole proprietorship, Governmental Authority or other entity of any kind.

“Personal Information” means information about an identifiable individual or other information that is subject to any Privacy Laws.

“Post-Termination Administration Costs” means the reasonable and prudent costs of the LDC, as estimated by the LDC and approved by the OPA, acting reasonably, to comply with: (i) all of its obligations that survive the expiration or earlier termination of this Master Agreement or of a Registered CDM Program and that are directly related to the Registered CDM Programs that expire or are terminated; and (ii) all of its obligations directly related to winding up such Registered CDM Programs in an orderly manner, including all staffing, servicing and other resources which have been allocated to such Registered CDM Programs, after the expiration or earlier termination of this Master Agreement or of a Registered CDM Program.

“Privacy Laws” means all federal, provincial, state, municipal or other applicable statutes, laws or regulations of any Governmental Authority in any jurisdiction governing the Handling of information about an identifiable individual, including the *Personal Information and Protection of Electronic Documents Act* (Canada), FIPPA, MFIPPA and any other equivalent provincial legislation.

“Program Administration Budget” or “PAB” means, with respect to a CDM Program, the funding amount for such CDM Program available to the LDC for spending on LDC Eligible Program

Administration Expenses, set forth in section 1 of Schedule A-5, as adjusted from time to time in accordance with the provisions of the Master Agreement.

“Program Management System” means the OPA CDM Program on-line management system, as it may be modified or replaced from time to time.

“Program Personal Information” has the meaning given to it in Section 12.2(a).

“Project” means one or more Eligible Measures that are expected to be undertaken pursuant to an Initiative.

“Receiving Party” has the meaning given to it in the definition of Confidential Information.

“Registered” means, in relation to a Registered Initiative or a Registered CDM Program that was not deemed to be a Registered Initiative or a Registered CDM Program pursuant to Sections 3.1, that (a) each of the following has occurred: (i) a Registration was submitted by the LDC to the Program Management System identifying each CDM Program and Initiative in which the LDC chose to participate in accordance with the provisions of each such Initiative Schedule; (ii) the OPA notified the LDC through the Program Management System that it was willing to enter into this Master Agreement in respect of such CDM Programs and Initiatives; and (iii) the LDC evidenced its acceptance through the Program Management System of the terms and conditions of this Master Agreement; or (b) the LDC has followed the Registration procedure in accordance with Section 3.2 or 3.3(a)(ii).

“Registered CDM Programs” means: (i) the CDM Program or CDM Programs for which the LDC has been Registered; and (ii) the CDM Program or CDM Programs deemed to be included in the Registered CDM Programs pursuant to the Change Terms.

“Registered Initiatives” means: (i) the Initiative or Initiatives for which the LDC has been Registered; and (ii) the Additional Initiative or Additional Initiatives deemed to be included in the Registered Initiatives pursuant to the Change Terms.

“Registration” means the information prescribed by the OPA that the LDC is required to submit to the Program Management System or otherwise in order to be Registered.

“Remaining C&I Initiatives” has the meaning given to it in Section 3.2(a).

“Representatives” means, in respect of a Person, such Person’s employees, officers, directors, shareholders, contractors, agents, representatives and advisors.

“Residential” means electricity consumers in Ontario that are classified as residential in the most recent *Yearbook of Electricity Distributors* published by the OEB.

“Responding Party” has the meaning given to it in Section 9(a) of Schedule A-4.

“Savings Milestones” means, for a specific CDM Program, the peak demand savings that the LDC anticipates to achieve for each year of the Term in order to meet its Peak Demand Savings Target and the electricity savings that the LDC anticipates to achieve for each year of the Term in order to meet its Electricity Savings Target, as the same are set forth in the LDC’s CDM Strategy and Annual Report, as each is submitted pursuant to the CDM Code.

“Senior Conference” has the meaning given to it in Section 13.2.

“Sublicence” has the meaning given to it in Section 5.6(a).

“Taxes” includes any taxes, duties, fees, premiums, assessments, levies, payments and other charges of any kind whatsoever imposed by any Governmental Authority, including all interest, penalties, fines and liabilities required by the *Income Tax Act* (Canada), and payments in lieu of taxes under the *Electricity Act, 1998* (Ontario), or other additional amounts imposed by any Governmental Authority in respect thereof, but does not include Applicable Taxes.

“Term” has the meaning given to it in Section 10.1(a).

“Trade-marks” means trade-marks, trade-names, brands, trade dress, business names, domain names, designs, graphics, logos and other commercial symbols and indicia of origin whether registered or not and any goodwill associated therewith.

SCHEDULE A-2

CDM PROGRAMS AND INITIATIVES

RESIDENTIAL PROGRAM

Conservation Instant Coupon Booklet Initiative

HVAC Incentives Initiative

Bi-Annual Retailer Event Initiative

Appliance Retirement Initiative

Appliance Exchange Initiative

Home Energy Assessment Tool Initiative

Midstream Electronics Initiative

Midstream Pool Equipment Initiative

Residential and Small Commercial Demand Response Initiative* (effective July 1, 2011)

Residential New Construction Initiative

COMMERCIAL AND INSTITUTIONAL PROGRAM (sometimes referred to herein as the “C&I Program”)

Energy Audit Initiative**

Efficiency: Equipment Replacement Incentive Initiative**

Direct Install Lighting and Water Heating Initiative

Direct Service Space Cooling Initiative (to be provided later per Section 3.2)

Building Commissioning Initiative** (to be provided later per Section 3.2)

New Construction Initiative (to be provided later per Section 3.2)

INDUSTRIAL PROGRAM (to be provided later per Section 3.2)°

Process and System Upgrades Initiatives 2011-2014: Preliminary Engineering Study Initiative

Process and System Upgrades Initiatives 2011-2014: Detailed Engineering Study Initiative

Process and System Upgrades Initiatives 2011-2014: Project Incentive Initiative

Process and System Upgrades Initiatives 2011-2014: Monitoring & Targeting Initiative

Process and System Upgrades Initiatives 2011-2014: Metering & Instrumentation Library (enabling measure)

Process and System Upgrades Initiatives 2011-2014: Energy Manager Initiative

Process and System Upgrades Initiatives 2011-2014: Key Account Manager Initiative

Demand Response 1 Initiative

Demand Response 3 Initiative

LOW INCOME PROGRAM (to be provided later per Section 3.2)

(Names of specific Initiatives to be determined)

- * denotes Initiatives available to both the Residential and C&I customer sectors
- ** denotes Initiatives available to both the C&I and Industrial customer sectors
- o all Initiatives in the Industrial Program are available to the C&I customer sector

SCHEDULE A-3

CONTRACT ADMINISTRATION

1. Notices and other communications will be addressed as follows:

- (a) If to the OPA for communications other than invoices or Registered Initiative inquiries or complaints from the public:

Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, Ontario M5H 1T1
Attention: Vice President, Conservation
Fax: 416-967-1947
E-mail: Andrew.Pride@powerauthority.on.ca

With a copy to:

Attention: General Counsel
Fax: 416-969-6383
E-mail: Michael.Lyle@powerauthority.on.ca

- (b) If to the OPA for invoices for payment:

Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, Ontario M5H 1T1
Attention: Accounts Payable

- (c) If to the OPA for Registered Initiative inquiries or complaints from the public:

Ontario Power Authority
Suite 1600
120 Adelaide Street West
Toronto, Ontario M5H 1T1
Attention: LDC Support
Fax: 416-967-1947
E-mail: LDC.Support@powerauthority.on.ca

- (d) If to the LDC for communications other than Registered Initiative inquiries or complaints from the public:

Name of the LDC:
Address:
City/Town:
Postal Code:
Attention:
Fax:
E-mail:

- (e) If to the LDC for Registered Initiative inquiries or complaints from the public:

Name of the LDC:
Address:
City/Town:
Postal Code:
Attention:
Fax:
E-mail:

Any notices of an Event of Default or termination of this Master Agreement will only be given by hand delivery.

2. The initial Company Representatives of the Parties are:

- (a) for the OPA:

Name: _____

Title: _____

- (b) for the LDC:

Name: _____

Title: Conservation Officer

3. The HST registration numbers of the Parties are:

- (a) for the OPA:

Number: 854195039RT0001

- (b) for the LDC:

Number: _____

SCHEDULE A-4

CHANGE TERMS

1. **Introduction**

The Parties acknowledge that the CDM Programs and the Initiatives have been developed in collaboration between the OPA, certain Local Distribution Companies and the EDA Representative, primarily through the activities of certain working groups. The Parties acknowledge and agree that the OPA, the Participating LDCs and the EDA Representative will, during the Term, take reasonable steps to continue such collaboration for, among other things, managing any necessary or desirable changes to the CDM Programs and the Initiatives (the “**Collaboration Process**”). Notwithstanding that the LDC may elect to not participate directly in the Collaboration Process, it is the intention of the Parties that the OPA and the EDA Representative and, the Participating LDCs will implement the Collaboration Process in a manner that reflects principles to be determined by working groups to be continued or established, which principles will include continuous improvement of the Initiatives, consistency and predictability of the Initiatives from the perspective of the Parties and the Participants, objective rationale for change, materiality thresholds for change, focus on province-wide scope and adherence to the Directive and Laws and Regulations.

2. **Definition of “Minor Change”**

- (a) The Parties acknowledge and agree that:
 - (i) pursuant to the Directive, the OPA is required to design the CDM Programs and to take all reasonable steps to collaborate with Local Distribution Companies in respect thereof; and
 - (ii) the LDC does not participate in the Initiatives that are not Registered Initiatives.
- (b) In the context of the foregoing, “**Minor Changes**” are Changes that comprise only the following, provided that they are in compliance with the Directive:
 - (i) any change in (i) a Participant Incentive, (ii) an Eligible Measure, (iii) any Eligibility Criteria, (iv) the form of an Application, (v) the provisions of the Residential and Small Commercial Demand Response Initiative that relate to dispatch rules applicable to such Initiative, or (vi) a Participant Agreement, (not including, for certainty, any Participant Agreement that has already been entered into by the LDC and is in force) in any of such cases that:
 - A. is not reasonably expected to materially reduce the predicted Electricity Savings or Peak Demand Savings of such Initiative over the remainder of the Term;

- B. is reasonably expected to materially reduce the predicted Electricity Savings or Peak Demand Savings of such Initiative over the remainder of the Term but that requires such change in order to maintain the cost effectiveness of such Initiative, as determined pursuant to the OPA's Cost Effectiveness Tests; or
 - C. is reasonably required as the result of a change, modification or other amendment of the OPA EM&V Protocols;
- (ii) any modification, supplement or replacement of a form of a Participant Agreement required pursuant to a Minor Change arising in clauses (i) to (v), inclusive, of Section 2(b)(i) of this Schedule, but only to the extent so required and, in any event, not in respect of any Participant Agreement that has already been entered into by the LDC and that is in force;
 - (iii) any amendment or modification to the Draft Allocation Methodology (as defined in Initiative Schedule "B-1") once finalized pursuant to Exhibit I-1 to Initiative Schedule "B-1"; and
 - (iv) any amendment, modification, supplement or replacement of any term or condition of any form of Participant Agreement (not including, for certainty, any Participant Agreement that has already been entered into by the LDC and is in force) or of this Master Agreement:
 - A. ensuring continuing compliance with the Directive or any other Laws and Regulations which is, in the good faith opinion of the OPA, necessary or desirable and not prejudicial to the LDC;
 - B. providing, in the good faith opinion of the OPA, additional protection for the LDC; or
 - C. removing any conflicts or inconsistencies in such agreement or making minor corrections which are, in the good faith opinion of the OPA, necessary or desirable and not prejudicial to the LDC.

3. Notice of Intention to Change by the OPA

- (a) The OPA will request a Change by delivering to the EDA Representative and the LDC a written document describing the proposed Change (a "**Notice of Intention to Change**"). The Notice of Intention to Change will include the following information:
 - (i) a description of the Change, including whether it is a Minor Change, an Additional Initiative or some other Major Change, and of how and when the

proposed Change would be implemented, the reason for the Change and whether there is urgency to the proposed Change;

- (ii) a description and analysis of the anticipated changes that implementation of the Change would have on the performance of the LDC's obligations in accordance with this Master Agreement, if any;
- (iii) a statement of any new Participant Incentives or of any change to the Participant Based Funding Amounts, Capability Building Funding Amounts or to the Participant Incentives, along with a description of the OPA's methodology for the calculation of these amounts;
- (iv) the expected time period and nature of the steps to be undertaken under the Collaboration Process with respect to the proposed Change or, if such steps have already occurred, the nature and the extent of such collaboration;
- (v) identification of any terms or conditions of the Master Agreement that the OPA proposes would be amended as a result of the Change along with the specific amendments that the OPA proposes to make to the Master Agreement or to the form of any Participant Agreement;
- (vi) in the case of a Notice of Intention to Change for an Additional Initiative, a draft Additional Initiative Schedule, unless the Collaboration Process is required to occur prior to drafting the terms of such Additional Initiative Schedule; and
- (vii) in the case of a Notice of Intention to Change for a Minor Change, unless the Collaboration Process is required to occur prior to drafting the following documents, a proposed replacement Exhibit, Appendix or other supplement to an Initiative Schedule, an amending agreement to this Master Agreement, or such other evidence of such Minor Change as determined by the OPA, acting reasonably, none of which if deemed to be effective pursuant to the provisions of this Schedule will require execution by the LDC to be effective.

4. Notice of Intention to Change by the LDC

The LDC may request a Change only through the EDA Representative, which will be required to request Changes on behalf of the LDC and all other affected Participating LDCs by the delivery to the OPA of a Notice of Intention to Change (an "**LDC Change Request**"). An LDC Change Request must contain the information required to be included by the OPA in a Notice of Intention to Change pursuant to Section 3 of this Schedule, excluding as required by Section 3(vi) and (vii) of this Schedule.

Minor Changes and Additional Initiatives

5. Collaborative Steps and Notice of Change

- (a) Following the receipt by the LDC and the EDA Representative of a Notice of Intention to Change for a Minor Change or for an Additional Initiative, the LDC and the OPA will take all actions within their respective control to cause the proposed Collaboration Process to occur.
- (b) If based on such Notice of Intention to Change the EDA Representative advises the OPA that the Minor Change or Additional Initiative should be implemented as proposed, the OPA will provide notice to the LDC that the Change Management Parties have agreed to a Minor Change or Additional Initiative and will deliver a **“Notice of Minor Change/Additional Initiative”** (as applicable) to the LDC and the EDA Representative. A Notice of Minor Change/Additional Initiative will be in substantially the form of the Notice of Intention of Change previously delivered in respect of such proposed Minor Change/Additional Initiative, as updated to take into account any developments arising up to the time of the issuance of the Notice of Minor Change/Additional Initiative, including the preparation of the relevant documents listed in Section 3(a)(vi) and 3(a)(vii) of this Schedule.
- (c) If the OPA reasonably and in good faith determines that it has taken all reasonable steps to either (i) cause the proposed Collaboration Process to occur or (ii) participate in the Collaboration Process in respect of such proposed Minor Change or Additional Initiative, it may deliver a Notice of Change/Additional Initiative (as applicable) to the LDC and the EDA Representative.
- (d) A Notice of Minor Change/Additional Initiative will take effect on the ninetieth (90th) day following the date of such notice (the **“Minor Change/Additional Initiative Notice Period”** (as applicable)) or an earlier date specified therein if (i) such earlier date has been agreed to by the Change Management Parties or, (ii) in the absence of such agreement, in a case of urgency specified by the OPA. Following the delivery of a Notice of Change/Additional Initiative, in respect of a Minor Change or an Additional Initiative,
 - (i) subject to Section 7 of this Schedule, such Minor Change will be binding on the LDC and the OPA; or
 - (ii) subject to Section 8 of this Schedule, such Additional Initiative will be binding on the LDC and the OPA.

6. Objection to Minor Change from EDA Representative

- (a) Following a Notice of Minor Change, the EDA Representative may deliver a response (**“Change Response”**) to the OPA within thirty (30) days of delivery of the

Notice of Minor Change objecting to the Notice of Minor Change only on the following grounds:

- (i) the proposed Change is not a Minor Change as defined in Section 2(b) of this Schedule;
- (ii) the OPA has failed to act in accordance with the Change Terms with respect to such Minor Change in any material respect; or
- (iii) the implementation of the Notice of Minor Change is not required on an urgent basis if the Notice of Minor Change so provides.

If the EDA Representative does not deliver a Change Response within such thirty (30) day period it will be deemed to have agreed with such Notice of Minor Change.

- (b) If the EDA Representative objects to a Notice of Minor Change on behalf of the LDC and all other Participating LDCs affected by such Notice of Minor Change, such Change Response will include the following information:
 - (i) the grounds set out in Section 6(a) of this Schedule for objecting to the Change;
 - (ii) an analysis of the elements of the Change and the consequences thereof that substantiate the grounds for objecting to the Change;
 - (iii) any other details reasonably required by the OPA to enable the OPA to reassess the anticipated impact of the Change; and
 - (iv) a good faith counter proposal or alternative to the manner of implementation of the Change.
- (c) The issuance of a Change Response will suspend the running of the Minor Change Notice Period. If at any time the Change Management Parties agree upon the Minor Change or any amendments to the proposed Minor Change and the EDA Representative provides notice to the OPA that the Minor Change should be implemented as amended:
 - (i) the OPA will provide notice to the LDC that the Change Management Parties have agreed to a Minor Change and, if necessary to reflect any agreed amendments, will re-issue the Notice of Minor Change; and;
 - (ii) the Minor Change Notice Period will recommence; and
 - (iii) subject to Section 7 of this Schedule, such Minor Change will be binding on the LDC and the OPA.

- (d) Following receipt by the OPA of a Change Response from the EDA Representative objecting to a Minor Change in whole or in part pursuant to Section 6(b) of this Schedule, the OPA may:
- (i) withdraw the Notice of Minor Change;
 - (ii) revise and re-issue the Notice of Minor Change accepting the counter proposal or alternative to the manner of implementation of the Change proposed by the EDA Representative; or
 - (iii) reject the Change Response (a **"Change Dispute"**).

If the OPA re-issues the Notice of Minor Change in accordance with clause (ii):

- A. the Minor Change Notice Period will recommence,
 - B. subject to Section 7 of this Schedule, such Minor Change will be binding on the LDC.
- (e) If there is a Change Dispute then the OPA may elect to have such Change Dispute determined by binding arbitration pursuant to Section 11(b) of this Schedule and the running of the Minor Change Notice Period will be suspended until such arbitration is completed or the parties to the arbitration have otherwise agreed.

7. **Objection by LDC to Minor Change**

- (a) If no Change Response is provided by the EDA Representative within the required thirty-day period in Section 6(a) of this Schedule or if the OPA notifies the LDC that the Change Management Parties have agreed upon the Minor Change, such Minor Change will be binding on the LDC and the OPA with effect on the last day of the Minor Change Notice Period and the Master Agreement will be deemed to be amended as provided in the Notice of Minor Change, as it may have been amended or re-issued.
- (b) If the LDC does not agree with the Minor Change on the basis that such Minor Change will (due to the LDC's size, customer mix, or service area location) adversely affect the LDC in a manner that is different from other Participating LDCs, the LDC may, no later than thirty (30) days after the delivery of a Notice of Minor Change that has been agreed to (or deemed to be agreed to) by the Change Management Parties, request a waiver or modification of such Minor Change. The OPA shall reasonably consider such request and, if further information is required, the Parties may agree to meet to discuss the request; provided, however, if the OPA does not agree with such request the provisions of Section 7(a) of this Schedule will be effective nevertheless.

- (c) Notwithstanding the provisions of Section 7(a) of the Schedule, if the Minor Change only affects the provisions of one or more Initiative Schedules for Registered Initiatives and the LDC does not agree with the terms and conditions of such Minor Change, it may, prior to the end of the Minor Change Notice Period, provide notice to the OPA objecting to such Minor Change. Such notice will be deemed to be notice of the LDC's intention to terminate each Initiative Schedule affected by such Minor Change, and:
 - (i) each such Initiative Schedule will be of no further force or effect as at the end of the calendar month in which such notice is provided by the LDC; and
 - (ii) the Master Agreement will be deemed to be so amended as at such time.

8. **Objection by LDC to Additional Initiative**

- (a) If the OPA provides the LDC with a Notice of Additional Initiative, provided that the proposed Additional Initiative is in respect of one of the LDC's Registered CDM Programs, such Additional Initiative will be binding on the LDC and the OPA with effect on the last day of the Additional Initiative Notice Period and the Master Agreement will be deemed to be amended as provided in the Notice of Additional Initiative. Alternatively, the OPA may notify the LDC of the method by which the LDC may be Registered in respect of any such Additional Initiative. In either case, each Additional Initiative Schedule that so amends this Master Agreement will be deemed to be a Registered Initiative that is part of the Registered CDM Program identified in such Additional Initiative Schedule.
- (b) Notwithstanding the foregoing, if the LDC does not agree with the terms and conditions of such Additional Initiative, it may, prior to the end of the Additional Initiative Notice Period, provide notice to the OPA together with an explanation regarding why it is not cost effective or practical for the LDC to deliver such Additional Initiative in its service area. The OPA will consider such explanation, acting reasonably, and may agree that the Additional Initiative will not be binding on the LDC.

Major Changes

9. **Major Change Notice and Acceptance or Rejection by Change Management Parties**

- (a) Following the receipt by (i) the LDC and the EDA Representative of a Notice of Intention to Change with respect to a Major Change, or (ii) by the OPA of an LDC Change Request for a Minor Change or a Major Change (in either case the receiving party is the "**Responding Party**" and the Party initiating the change request is the "**Initiating Party**", any such Minor Change will be deemed to be a Major Change for purposes of Sections 9, 10, 11 and 12 of this Schedule, and any such change request is a "**Major Change Request**"), the LDC and the OPA will take all actions

within their respective control to cause the proposed Collaboration Process to occur and for the Change Management Parties to negotiate the proposed Major Change in good faith.

- (b) As part of the Collaboration Process and negotiation, the Change Management Parties will attempt to agree on a notice period for the Major Change to take effect in the event that the Change Management Parties are able to agree upon the Major Change Request (the “**Major Change Notice Period**”).
- (c) If at any time (i) the Responding Party is the EDA Representative and it has delivered to the OPA on behalf of the LDC and the other Participating LDCs affected by such Notice of Intention to Change a response accepting the OPA’s request, or (ii) the Responding Party is the OPA and it has delivered to the LDC and the EDA Representative a response accepting the LDC Change Request (in either case, a “**Major Change Acceptance**”) the OPA will prepare a Change Order in accordance with Section 12(a) of this Schedule.
- (d) The OPA may at any time withdraw any Notice of Change that it submitted.
- (e) The EDA Representative may at any time withdraw any LDC Change Request that it submitted.
- (f) If the reason for the Major Change Request is a change in Laws or Regulations and if the Change Management Parties are unable to agree upon such Major Change Request within thirty (30) days following the issuance of such Major Change Request by the OPA (a “**Change Dispute**”), then the OPA may elect to have the subject matter of the Major Change Request determined by binding negotiation and/or arbitration pursuant to Section 11 of this Schedule in order to effect such Major Change in a manner that will permit the Parties to perform their respective obligations hereunder in accordance with such change in Laws and Regulations.

10. **Objection by LDC to Major Change**

- (a) If the LDC does not agree with a Major Change on the basis that such Major Change will (due to the LDC’s size, customer mix, or service area location) adversely affect the LDC in a manner that is different than other Participating LDCs, the LDC may, no later than thirty (30) days after the delivery of a Change Order prepared by the OPA following a Major Change Acceptance, request a waiver or modification of such Major Change. The OPA shall reasonably consider such request, and, if further information is required, the Parties may agree to meet to discuss the request; provided, however, if the OPA does not agree with such request the Major Change will be effective in respect of the LDC in accordance with such Change Order issued by the OPA in accordance with the Major Change Acceptance delivered.

- (b) Notwithstanding the issuance of a Major Change Acceptance, if the proposed Major Change was introduced pursuant to a Notice of Intention to Change by the OPA and:
 - (i) if the Major Change only affects the provisions of one or more Initiative Schedules for Registered Initiatives and the LDC does not agree with the terms and conditions of such Major Change, it may, prior to the end of the Major Change Notice Period, provide notice to the OPA objecting to such Major Change and electing to terminate each Initiative Schedule affected by such Major Change. Following such notice:
 - A. each Initiative Schedule listed in such notice will be of no further force or effect as at the end of the calendar month in which such notice is provided by the LDC; and
 - B. the Master Agreement will be deemed to be so amended; or
 - (ii) if the Major Change affects the provisions of the Master Agreement other than as contained in one or more Initiative Schedules and the LDC does not agree with the terms and conditions of such Major Change, it may, prior to the end of the Major Change Notice Period, provide notice to the OPA of its rejection of the Major Change and the OPA may:
 - A. withdraw its Change Request; or
 - B. negotiate with the LDC in good faith the terms and conditions pursuant to which the Major Change described in its Major Change Request will be implemented and not implement such Major Change for the LDC or any other Participating LDC affected by such Major Change unless and until an agreement satisfactory to the OPA is reached with the LDC.
- (c) For certainty, the LDC may not provide a notice of objection with respect to a Major Change Acceptance if such Major Change Acceptance arises from an LDC Change Request.

11. **Group Negotiation/Arbitration**

- (a) If the OPA elects to have a Change Dispute in respect of a Major Change determined by group negotiation and/or arbitration pursuant to this Section 11 of this Schedule, then the Parties and, at the OPA's discretion, the Participating LDCs that are affected by the Major Change Request and are required by the OPA to participate, shall engage in good faith negotiations to amend this Master Agreement and the respective agreements of such Participating LDCs in accordance with the change in Laws and Regulations in a manner that will permit the Parties to perform their respective obligations hereunder.

- (b) If (x) the OPA has made the election pursuant to Section 6(e) of this Schedule to arbitrate a Change Dispute for a Minor Change, or (y) the Parties fail to reach agreement on the amendments described in Section 11(a) of this Schedule and the OPA so elects, the matter shall be determined by mandatory and binding arbitration to be conducted in accordance with the procedures set out in Article 11, as modified as follows:
- (i) the Parties and, at the OPA's discretion, the Participating LDCs that are required by the OPA to participate shall participate in the arbitration;
 - (ii) if the LDC fails to participate in such arbitration, the LDC acknowledges that it waives its right to participate in such arbitration, which shall nevertheless proceed, and the LDC shall be bound by the award of the arbitrator and the subsequent amendments to this Master Agreement made by the OPA to implement such award;
 - (iii) the application of section 7(2) of the Arbitration Act is expressly excluded;
 - (iv) the OPA and the LDC intend, and will take all reasonable action as is necessary or desirable to ensure, that there be a speedy resolution to the Change Dispute, and the arbitrator will conduct the arbitration of the Change Dispute with a view to making a determination and order as soon as possible;
 - (v) despite section 28(1) of the Arbitration Act, an arbitrator will not, without the prior written consent of the Change Management Parties, retain any expert;
 - (vi) each of the OPA's and the LDC's submissions will each set out:
 - A. the detailed terms and conditions under which it proposes that the Change be implemented for the remainder of the Term; and
 - B. rejection of the implementation of the Change as proposed by the other Party and the reasons for such rejection;
 - (vii) the OPA's submission will also set forth the OPA's budget limit for the CDM Program that is the subject matter of the Change Dispute and the remaining availability of funds payable by the OPA in respect of the Change (the "**Funding Limit**");
 - (viii) if the arbitrator's award requires the OPA to pay an aggregate amount in excess of the Funding Limit, the OPA may within 60 days of such award
 - A. seek approval of its board of directors to increase the Funding Limit;
or

- B. withdraw the Change Request that gave rise to the arbitration, in which case the arbitrator's award will provide that the Change will not be effective. In no event will the arbitrator's award require the OPA to pay an aggregate amount in excess of the Funding Limit if it does not seek or obtain the approval of its board of directors to increase the Funding Limit necessary to give effect to such award;
- (ix) each of the LDC and the OPA will bear its own costs incurred in conducting the arbitration, and will share equally the costs of any third party (other than each Party's legal counsel) associated with the arbitration.
- (c) Subject to Section 11(b)(viii) of this Schedule, following the receipt of the determination of the arbitrator, the OPA will prepare a Change Order that provides for the making of the Change on the terms and conditions determined by the arbitrator.
- (d) No amounts paid or payable by the OPA to the LDC will be used by the LDC to pay any costs or expenses in any way directly or indirectly related to a negotiation or arbitration pursuant to this Section 11 or any other matter contemplated by this Schedule.

12. **Implementation of Major Changes**

- (a) The Parties will not implement any Major Change unless an instrument setting out the terms and conditions pursuant to which the Major Change will be made (a "**Change Order**") has been (i) agreed upon by the Change Management Parties or (ii) prepared by the OPA to implement the determination of an arbitrator, and, in either case, the LDC has been notified of such Change Order.
- (b) Upon the receipt of a notice (A) signed by the Change Management Parties of a Change Order pursuant to Section 9(c) of this Schedule (but subject to the rights of the LDC pursuant to Section 10(a) of this Schedule) or (B) of a Change Order to implement the determination of an arbitrator:
 - (i) the LDC and the OPA will be obligated to implement the Change described in the Change Order in accordance with the terms and conditions of the Change Order; and
 - (ii) if the Change Order expressly states that it is intended to amend this Master Agreement and identifies the specific amendments to be made, then the Change Order will be deemed incorporated into and will constitute a formal amendment to this Master Agreement and all provisions of this Master Agreement which are expressly amended as part of the Change Order will be amended accordingly.

13. Miscellaneous

- (a) Changes requested by the OPA concurrently will be considered by the EDA in the order determined by the OPA.
- (b) Upon the OPA's reasonable request, the Parties will amend and restate this Master Agreement to reflect a consolidation of all Changes made to this Master Agreement.

SCHEDULE A-5

FUNDING AMOUNTS

1. Program Administration Budget and Payment Schedule

The Program Administration Budget for each Registered CDM Program is the amount set forth for the period “2011- 2014” in Table 1 of Exhibit A-5-1 under the heading “Program Administration Budget (\$)”.

The payment schedule for the Program Administration Budget for each Registered CDM Program is as set forth in the following Table 1:

Table 1: Payment Schedule and Payment Percentage of Program Administration Budgets for Registered CDM Programs per OPA-Contracted Province-Wide CDM Program

Payment Month	Residential Program	Commercial & Institutional Program	Industrial Program
January 2011	15%	20%	20%
July 2011	15%	20%	20%
January 2012	15%	15%	15%
July 2012	15%	15%	15%
January 2013	10%	10%	10%
July 2013	10%	10%	10%
January 2014	10%	5%	5%
July 2014	10%	5%	5%
Total	100%	100%	100%

The Parties acknowledge that the Program Administration Budget for the LDC for each Registered CDM Program has been determined based upon, among other considerations: (a) the number of electricity consumers in the LDC’s service area, as determined by the LDC as at the Effective Date, and expected to be eligible in the CDM Programs applicable to such consumers; (b) a percentage allocation to the LDC of the Province-wide peak demand savings target and the electricity savings target for all CDM Programs as such percentage is determined by dividing the LDC’s CDM Target by the aggregate CDM Targets of the LDC and all other Participating LDCs; and (c) a Term of four years.

The Parties also acknowledge that Province-wide peak demand savings target and electricity savings target set forth in Table 2 has been allocated among the LDC and all Participating LDCs in the same

manner as the funds available for the aggregate Program Administration Budgets for the LDC and all Participating LDCs.

Table 2: CDM Program Savings by Year and by Term

Year	Residential Program		Commercial & Institutional Program		Industrial Program	
	MWh	MW	MWh	MW	MWh	MW
2011	327,431	52.846	604,041	120.590	213,890	52.014
2012	484,320	78.168	617,940	123.365	221,795	53.937
2013	541,370	87.376	631,180	126.008	222,906	54.207
2014	550,879	88.910	641,839	128.136	221,409	53.843
Total	1,904,000	307.300	2,495,000	498.100	880,000	214.000

2. Cost Efficiency Incentive

The Cost Efficiency Incentive will be calculated for each Registered CDM Program as a percentage of the cost savings represented by the difference between the PAB Budget and the Actual Spend, where:

“PAB Budget” is the Program Administration Budget for the applicable Registered CDM Program, as such amount may be adjusted pursuant to Section 3.2, Section 3.3, Section 7.3 or Article 10; and

“Actual Spend” is the aggregate, without duplication of: (i) LDC Eligible Program Administration Expenses for the applicable Registered CDM Program spent or incurred by the LDC during the Term (and in the case of incurred expenses, paid within ninety (90) days following the Term); and (ii) the estimated or actual, as the case may be, Post Termination Administration Costs for the applicable Registered CDM Program spent or incurred, or expected to be spent or incurred, by the LDC after the Term.

The Cost Efficiency Incentive will be the sum of two tiers of incentives:

- (a) in the first tier, if Actual Spend is greater than or equal to 95% and less than 100% of PAB Budget, the LDC will be eligible to retain 60% of the difference of PAB Budget less Actual Spend and the remaining 40% will be returned to the OPA; and
- (b) in the second tier, if Actual Spend is greater than or equal to 80% and less than 95% of PAB Budget (i.e. saving between 20% and 5%), the LDC may retain 80% of the difference of 95% of PAB Budget less Actual Spend and the remaining 20% will be returned to the OPA.

No amounts may be retained by the LDC for amounts above the positive difference of PAB Budget less Actual Spend that exceeds 20% of PAB Budget.

Actual Spend (as % of PAB Budget)	Cost Efficiency Incentive Share for LDC
≥ 95% - 100%	60%
≥ 80% - <95%	80%
< 80%	0%

Exhibit A-5-1 to Schedule A-5

Table 1 to Exhibit A-5-1: 2011 – 2014 LDC Program Administration Budget

CDM Program	Residential	C & I	Industrial
	Program Administration Budget (\$)	Program Administration Budget (\$)	Program Administration Budget (\$)
2011 - 2014			

[Note to Finalization: The amounts to be recorded in the cells of Table 1 above in respect of the Registered CDM Programs have been agreed to and accepted by the LDC as at the Effective Date.]

SCHEDULE A-6

REPORTING REQUIREMENTS

- (a) The LDC shall break down the LDC Eligible Program Administration Expenses into the “**LDC Eligible Program Administration Expense Categories**” (listed in Exhibit A-6-1) and will report on these expenses by Registered Initiative.
- (b) For each applicable Registered CDM Program the LDC shall identify the LDC Eligible Program Administration Expenses spent in respect of each LDC Eligible Program Administration Expense Category for each Registered Initiative on an Initiative by Initiative basis.
- (c) In breaking down the LDC Eligible Program Administration Expenses into the LDC Eligible Program Administration Expense Categories for shared expenses that cannot be allocated solely to one Registered CDM Program or one Registered Initiative, the LDC will use an activity analysis to assess the nature and extent of the functions being performed by the LDC in respect of which the LDC Eligible Program Administration Expenses are being allocated. The analysis must include the identification of all activities performed by the LDC in respect of each Registered Initiative and allocate expenses to CDM Program delivery activities (as opposed to regulated activities) as provided by the CDM Code.
- (d) All LDC Eligible Program Administration Expenses that are required to be reported pursuant to this Schedule will be reported net of recoverable Applicable Taxes that may have been incurred by the LDC on such expenses.

Exhibit A-6-1 to Schedule A-6

Categories for Reporting of LDC Eligible Program Administration Expenses

The following categories must be used, as applicable, for the reporting of LDC Eligible Program Administration Expenses:

- (a) all salaries and labour costs including benefits;
- (b) LDC Other Service Provider expenses;
- (c) billing and collection expenses;
- (d) customer care, advertising, and marketing expenses;
- (e) information technology expenses;
- (f) office equipment expenses; and
- (g) any other expense that the LDC can show is relevant and necessary for a Registered Initiative.

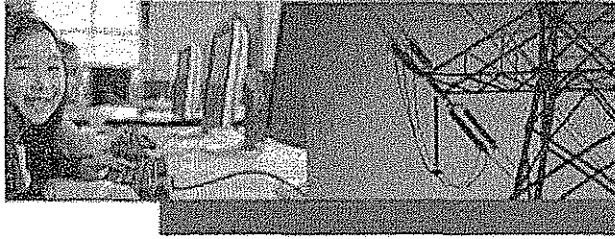
SCHEDULE A-7

MINISTRY MARKS

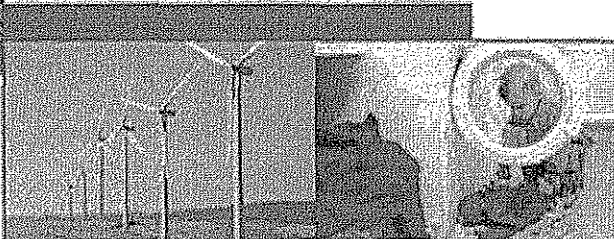
1. Cleaner Ontario
2. L'Ontario plus propre
3. Our Province. Our Future
4. Notre province. Notre future
5. Cleaner Ontario logo design in color (below)
6. Cleaner Ontario Logo in black and white (below)
7. L'Ontario plus propre logo design in color (below)
8. L'Ontario plus propre logo design in black and white (below)







ONTARIO POWER AUTHORITY



October 19, 2010

OPA 2011-2014 Province-Wide CDM Programs Symposium

Funding, Contracting Process & Timeline, Good Governance

2011-2014 Program Funding

Background

- Individual program working groups developed budgets and savings targets for each program.
- In July 2010, the OPA Board of Directors approved a 4-year budget for the portfolio of OPA-Contracted Province-Wide CDM Programs as shown in the table below, and subject to changes requiring additional Board of Directors approval.

	Consumer Program	Commercial & Institutional Program	Industrial Program
2011-2014 Budget (M)	\$570	\$568	\$218
2014 Demand Reductions (MW)	319	498	214
2011-2014 Energy Savings (GWh)	1,905	2,495	880

2011-2014 Program Funding cont.

- Based on designs and expected participation levels, OPA Contracted Province-Wide Programs are forecasted to achieve and will be funded to:
 - 78% of Provincial LDC Aggregate Demand Reduction Target
 - 91% of Provincial LDC Aggregate Energy Savings Target
- The first 6-months of Residential & Small Commercial Demand Response (**peaksaver**®) will be contracted through the existing process with an extension to the existing Master Agreement and Schedule for 6-months.
- The Low Income program will be introduced in early 2011 with funding provided at that time.

Funding Framework Working Group

- The Funding Framework Working Group that includes members of EDA, CDM Caucus and OPA was established with the following mandate:
 1. Identify total LDC funding available for all OPA Contracted Province-Wide Programs
 2. Develop an allocation methodology for allocating total LDC CDM funding for OPA Contracted Province-Wide Programs to LDCs
 3. Develop a funding governance mechanism to address timing of CDM funding, true-ups, invoicing, reporting, payment of cost efficiency payments with recognition of verified energy savings and peak reduction targets
 4. Develop recommendations on the mechanism for calculating cost efficiency payments

2011-2014 Funding Framework

Key Components

- **Program Administration Budgets (PAB)**
 - To cover program management, local marketing, administrative and other related costs that are mostly not based on actual program participation levels.
 - Similar to fixed funding in existing contracts
 - To be included in Master Agreement
- **Participant Based Funding (PBF)**
 - To cover the costs of program delivery which are directly related to the actual number of participants in a CDM program (e.g. equipment and installation for 'direct install' initiatives, operation and maintenance (O&M) costs for load control devices), excluding customer incentives.
 - Similar to variable funding in existing contracts (with changes for 2011-2014 e.g. ERIP)
 - For 2011-2014, RDR and Direct Install only and will be included in initiative schedules
- **Customer Incentives (CI)**
 - To cover the cost of reimbursing LDCs for any cash incentives provided to program participants. This funding is essentially a flow-through from the OPA to program participants, through LDCs in most cases.
 - Initiative specific and will be included in initiative schedules
- **Capability Building Funding (CBF)**
 - To cover the costs of accessing and/or delivering enabling initiatives (e.g. account manager funding; building operator training) which support and increase program participation and which are not included in PAB.
 - Initiative specific and will be included in initiative schedules
- **Cost Efficiency Incentive (CIF)**
 - To encourage the delivery of programs at or below PAB
 - To be included in Master Agreement
 - Details to be determined

2011-2014 LDC Funding

LDC Program Administration Budgets (PAB)

	Consumer Program	Commercial & Institutional Program	Industrial Program
2011-2014 Budget (M)	\$570	\$568	\$218
LDC PAB (M)	\$115.50	\$127.10	\$18.90
LDC PAB (M) less first 6-months of R&SCDR	\$111.50	\$2,495	\$880
2014 Demand Reductions (MW) less first 6-months of R&SCDR	307	498	214
2011-2014 Energy Savings (GWh) less first 6-months of R&SCDR	1904	2495	880

- Provincial program budgets and forecast will be allocated to each LDC based on a methodology to be determined shortly.
- LDCs will be provided with 4-year budgets and share of forecast for each program.
- LDCs will have the ability to reduce program forecast at registration, with a proportional reduction in budget.

2011-2014 LDC Funding cont.

- Minimum amounts for the 4-years for each program have been recommended by CDM Caucus and accepted:
 - Consumer: \$50,000
 - Commercial & Institutional: \$150,000
 - Industrial: \$40,000
- LDCs that register for the programs will be eligible to receive the minimum amount regardless of target and size.
- Participant Based Funding (PBF) and Customer Incentives (CI) will not be allocated to each LDC.
- Cost Efficiency Incentive (CIF) will be calculated at end of 4-years through a true-up process.
- Any changes required to funding framework including program budgets, forecast and allocation will be part of the change management process in Master Agreement.
- OPA, on a quarterly basis, will be reporting program spending and savings results.

Timeline

	Activity	Projected Timing
1	<i>LDC Budget and Forecast Allocation (4-year)</i> All LDCs to receive share of provincial budgets and forecasts.	Prior to Nov. 1
2	<i>Annual Distribution of Budget and Forecast</i> CDM Caucus to provide OPA with projected breakdown of budget and forecast over 4-years. This will be used to determine annual payment amounts and frequency.	Oct. 25 - Nov. 5
3	<i>Annual Funding Payments and Frequency of Payments</i> The plan and schedule for payments to LDCs for funding will be finalized with Funding Framework Working Group.	Nov. 5 – Dec. 1
4	<i>LDC Registration</i> LDC contracts will be available for registration on iCon beginning in December. Included in contracts will be PAB amounts and forecast for each LDC.	Dec. – Jan.
5	<i>peaksaver®</i> (first 6 mos.) Funding for first 6 months (2011) of <i>peaksaver</i> to follow funding framework in existing RDR contract through extension of 2010 Master agreement and RDR schedule. Registration to happen at same time as registration for 2011-2014 programs through iCon.	Dec. – Jan.
6	<i>Low Income</i> Rates and projections process for Low Income program to start in Q1 2011 through iCon.	Q1 2011
7	<i>Change Management</i> Rates and projections will be part of Change Management process for 2011-2014	Ongoing

Good Governance

- Good Governance will be included in 2011-2014 Master Agreement and Schedules.
- Program/Initiative Level
 - Establish consistent standards for QA/QC for LDCs and OPA (for OPA coordinated activities) to ensure that projects are being completed as per program design
 - Can be initiative specific and will be addressed in program schedules
- Portfolio Level
 - More than EM&V (QA/QC looks at projects, not overall program savings)
 - OPA will verify if necessary
 - Will be included in Master Agreement

Disposal of Materials

- Disposal clause to ensure that disposal of materials is conducted in an environmentally friendly manner, based upon “Good Industry Standards” and consistent across programs.
- Current Issues
 - Current practice does not reflect good stewardship
 - Inconsistent across programs
 - Fridge maintains world class standards
 - SCDI disposal based on good industry practice
 - ERIP no requirements regarding disposal
 - Potential for materials to enter secondary market
 - Potential negative outcome and reaction from conservation initiatives
- For 2011-2014 programs, disposal of used equipment to be addressed in Master Agreement and applicable schedules.

Program Transition

Bill Wylie

Program Transition – Principles

- Retrofit projects initiated under existing OPA-funded programs will be fully administered under the terms and conditions of those programs:
 - Projects must be approved and completed by dates specified
 - Invoices for Participant incentives, variable funding, etc are to be submitted to the OPA and/or paid by the LDC by dates specified or otherwise agreed-upon
 - Program reporting to be submitted by dates specified

LDC-Delivered Programs – ERIP

- Last date for project approval by the LDC:
 - December 31, 2010
- Last date for project completion by the Participant:
 - December 1, 2011
- Last date for payment of incentives to the Participant by the LDC:
 - December 31, 2011
- Last date for submission of Program Final Report by the LDC:
 - March 31, 2011
- Proposal:
 - LDCs will be requested to provide list of projects approved but to be completed in 2011
 - PRELIMINARY list by Friday December 17, 2010
 - FINAL list by March 31, 2011 (i.e., with the Program Final Report)
 - Payment to LDC of ERIP Financial Incentive, Variable Funding, Incremental Funding and Performance Funding will occur when each project is completed based on Project Completion Report
 - Variable Funding component of the Annual True-up will be performed based on Final List of ERIP-approved projects.
 - The OPA will revise the Annual True-up post December 31, 2011 if applicable

LDC-Delivered Programs – Power Savings Blitz

- Last date of retrofit project completion (based on Work Order Installation Date) to the LDC:
 - December 31, 2010
- Last date for payment of incentives to the Contractor by the LDC:
 - Not specified
- Last date for submission of Program Final Report by the LDC:
 - March 31, 2011
- Proposal:
 - Last date for submission of Work Orders via CF&R system:
 - January 31, 2011
 - Payment to LDC of Retrofit Payment, Variable Funding, Participant Performance Incentive, Incremental Retrofit Performance Incentive, will occur when each Work Order is processed

Ontario Energy Board (Board Staff) INTERROGATORY #2 List 1

Interrogatory

OPA Co-ordination

Reference: Exhibit C, Tab 1, Schedule 2, Page 1 – 67

Preamble: HONI has proposed to implement six different CDM initiatives from 2011-2014 in an effort to supplement the OPA-Contracted Province-Wide CDM Programs it anticipates it will offer to its customers.

- a) Will HONI incorporate a standard registration system for participating customers that will combine with, and/or act in a similar manner, to that which the OPA has for OPA-Contracted Province-Wide CDM Programs (i.e. the iCON portal) for all of its proposed Board-Approved CDM Programs?
- b) If the answer to (a) is yes, please discuss the work that has been completed in this area and the milestones HONI has in place for the full implementation of its registration system.
- c) If the answer to (a) is no, please discuss the registration system that HONI will make available for its proposed Board-Approved CDM Programs, the process for how prospective participants will register for programs, and the manner in which HONI will track registrations, installations and any other program related activities.

Response

- a) HONI does not need to incorporate a standard registration system similar to the OPA's iCon system for the reason described in c).
- b) Please see response to a)
- c) A standard registration system will not be required for any Board-Approved CDM Programs.

For Community Education and Neighbourhood Benchmarking, a registration process is not required. For Small Commercial Energy Management and Load Control and Monitoring and Targeting, the registration process will be handled through third-party vendors. For Double Return Plus and Municipal and Hospital Energy Efficiency Performance, HONI will rely on existing internal systems to cost-effectively manage the process.

Ontario Energy Board (Board Staff) INTERROGATORY #3 List 1

Interrogatory

Community Education – Initiative #1

Reference: Exhibit C, Tab 1, Schedule 2, Page 3 of 67

Preamble: HONI notes that it will rely on a community events partner to help represent Hydro One at local community events throughout the Province.

- a) Has HONI decided on who its events partner will be for the Community Education Initiative?
- b) Will HONI use the same events partner to represent the company across the province in relation to the Community Education Initiative?
- c) If the answer to (b) is no, please discuss the reasons why HONI has decided not to use the same events partner to coordinate this initiative and represent the company on a consistent basis.

Response

- a) For 2011, HONI has an existing events partner under contract. The vendor was chosen based on a competitive bid process. For the remainder of the period, 2012 – 2014, HONI will facilitate a competitive bid process to select the new vendor of choice.
- b) Yes. HONI's current community events partner provides support for community events across the Company's entire service territory.
- c) Please see response in (b).

Ontario Energy Board (Board Staff) INTERROGATORY #4 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 3 of 67

Preamble: HONI states that the OPA-Contracted Province-Wide CDM Programs do not provide an initiative similar to the Community Education Program it is proposing in this application. HONI highlights the fact that its proposed initiative relies on face-to-face interactions with customers, while the OPA Consumer Enabling Initiative features an on-line education component.

- a) Please discuss the process that HONI followed in determining if the Community Education Initiative does not duplicate that of the OPA Consumer Enabling Initiative. Provide all correspondence and documentation between HONI and the OPA that addresses the fact that the Community Education Initiative does not duplicate an OPA-Contracted Province-Wide CDM Program.
- b) Has HONI received confirmation from the OPA that its Consumer Enabling Initiative cannot be tailored, or customized, to include a “face-to-face” element where the distributor, or its representative, can meet in a more personal setting with prospective CDM participants.

Response

- a) The process that HONI followed in determining if the Community Education Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs was described in Exhibit B, Tab 1, Schedule 2, Page 3 of 24 and Exhibit C, Tab 1, Schedule 2, page 3 of 67, namely:

“Hydro One has acquired extensive understanding of the OPA-Contracted CDM Programs through its participation in the OPA design working groups. This knowledge, coupled with a comprehensive understanding of Hydro One’s customers within its service territory, allowed Hydro One to identify the CDM potential that is not addressed by the existing OPA-Contracted CDM programs. All Board-Approved CDM programs proposed in this Application are designed to target these ‘untapped’ areas and they are not duplicative of the existing OPA-Contracted CDM programs.”

This program is non-duplicative of the OPA Province-Wide Programs. Please refer to Attachment 1 for a letter from the OPA.

- b) No. HONI has not requested the OPA to redesign its Province-Wide CDM Programs to address the specific needs of HONI's customer base.



January 26, 2011

Rick Stevens
VP Asset Management, Hydro One
483 Bay Street
Toronto ON
M5G 2P5

Dear Mr. Stevens,

RE: Hydro One Networks Inc. and Hydro One Brampton Networks Inc. Board-Approved CDM Program Applications – Board file number EB-2010-0332 and EB-2010-0331

On behalf of the OPA, especially all of our staff in the Conservation Division, I would like to personally thank you and your conservation staff for your support over the past 14 months as we have worked together to design and launch the new suite of OPA-Contracted Province-Wide Conservation Programs. The OPA has greatly appreciated the active role which HONI has taken in the design process, through your participation on all seven of the OPA-LDC Working Groups, including chairing the OPA-LDC Residential and Small Commercial Demand Response Working Group. The collaboration between LDCs, including HONI, and the OPA was a critical factor in developing programs which we believe will stand among the 'best in class'.

Based on recent discussion regarding your Board-approved CDM Program Applications, I am writing this letter to state that the OPA is supportive of innovative CDM initiatives that foster a culture of conservation in Ontario. The OPA supports the efforts of Hydro One Networks Inc. and Hydro One Brampton Networks Inc. (the "Applicants") to promote Ontario as a leader in conservation and demand management. CDM initiatives, including potential OEB-Approved programs that are incremental and complementary to OPA-Contracted Province-Wide Programs ("Province-Wide Programs"), would increase Ontario's overall CDM results and provide added opportunities for learning and informing the development of future programs for Ontario.

The OPA has reviewed the Applicants' evidence related to the six proposed CDM programs that have been submitted to the OEB for approval. The six programs are:

- Community Education
- Neighbourhood Benchmarking
- Monitoring and Targeting
- Small Commercial Energy Management and Load Control
- Municipal and Hospital Energy Efficiency Performance
- Double Returns Plus

Ontario Power Authority

The OPA understands that the Applicants intend to deliver these proposed Board-Approved programs in a way that is incremental and complementary to the Province-Wide Programs. The OPA has reviewed the Applicants' description of the Province-Wide Programs in Exhibit C-1-1. That description is generally consistent with key elements of the program designs, the details of which have continued to evolve. Further and more precise information regarding these program designs will be available when the Master Agreement and its associated schedules for the Province-Wide Programs are finalized. The Master Agreement, Consumer Program Schedules and some Commercial Program schedules will be made available to LDCs on January 26th. The remaining Commercial Program schedules and Industrial Program schedules will be made available to LDCs by the end of February, 2011. The OPA expects to make summaries of the Province-Wide Program designs available to the public shortly thereafter.

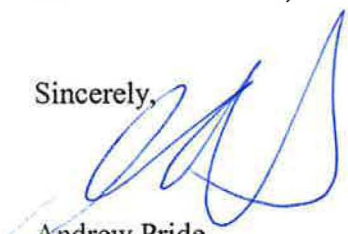
The OPA is supportive of the Applicants moving forward with the implementation of the proposed Board-Approved programs subject to the following conditions:

- that the OPA may transition these programs to Province-Wide Programs sometime in the future;
- that events under the Community Education program will not use funds available through the Province-Wide Consumer Program;
- with respect to the Applicants' proposed Small Commercial Energy Management and Load Control program ("SCEMLC"),
 - that this program may be adopted under the Province-Wide Programs at a future date;
 - that the Applicants will continue to work with the OPA on coordinating the delivery of this proposed program with the Province-Wide Programs;
- with respect to the Applicants proposed Municipal and Hospital Energy Efficiency Performance program,
 - that institutional customers that are seeking a project-based approach to retrofits would be channeled towards the Electricity Retrofit Incentive Initiative and Commissioning Initiative under the Province-Wide Commercial Program; and
 - that participants will be allowed to participate in only one of the Province-Wide Program or the proposed Board-Approved Program.

The OPA believes that the experience gained by the Applicants in implementing these programs now can contribute to the continuous improvement of OPA-Contracted Province-Wide Programs.

The OPA also confirms that the projected provincial savings from the OPA-Contracted Province-Wide programs are less than the provincial aggregate LDC target. The OPA-Contracted Province-Wide Programs are forecasted to achieve more than 1,000 MW of peak demand reduction and more than 5,400 GWh of reduced electricity consumption accumulated over the four-year period, representing about 78 percent of the total peak and 91 percent of the provincial aggregate LDC CDM Target established for all distributors in accordance with the Minister's March 31, 2010 directive to the Board (1,330 MW peak and 6,000 GWh energy savings).

Sincerely,



Andrew Pride

Vice President, Conservation Division

Ontario Energy Board (Board Staff) INTERROGATORY #5 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 6 of 67

Preamble: HONI provided projected reductions in both peak electricity demand (MW) and electricity consumption (MWh) in two tables shown on page 6.

- a) Please discuss the calculations that went into the projections found in each table.
- b) Please describe and discuss all of the various energy efficient measures that will be distributed to participants at the local education sessions.

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 7, part (b)
- b) HONI will be distributing simple, low cost, energy efficient products to participants at local community events. These measures are intended to help customers to “get started” and promote the idea that “small measures can add up” and have a meaningful impact on energy savings. HONI plans to distribute CFL’s, plug in timers and power bars (all for residential use).

Ontario Energy Board (Board Staff) INTERROGATORY #6 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 7 of 67

Preamble: HONI provides the budget figures for its Community Education Initiative with a total budget of \$1.35M.

- a) Please expand on the budget table provided with further detailed evidence showing the items that make up the following costs that have been included in the budget for:
 - i. Event Planning and Administration
 - ii. Overhead
 - iii. Incentives (promotional giveaways)

Response

- i. Event Planning and Administration: This category includes direct costs associated with internal and external resources used for program management and administration of the entire event lifecycle.
- ii. Overhead: This category covers allocable costs related to expenditures incurred by Hydro One for the delivery of the initiative, and is expressed in terms that reflect the application of overhead rates. This also covers costs associated with the assistance of other Hydro One departments (Supply Chain, Legal, Regulatory and Finance support) that support the delivery, evaluation and reporting on this initiative.
- iii. Incentives (promotional giveaways): Include costs related to the purchase of promotional giveaways which will be distributed at the events.

Ontario Energy Board (Board Staff) INTERROGATORY #7 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 7 of 67

Preamble: HONI shows the cost-effectiveness test results for the Community Education Initiative as TRC = 1.7 and PAC = 1.6.

- a) Please confirm that HONI complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) Please provide the specific calculations, both TRC and PAC, which yielded the cost-effectiveness results shown in the application.

Response

- a) Hydro One confirms that we have complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) As indicated in our submission, the cost effectiveness results are as follows:

Total Resource Cost:

Total Resource Cost (TRC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$1,796,672	\$1,076,997	\$719,675	1.7

Where TRC Test Ratio = Benefits / Costs

Program Administrator Cost:

Program Administrator Cost (PAC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$1,796,672	\$1,105,385	\$691,287	1.6

Where PAC Ratio = Benefits / Costs

Participant Cost (PC) Test

Participant Cost (PC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$3,976,173	\$288,398	\$3,687,775	13.8

This test is not required as part of the OPA EM&V Protocol.

Where PC Ratio = Benefits / Costs

The following table outlines the inputs and assumptions used for the calculations of the cost effectiveness tests.

Measure and Input Assumption Sheet

Measure Name: Community Events

Efficient Technology & Equipment Description
This Initiative focuses on customer education and promotes the exchange of information between the utility and its consumers at local community events. Hydro One projects attendance at these local community events to reach approximately 150,000 people per year ¹ . Customers will enter a contest (random draw, wheel of conservation) to receive prizes. Energy efficiency products provided will include CFLs, Power Bars and Indoor Lighting Timers. The delivery of the Initiative will rely on a community events partner to help represent Hydro One at local community events throughout the Province.
Base Technology & Equipment Description
No utility participation in community events and no giveaways of energy efficiency products.

¹ Based on past experience

Resource Savings Assumptions:

Participants

Hydro One expects up to 150,000 attendees to visit our booth each year². The expected breakdown of energy efficiency products distributed to the participants by year is as follows;

2011:

- 35,000 CFLs
- 3,000 Power Bar with Timers

2012 to 2014

- 3,000 Power Bar with Timers per year
- 10,000 Indoor Lighting Timers per year

Electricity *kW and/or kWh*

Peak Demand savings (kW) assumptions were based on the 2010 OPA Measures and Assumption List

- 1 W per CFL (60W incandescent replaced with 15W CFL);
- 4 W per Power Bar with Timers
- 7 W per Indoor Lighting Timer

Based on the above assumptions, the overall impact of this initiative was estimated to be 0.15 MW to the end of 2014.

Annual energy savings (kWh) assumptions were taken from the 2010 OPA Measures and Assumption List

- 44 kWh per CFL (60W incandescent replaced with 15W CFL);
- 53 kWh per Power Bar with Timers
- 219 kWh per Indoor Lighting Timer

Based on the above assumptions, the overall impact of this initiative was estimated to be 10,450 MWh to the end of 2014.

Natural Gas *m3 or Btu or CFM*

² Based on past experience

Water

1
2 **Other Input Assumptions:**
3

Equipment Life (years)
Equipment life assumptions were based on the 2010 OPA Measures and Assumption List: <ul style="list-style-type: none">• CFL: 8 years• Power Bars with Timers: 10 years• Indoor Lighting Timer: 10 years
Incremental Costs (including equipment, operations & maintenance)
Incremental costs assumptions were based on the 2010 OPA Measures and Assumption List: <ul style="list-style-type: none">• (-\$4.52) for CFL;• \$25 for Power Bar with Timers• \$19.5 for Indoor Lighting Timer
Free Ridership %
Based on 2008 Every Kilowatt Counts EM&V Report: <ul style="list-style-type: none">• 52% CFL;• 41% for Power Bars with Timers• 50% for Indoor Lighting Timer
Incentives
Incentives are based on actual 2008-2010 Hydro One purchase costs for the following measures: <ul style="list-style-type: none">• \$1.75 for CFL;• \$13 for Power Bar with Timers• \$5 for Indoor Lighting Timer

Program Cost				
Includes Program Management, Event Planning & Administration, and Reporting				
Program Cost by year				
2011	2012	2013	2014	

1
2

Ontario Energy Board (Board Staff) INTERROGATORY #8 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 9-12 of 67

Preamble: HONI has provided a draft evaluation plan for its proposed Community Events Initiative.

- a) Has HONI received, or did HONI review, the finalized EM&V Protocols from the OPA when preparing its Draft Evaluation Plan for the Community Events Initiative and all of its other proposed Board-Approved CDM Programs found within this application?
- b) If the answer to 8(a) is no, please discuss how HONI will update its Draft Evaluation Plan and other EM&V functions after the OPA's EM&V Protocols are finalized.
- c) If the answer to 8(a) is no, please discuss and provide the EM&V protocols HONI used when preparing its Draft Evaluation Plan.
- d) Please discuss if HONI will combine its EM&V efforts for this program with Hydro One Brampton Networks Inc.?
- e) If the response to 8(d) is no, please expand on HONI's rationale for not combining its EM&V efforts with Hydro One Brampton Networks Inc. even though, if approved, the two utilities will be offering the same program.

Response

- a) We used OPA's draft EM&V protocols dated April 9, 2010 (reference <http://www.powerauthority.on.ca/benefits/evaluation-measurement-and-verification>) and we also used an updated version dated October 18, 2010. The draft EM&V protocols were the best information available at the time of our submission..
- b) Should Hydro One receive approval to proceed with this proposed initiative, HONI will issue an RFP to select a Third-Party EM&V expert in accordance with the OPA EM&V Protocol. HONI and the Third-Party EM&V expert will update its Draft Evaluation Plan and other EM&V functions after the OPA's EM&V Protocols are finalized.
- c) As indicated above, HONI used the draft EM & V protocols to prepare the draft evaluation plan in the submission.
- d) We will combine our EM & V efforts where appropriate and where it results in reduced costs that would make our efforts more cost effective.

Filed: January 27, 2010

EB-2010-0332

Exhibit I

Tab 1

Schedule 8

Page 2 of 2

- 1 e) Please see response to (d)

Ontario Energy Board (Board Staff) INTERROGATORY #9 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 11 & 12 of 67

Preamble: Within the Draft Evaluation Plan for the Community Education Initiative are three areas that HONI has noted further development is necessary. These three areas are the Data Collection Responsibilities to Support Program Evaluation, Evaluation Schedule and Budget, and the Evaluation Team.

- a) Please provide any and all updates to the Data Collection Responsibilities to Support Program Evaluation section.
- b) Has HONI agreed to terms with a third party EM&V expert to assist in ensuring that complete and appropriate collection of data to support program evaluation is acquired?
- c) If the answer to (b) is yes, who has HONI agreed to terms with?
- d) If the answer to (b) is no, please discuss the process and schedule for which HONI plans to have a third party EM&V expert in place.
- e) Please provide an update to the Evaluation Schedule and Budget table, updating all the items where HONI has "TBD".
- f) Please confirm that HONI included the total EM&V budget in the calculation when completing the cost effectiveness tests.
- g) Please discuss the evaluation process HONI plans on administering for the Customer Education Initiative. In your response, discuss the specific elements HONI will focus on and how it will ensure accuracy in its methods and final results.
- h) Please provide an update to the Evaluation Team table, updating all the items where HONI has "TBD".

Response

- a) There are no updates at this time. As indicated in Exhibit C, Tab 1, Schedule 2, Page 11 of 67, "This area is still under development and will be completed with the assistance of a third party EM&V expert..." The procurement of the EM & V expert will take place once HONI is given approval to proceed with the proposed initiatives.
- b) No. HONI has not as yet retained a third-party EM&V expert.
- c) Please see response to (b).

Filed: January 27, 2010

EB-2010-0332

Exhibit I

Tab 1

Schedule 9

Page 2 of 2

- 1 d) As soon as HONI receives approval to proceed with this proposed initiative, HONI
- 2 will issue an RFP to select a Third-Party EM&V expert in accordance with the OPA
- 3 EM&V Protocol.
- 4
- 5 e) There is no update on this item. The Evaluation Schedule and Budget table will be
- 6 finalized during the detailed Draft Evaluation Plan development phase, after the
- 7 Third-Party vendor is retained
- 8
- 9 f) Yes, HONI confirms that the Company included the total EM&V budget when
- 10 completing the cost-effectiveness tests.
- 11
- 12 g) Please see response to (a).
- 13
- 14 h) Please see response to (e).
- 15

Ontario Energy Board (Board Staff) INTERROGATORY #10 List 1

Interrogatory

Neighbourhood Benchmarking – Initiative #2

Reference: Exhibit C, Tab 1, Schedule 2, Page 13 of 67

Preamble: HONI states that the Neighbourhood Benchmarking program is non-duplicative from all OPA-Contracted Initiatives as it is the only program that addresses behavioural changes based on peer comparison and influence.

- a) Please discuss the process that HONI followed in determining if the Neighbourhood Benchmarking Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs. Provide all correspondence and documentation between HONI and the OPA that addresses the fact that the Neighbourhood Benchmarking Initiative does not duplicate an OPA-Contracted Province-Wide CDM Program.

Response

- a) The process that HONI followed in determining if the Neighbourhood Benchmarking Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs was described in Exhibit B, Tab 1, Schedule 2, Page 3 of 24 and Exhibit C, Tab 1, Schedule 2, page 3 of 67, namely:

“Hydro One has acquired extensive understanding of the OPA-Contracted CDM Programs through its participation in the OPA design working groups. This knowledge, coupled with a comprehensive understanding of Hydro One’s customers within its service territory, allowed Hydro One to identify the CDM potential that is not addressed by the existing OPA-Contracted CDM programs. All Board-Approved CDM programs proposed in this Application are designed to target these ‘untapped’ areas and they are not duplicative of the existing OPA-Contracted CDM programs.”

This program is non-duplicative of the OPA Province-Wide Programs. Please refer to Exhibit I, Tab 1, Schedule 4, Attachment 1.

Ontario Energy Board (Board Staff) INTERROGATORY #11 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 13 of 67

Preamble: HONI notes that customers will received a paper-based “Home Energy Report” that offers insights about their individual energy use as well as a comparison with their neighbourhood energy use.

- a) Please provide further description of the Home Energy Report that customers will receive. Will HONI be including any detailed information regarding other neighbouring customers’ energy usage?
- b) If the answer to (a) is that yes, there will be detailed information about neighbouring customers energy usage included in the report, please discuss if HONI has or will receive(d) sign-off from the customers it cites in the report.
- c) Please discuss if HONI will allow customers receive electronic Home Energy Reports via e-mail?

Response

- a) The Home Energy Report helps customers understand how their home energy use compares to the average neighbourhood energy use. It compares an individual home to the statistical “average” of other homes in the neighbourhood or to the statistical “average” of homes with similar characteristics (ie. Similar geography, close proximity, square footage, age of home, heating type, etc). The report offers targeted savings tips to the homeowner and makes them aware of conservation programs available to them. The Home Energy Report will not include information on a neighbouring customer’s account.
- b) Please see response to (a)
- c) Yes, HONI will allow customers to receive electronic reports via e-mail.

Ontario Energy Board (Board Staff) INTERROGATORY #12 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 13 of 67

Preamble: HONI states at line 26 that “neighbouring benchmarking has been proven successful in other jurisdictions...”.

- a) Please expand on this statement and provide references to other research studies, reports, evaluations or any other documentation that supports the statement above.

Response

- a) The neighbourhood benchmarking concept has been implemented by various US utilities, which include:

- Austin Utilities
- Burbank Water & Power
- Centerpoint Energy
- City of Anaheim
- City of Loveland
- City of Palo Alto Utilities
- Commonwealth Edison
- Connecticut Light & Power
- Connexus Energy
- Consumers Energy
- Dominion Virginia Power
- First Choice Power
- Fort Collins Utilities
- Gainesville Regional Utilities
- Glendale Water & Power
- Hawaiian Electric Co.
- Lake Country Power
- MERC
- National Grid
- NSTAR
- Owatonna Public Utilities
- Puget Sound Energy
- Rochester Public Utilities
- Seattle City Light
- SMUD
- Xcel Energy

1 The following references supported the program effectiveness resulting from the US
2 experience:

- 3 • OPOWER Final Connexus 3rd Party Measurement and Verification Study
4 (Dated: July 28, 2010): This report was conducted by a third party firm, Power
5 System Engineering Inc, on the results of Connexus Energy's program after one
6 year of its deployment.
- 7 • Social Norms and Energy Conservation (Dated June 9, 2010): This is a paper
8 written by Hunt Alcott, a behavioral economist and professor at MIT and NYU on
9 a Home Energy Report program executed in Minnesota.
- 10 • Summit Blue Report: This report was conducted by a third party firm, Summit
11 Blue (now Navigant Consulting), on the savings results of SMUD's program after
12 one year of its deployment.

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Ontario Energy Board (Board Staff) INTERROGATORY #13 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 14 of 67

Preamble: HONI notes that Initiative #2 is centred on a paper-based “Home Energy Report” which is mailed to consumers and that the information included in the report motivates them to take action and reduce their household energy use.

- a) Has HONI built in any follow-up procedures (i.e. phone call, e-mail, home visit) into the program to ensure that customers are in fact reviewing the Home Energy Report and simply not discarding the document?

Response

- a) The program is based on a paper-based report which is mailed to residential customers. However, HONI expects that there will be inquiries, which the Company will receive through its call centre, through e-mail and/or the HONI TWITTER account. HONI representatives will be available to answer customer inquiries and respond by helping customers to understand their reports. HONI will monitor these feedback channels closely to ensure that customers are receiving the support they need. The Company will also monitor the pre - and – post energy usage in these homes, to see if customers are responding by taking actions to reduce their energy use.

Ontario Energy Board (Board Staff) INTERROGATORY #14 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 14 of 67

Preamble: HONI notes at line 22 that this behavioural science-driven model has proven results with over 20 U.S. utilities which indicate that people will take action to conserve energy when they are made aware of how their energy usage pattern compares with their neighbours or peers.

- a) Please provide supporting documentation that shows positive results with similar initiatives as the Neighbourhood Benchmarking program at the 20 U.S. utilities mentioned above.

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 12, part a.

Ontario Energy Board (Board Staff) INTERROGATORY #15 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 15 of 67

Preamble: HONI notes that the results of the Home Energy Reporting system will be measured using a proven scientific test and control group methodology.

- a) Please discuss in detail the scientific tests that will be used to measure the results of the Home Energy Reporting system.

Response

- a) The Home Energy Reporting system is based on a test and control group methodology:

The same number of customers is represented in both the “test” and the “control group”. The customers within both groups share similar characteristics (similar geography, proximity, square footage, heating fuel types, etc). The only difference between the test and control groups is that the customers in the “test” group will receive the Home Energy Reports – while the control group will not. This will allow HONI to measure, monitor and compare the home energy usage between the two groups. The difference between the groups will be compared in both the pre-and-post program periods. The difference between the test group and control group results represents the energy savings attributed to the Home Energy Report.

Ontario Energy Board (Board Staff) INTERROGATORY #16 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 15 of 67

Preamble: HONI notes that part of the information provided to the customer in the report card will include comparisons to the customer's closest neighbours and most efficient neighbours.

- a) Will HONI be including any personal information (i.e. name, address) from "neighbouring" customers on the report card? If so, please discuss what will be included.

Response

- a) No, HONI will not be providing any personal information from neighbouring customers on the report card.

Ontario Energy Board (Board Staff) INTERROGATORY #17 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 18 of 67

Preamble: HONI has provided a table displaying the budget for its Neighbourhood Benchmarking Initiative with a total budget of \$3.15M.

- a) Please expand on the budget table provided with further detailed evidence showing the items that make up the following costs that have been included in the budget for:
- i. Administrative Costs
 - ii. Setup and data management
 - iii. Home energy reports and Web
 - iv. Advanced Features
 - v. Data Transfers
 - vi. Overhead

Response

The following detailed evidence further expands on the budget table provided:

- i. Administrative Costs: This category includes direct costs associated with internal and external resources used for program management and administration.
- ii. Set-Up and Data Management: This category includes the following items: identification of target customers and control group, building the targeted customer list and information database, setting up the monthly mail-out processes, and other set-up and data management activities.
- iii. Home Energy Reports and Web: This category includes the development and customization of the Home Energy Report templates and the development of a password protected web-based portal to allow customer's access to their Home Energy Report.
- iv. Advanced Features: This category incorporates the effort required to build and maintain increased functionality, such as special notices that will be sent to customers who, mid-month, appear to be heading towards a high bill and recognizing the efforts of customers who meet or exceed their energy targets.
- v. Data Transfers: This category includes the updating of the customer information database and the transfer of data from HONI's Customer Information System to the database that supports this initiative.
- vi. Overhead: This category includes other costs incurred by HONI for the delivery of the initiative. These costs are associated with indirect support provided by various

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1 other HONI departments (Supply Chain, Legal, Regulatory and Finance support) to
2 the CDM Department.
3
4
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Ontario Energy Board (Board Staff) INTERROGATORY #18 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 18 of 67

Preamble: HONI has provided the cost-effectiveness test results for the Neighbourhood Benchmarking Initiative of: TRC = 1.2 and PAC=1.2.

- a) Please confirm that HONI complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) Please provide the specific calculations, both TRC and PAC, which yielded the cost-effectiveness results shown in the application.

Response

- a) HONI confirms that we have complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) As indicated in our submission, the cost effectiveness results are as follows:

Total Resource Cost:

Total Resource Cost (TRC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$3,166,669	\$2,676,001	\$490,668	1.2

Where TRC Test Ratio = Benefits / Costs

Participant Administrator Cost:

Participant Administrator Cost			
Benefits	Costs	Net Benefit	Test Ratio
\$3,166,669	\$2,676,001	\$490,668	1.2

Where PAC Test Ratio = Benefits / Costs

Participant Cost (PC) Test:

Participant Cost (PC) Test			
Benefits	Costs*	Net Benefit	Test Ratio
\$5,778,342	n/a	\$5,778,342	n/a

Where PC Test Ratio = Benefits / Costs

*This initiative has no incremental equipment cost, hence there are no costs for the PC test.

This test is not required as part of the OPA EM&V Protocol.

The following table outlines the inputs and assumptions used for the calculations of the cost effectiveness tests.

Measure and Input Assumption Sheet for Neighbourhood benchmarking

Measure Name: Neighbourhood Benchmarking

Efficient Technology & Equipment Description

This program is centered on a paper-based “Home Energy Report” which is mailed annually to 50,000 consumers that offers insights about their individual energy use and offers a comparison with their neighbourhood energy use. The neighbourhood comparison data helps consumers understand “how they are doing” in comparison to their neighbours. The information motivates them to take action and reduce their household energy use. The Initiative is based on proven behavioural science which indicates that an effective way to motivate people is to provide peer context for their energy use¹

The information shown on the report is customized to meet the needs of each individual household. In each case, customer load profile data collected from the smart meter will be used to help identify the areas of opportunity (i.e. to improve energy efficiency and promote conservation). The “Home Energy Report” will translate the individual energy usage patterns into meaningful insights coupled with targeted action steps. The report will offer energy recommendations that are specifically tailored to meet the needs of the customer.

¹ Assumptions are based on a Third Party’s program results with over 20 U.S. utilities.

Base Technology & Equipment Description
There is no equipment involved in this initiative.

1
2
3

Participants and Resource Savings Assumptions:

Participants
Annual participation is based on targeting high-use customers - i.e., annual consumption of 17,500 kWh: Number of participants: <ul style="list-style-type: none">• For 2011 – 2014: 50,000 residential customers (Note: program roll out is planned to begin Q2/Q3 Yr 2011)
Electricity <i>kW and/or kWh</i>
Average Energy (kWh) and demand (kW) savings ⁱ per participant: Peak Demand Savings: <ul style="list-style-type: none">- 0.011kW (year 1)- 0.038kW (year 2, year 3 and year 4) Energy Savings: <ul style="list-style-type: none">- 114 kWh (year 1)- 368 kWh (year 2, year 3 and year 4) The energy savings in the TRC analysis are spread over 8 costing periods (3 winter periods, 3 summer periods and 2 shoulder periods) based on the end-use profile for savings associated with IHD devices which is the closest profile to approximate expected energy savings for this initiative (Source: 2010 OPA Measures and Assumption List).
Natural Gas <i>m3 or Btu or CFM</i>

Water

Other Input Assumptions:

Equipment Life (<i>years</i>)												
<ul style="list-style-type: none">Behavioral: 1 year (since this program is based on behavioural changes, the projected savings have been conservatively assumed to last one year).												
Incremental Costs (<i>including equipment, operations & maintenance</i>)												
<ul style="list-style-type: none">There is no equipment involved in this initiative.												
Free Ridership %												
<ul style="list-style-type: none">There is no free ridership because the unique benchmarking services are not available outside of the scope of this initiative.												
Program Costs (<i>excludes incentives</i>)												
In addition to the 3 rd Party turnkey costs ² , the program cost (<u>total of \$3.15 million</u>) includes program management, data transfers, and EM&V costs.												
<table><tr><th colspan="4">Program Cost by year</th></tr><tr><th>2011</th><th>2012</th><th>2013</th><th>2014</th></tr><tr><td>\$840,000</td><td>\$770,000</td><td>\$770,000</td><td>\$770,000</td></tr></table>	Program Cost by year				2011	2012	2013	2014	\$840,000	\$770,000	\$770,000	\$770,000
Program Cost by year												
2011	2012	2013	2014									
\$840,000	\$770,000	\$770,000	\$770,000									

ⁱ Based on input from specialized third party vendors.

² These costs are preliminary estimates based on a quote from a 3rd Party vendor. The final turnkey costs would be based on the results of a competitive bidding process.

Ontario Energy Board (Board Staff) INTERROGATORY #19 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 20-23 of 67

Preamble: HONI has provided a draft evaluation plan for its proposed Neighbourhood Benchmarking Initiative.

- a) Please discuss if HONI will combine its EM&V efforts for this program with Hydro One Brampton Networks Inc.?
- b) If the response to (a) is no, please expand on HONI's rationale for not combining its EM&V efforts with Hydro One Brampton Networks Inc. even though, if approved, the two utilities will be offering the same program.

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 8, part d.
- b) Please see response in (a).

Ontario Energy Board (Board Staff) INTERROGATORY #20 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 22-23 of 67

Preamble: Within the Draft Evaluation Plan for the Neighbourhood Benchmarking Initiative are three areas that HONI has noted further development is necessary. These three areas are the Data Collection Responsibilities to Support Program Evaluation, Evaluation Schedule and Budget, and the Evaluation Team.

- a) Please provide any and all updates to the Data Collection Responsibilities to Support Program Evaluation section.
- b) Has HONI agreed to terms with a third party EM&V expert to assist in ensuring that complete and appropriate collection of data to support program evaluation is acquired?
- c) If the answer to (b) is yes, who has HONI agreed to terms with?
- d) If the answer to (b) is no, please discuss the process and schedule for which HONI plans to have a third party EM&V expert in place.
- e) Please provide an update to the Evaluation Schedule and Budget table, updating all the items where HONI has "TBD".
- f) Please confirm that HONI included the total EM&V budget in the calculation when completing the cost effectiveness tests.
- g) Please provide an update to the Evaluation Team table, updating all the items where HONI has "TBD".

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 9, part a.
- b) Please refer to Exhibit I, Tab 1, Schedule 9, part b.
- c) Please see response in (b).
- d) Please refer to Exhibit I, Tab 1, Schedule 9, part d.
- e) Please refer to Exhibit I, Tab 1, Schedule 9, part e.
- f) Please refer to Exhibit I, Tab 1, Schedule 9, part f.
- g) Please refer to Exhibit I, Tab 1, Schedule 9, part h.

Ontario Energy Board (Board Staff) INTERROGATORY #21 List 1

Interrogatory

Monitoring and Targeting – Initiative #3

Reference: Exhibit C, Tab 1, Schedule 2, Page 25 of 67

Preamble: HONI notes that the Monitoring and Targeting (“M&T”) Initiative offers financial incentives toward an M&T system up to a maximum amount per M&T installation as well as performance incentives up to a specified amount for achieved energy savings.

- a) Please discuss how the financial incentive towards an M&T system of up to the maximum amount per M&T installation is determined. What is the process for determining the incentive each participant is eligible for?
- b) What is the process for determining how much of a performance incentive participants will earn based on achieved energy savings?
- c) Is there a maximum performance incentive amount a participant is able to earn? If so, what is the maximum?

Response

- a) The typical industry cost of an M&T system is expected to be approximately \$45,000 (Office of Energy Efficiency of Natural Resources Canada (2004). However based on the most up-to-date market intelligence, the average cost for an M&T system large industrial customers is estimated at [REDACTED].

The financial incentive towards the M&T system in a project is determined by offering [REDACTED] per projected kW savings up to 50% of the total cost of the M&T system or to a maximum of [REDACTED], whichever is less.

The process for determining the M&T incentive each participant is eligible for is as follows: the proposed initiative will offer financial assistance towards the purchase of an M&T system based on the expected kW savings, up to the specified maximum amount. At program registration, potential participants are required to submit an energy management plan identifying areas where the M&T system is expected to produce energy and peak demand savings, including estimates of those savings. Hydro One will review this preliminary plan, and assess the expected savings to determine whether the cap applies.

- b) The process is as follows: [REDACTED] will be offered towards achieved annual savings to the end of 2014. Only incremental annual kWh savings will be

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1 incented based on measured and verified results. For the measurement and
2 verification of the results we will rely on the M&T system itself which can be carried
3 out in a timely manner.

4

5 c) We will only incent the annual kWh savings to the end of 2014. The deadline of
6 December 31, 2014 is effectively a cap on the performance incentive payment.

7

Ontario Energy Board (Board Staff) INTERROGATORY #22 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 26 of 67

Preamble: HONI states that the proposed Monitoring and Targeting Initiative is intended to address the needs of the remaining 1,600 customers with less than 15 GWh of annual consumption that aren't eligible for the OPA's Industrial Accelerator program.

- a) Please discuss the process that HONI followed in determining if the Monitoring and Targeting Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs. Provide all correspondence and documentation between HONI and the OPA that addresses the fact that the Monitoring and Targeting Initiative does not duplicate an OPA-Contracted Province-Wide CDM Program.
- b) Has HONI received confirmation from the OPA that its Industrial Accelerator Program cannot be customized to resemble the Monitoring and Targeting Initiative?

Response

- a) The process that HONI followed in determining if the Monitoring and Targeting Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs was described in Exhibit B, Tab 1, Schedule 2, Page 3 of 24 and Exhibit C, Tab 1, Schedule 2, page 3 of 67, namely:

"Hydro One has acquired extensive understanding of the OPA-Contracted CDM Programs through its participation in the OPA design working groups. This knowledge, coupled with a comprehensive understanding of Hydro One's customers within its service territory, allowed Hydro One to identify the CDM potential that is not addressed by the existing OPA-Contracted CDM programs. All Board-Approved CDM programs proposed in this Application are designed to target these 'untapped' areas and they are not duplicative of the existing OPA-Contracted CDM programs."

This program is non-duplicative of the OPA Province-Wide Programs. Please refer to Exhibit I, Tab 1, Schedule 4, Attachment 1.

- b) No. HONI has not requested the OPA to redesign its Industrial Accelerator Program to cover customers that consume less than 15 GWh annually.

Ontario Energy Board (Board Staff) INTERROGATORY #23 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 27 of 67

Preamble: HONI notes that the Initiative will ensure that the customer's senior management fully supports the M&T project to establish it as a continuous improvement process.

- a) Please explain how HONI will ensure that the customer's senior management fully supports the M&T project.

Response

- a) The M&T initiative will be implemented using specialized Third-Party M&T vendors who will apply a standard M&T model that includes ensuring that the customers' senior management are fully supportive of the M&T projects.

Ontario Energy Board (Board Staff) INTERROGATORY #24 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 29 of 67

Preamble: HONI has provided a table displaying the budget for its Monitoring and Targeting Initiative with a total budget of \$4.25M.

- a) Please expand on the budget table provided with further detailed evidence showing the items that make up the following costs that have been included in the budget for:
- i. Administrative Costs
 - ii. Marketing & Site visits Costs
 - iii. Fixed Allocable Costs
 - iv. Variable Costs

Response

The following detailed evidence further expands on the budget table provided:

- i. Administrative Costs: includes tracking results, financial monitoring, processing invoices and reporting to various stakeholders.
- ii. Marketing & Site visits Costs: this category includes production of collateral material, direct mail, call centre, as well as a range of behind-the meter services such as online technical services, on-site visits, energy efficiency and demand response workshops.
- iii. Fixed Allocable Costs: These costs are associated with indirect support provided by various HONI One departments (Supply Chain, Legal, Regulatory and Finance support) to the CDM Department.
- iv. Variable Costs: represent HONI's expected budget to cover the funding of the M&T system as well as any service fee associated with the M&T system that would be paid by HONI.

Ontario Energy Board (Board Staff) INTERROGATORY #25 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 29 and 30 of 67

Preamble: HONI has provided the cost-effectiveness test results for the Neighbourhood Benchmarking Initiative of: TRC = 1.6 and PAC=1.5.

- a) Please confirm that HONI complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) Please provide the specific calculations, both TRC and PAC, which yielded the cost-effectiveness results shown in the application.

Response

- a) Hydro One confirms that we complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) As indicated in our submission, the cost effectiveness results for the Monitoring and Targeting Initiative (we understand the reference to the Neighbourhood Benchmarking in the interrogatory above is a typographical error) are as follows:

Total Resource Cost Test:

Total Resource Cost (TRC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$6,276,262	\$3,855,555	\$2,420,707	1.6

Where TRC Ratio = Benefits / Costs

Program Administrator Cost Test:

Program Administrator Cost (PAC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$6,276,262	\$4,286,261	\$1,990,002	1.5

Where PAC Ratio = Benefits / Costs

Participant Cost Test:

Participant Cost (PC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$5,761,931	\$2,328,899	\$3,433,033	2.5

This test is not required as part of the OPA EM&V Protocol.

Where PC Ratio = Benefits / Costs

The following table outlines the inputs and assumptions used for the calculations of the cost effectiveness tests.

Measure and Input Assumption Sheet

Measure Name: Monitoring and Targeting

Efficient Technology & Equipment Description

The proposed Monitoring & Targeting (“M&T”) Initiative is offered to commercial and industrial customers with average demand above 200kW, but only to industrial customers whose consumption is no more than 15GWh. Potential participants will be offered financial incentives to install a monitoring and targeting system that assesses the energy use against key performance indicators such as productivity. M&T will assist these customers to better understand their energy performance. It will also give the participants an opportunity to benchmark their consumption against best practices by other similar businesses. The Initiative is intended to enable customers to achieve sustainable behavioural and continuous operational improvements. Behavioral changes have a key impact on the energy consumption, and they are often overlooked. This M&T initiative will enable customers to identify these behavioral measures and implement those changes in a rapid manner¹.

Base Technology & Equipment Description

Current operations and maintenance practices

¹ The US Department of Energy has identified as the 10 top practices for “Industrial Technologies Program” behavioural and maintenance driven actions as a result of a thorough auditing and company’s data analysis. These initiatives lead to long-term savings and better maintenance practices

Resource Savings Assumptions:

Participants

As the investment in an M&T system is relatively significant, we expect a 2% participation rate to be achievable in the four year program (10 new participants per year). This penetration rate is very conservative compared to the experience in other jurisdictions, where research has shown penetration rates² ranging between 2% and 5%.

- 2011, 2012, 2013, 2014: 10 new participants per year for a total of 40.

Electricity kW and/or kWh

The average energy (kWh) and peak demand (kW) savings are expected to be 10%. Hydro One arrived at these projections based on inputs from the following:

- 1) A UK experience shows energy savings for industrial installations ranging from 5-15%³.
- 2) a CIPEG study⁴ that estimated an average of 8% energy savings potential for M&T systems;

Other utilities experience in Ontario such as Enbridge indicates that our estimated savings from M&T projects is in line with industry average savings.

Average Peak Demand Savings:

At an average of 155kW savings with a total of 40 participants in the program we arrived at a total of 6MW load reduction, which after free-ridership discount (20%) will be 4.8MW as provided in the evidence.

Average Energy Savings:

On an annual basis the participants are expected to achieve an average of 10% energy savings (165MWh). For the duration of the program 2011-2014, a participant is expected on average to save 327 MWh. With a total of 40 participants in the program we arrived at a total of 13,063MWh load reduction, which after free-ridership discount (20%) will be

² PECO and Summit Building Engineering. California Commissioning Collaborative, (2007). California retro-commissioning

³ Source: Office of Energy Efficiency of Natural Resources Canada (2004). Energy Management Information System, CIPEG.

⁴ See above

10,450MWh as provided in the evidence.

The energy savings in the TRC analysis are spread over 8 costing periods (3 winter periods, 3 summer periods and 2 shoulder periods) based on the end-use profile for savings associated with Commercial Base load which is the closest profile to approximate expected energy savings for this initiative (Source: 2010 OPA Measures and Assumption List).

Natural Gas *m3 or Btu or CFM*

Gas savings are not included in the TRC analysis at this time. However, Hydro One is currently exploring the opportunities for collaborating with the gas utilities on this initiative.

Water

Water savings are not included in the TRC analysis at this time. However, Hydro One will be exploring opportunities for including water savings in this initiative

Other Input Assumptions:

Equipment Life (*years*)

- Equipment Life is estimated at approximately 8 years (source: based on consultation with specialized M&T vendors in Ontario)

Incremental Costs (*including equipment, operations & maintenance*)

- The average incremental equipment cost for the M&T system is estimated at approximately [REDACTED] for Hydro One customer base including a large percentage of industrial customers (source: based on consultation with specialized M&T vendors in Ontario)

Free Ridership %

- M&T systems require a relatively significant investment on the part of customers and typically they require financial assistance to convince them to undertake projects of this size. Consequently, the free-ridership for this program is expected to be relatively low. However, to be conservative, Hydro One has assumed 20% Free Ridership in the TRC analysis.

Incentives															
<ul style="list-style-type: none">• [REDACTED] per expected kW savings up to 50% of the installed cost of the system to a maximum of [REDACTED]. This incentive will be offered once the customer has contractually committed to install an M&T system.• 5 cents per kWh will be offered on an annual basis for incremental savings to the end of 2014															
Program Cost (excluding incentives)															
Program cost includes program management, marketing.															
<table><tr><th colspan="4">• Program Cost by year</th></tr><tr><th>2011</th><th>2012</th><th>2013</th><th>2014</th></tr><tr><td>[REDACTED]</td><td>[REDACTED]</td><td>[REDACTED]</td><td>[REDACTED]</td></tr></table>				• Program Cost by year				2011	2012	2013	2014	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
• Program Cost by year															
2011	2012	2013	2014												
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]												

Ontario Energy Board (Board Staff) INTERROGATORY #26 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 31-34 of 67

Preamble: HONI has provided a draft evaluation plan for its proposed Monitoring and Targeting Initiative.

- a) Please discuss if HONI will combine its EM&V efforts for this program with Hydro One Brampton Networks Inc.?
- b) If the response to (a) is no, please expand on HONI's rationale for not combining its EM&V efforts with Hydro One Brampton Networks Inc. even though, if approved, the two utilities will be offering the same program.

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 8, part d.
- b) Please see response in (a).

Ontario Energy Board (Board Staff) INTERROGATORY #27 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 33-34 of 67

Preamble: Within the Draft Evaluation Plan for the Monitoring and Targeting Initiative are three areas that HONI has noted further development is necessary. These three areas are the Data Collection Responsibilities to Support Program Evaluation, Evaluation Schedule and Budget, and the Evaluation Team.

- a) Please provide any and all updates to the Data Collection Responsibilities to Support Program Evaluation section.
- b) Has HONI agreed to terms with a third party EM&V expert to assist in ensuring that complete and appropriate collection of data to support program evaluation is acquired?
- c) If the answer to (b) is yes, who has HONI agreed to terms with?
- d) If the answer to (b) is no, please discuss the process and schedule for which HONI plans to have a third party EM&V expert in place.
- e) Please provide an update to the Evaluation Schedule and Budget table, updating all the items where HONI has "TBD".
- f) Please confirm that HONI included the total EM&V budget in the calculation when completing the cost effectiveness tests.
- g) Please provide an update to the Evaluation Team table, updating all the items where HONI has "TBD".

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 9, part a.
- b) Please refer to Exhibit I, Tab 1, Schedule 9, part b.
- c) Please see response in (b).
- d) Please refer to Exhibit I, Tab 1, Schedule 9, part d.
- e) Please refer to Exhibit I, Tab 1, Schedule 9, part e.
- f) Please refer to Exhibit I, Tab 1, Schedule 9, part f.
- g) Please refer to Exhibit I, Tab 1, Schedule 9, part h.

Ontario Energy Board (Board Staff) INTERROGATORY #28 List 1

Interrogatory

Small Commercial Energy Management and Load Control – Initiative #4

Reference: Exhibit C, Tab 1, Schedule 2, Page 36 of 67

Preamble: HONI notes that the proposed initiative is solely designed to meet the needs of small commercial customers with up to 200kW load. HONI further notes that although the OPA Demand Response Initiative has been offered to small commercial customers (under 50kW) load, participation has been very limited.

- a) Please discuss the process that HONI followed in determining if the Small Commercial Energy Management and Load Control Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs. Provide all correspondence and documentation between HONI and the OPA that addresses the fact that the Small Commercial Energy Management and Load Control Initiative does not duplicate an OPA-Contracted Province-Wide CDM Program.
- b) Did HONI discuss customizing either the DR1 or DR3 OPA programs with the OPA prior to submitting its application for Board-Approved?
- c) If the answer to (b) is yes, please discuss the response HONI received from the OPA.
- d) If the answer to (b) is no, please discuss the reasons for not contacting the OPA prior to filing the application for Board-Approved CDM Programs.
- e) Please expand on the features of the EMS system HONI has proposed to provide to customers to assist them in better understanding TOU rates. In your response, please compare the EMS system offered through Initiative #4 and the in-home displays the OPA will be offering through its demand response program.

Response

- a) The process that HONI followed in determining if the Small Commercial Energy Management and Load Control Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs was described in Exhibit B, Tab 1, Schedule 2, Page 3 of 24 and Exhibit C, Tab 1, Schedule 2, page 36 of 67, namely:

“Hydro One has acquired extensive understanding of the OPA-Contracted CDM Programs through its participation in the OPA design working groups. This knowledge, coupled with a comprehensive understanding of Hydro One’s customers within its service territory, allowed Hydro One to identify the CDM potential that is not addressed by the existing OPA-Contracted CDM programs. All Board-Approved CDM programs

1 proposed in this Application are designed to target these ‘untapped’ areas
2 and they are not duplicative of the existing OPA-Contracted CDM
3 programs.”
4

5 With respect to the Small Commercial Energy Management and Load Control
6 Initiative, HONI closely examined the program details of three particular OPA-
7 contracted programs (Residential DR, DR1 and DR3) to ensure that this initiative was
8 designed to meet the needs of customers that were not being met by any of these
9 province-wide programs and to fill this gap. Please refer to Exhibit C, Tab 1,
10 Schedule 2, page 36 of 67 for additional details.
11

12 This program is non-duplicative of the OPA Province-Wide Programs. Please refer
13 to Exhibit I, Tab 1, Schedule 4, Attachment 1.
14

15 b) No. HONI has not requested the OPA to redesign its Province-Wide CDM Programs
16 to cover the specific features provided by the Small Commercial Energy Management
17 and Load Control Initiative.
18

19 c) Please see response in (b).
20

21 d) HONI did not discuss customizing either the DR1 or DR3 OPA programs with the
22 OPA prior to submitting its application for Board-Approved because both DR1 and
23 DR3 are very different initiatives from the Small Commercial Energy Management
24 and Load Control Initiative. To begin with, both DR1 and DR3 are contractually
25 binding dispatchable demand response programs in the sense that participants agree
26 to provide load capacity for up to 100 or 200 hours throughout the year in return for
27 financial payments. The Small Commercial Energy Management and Load Control
28 Initiative, by contrast, is more of a reliability program as it calls for up to 15 load
29 control events during the summer season only. In addition to initiating load control
30 events, the Small Commercial Energy Management and Load Control Initiative is
31 designed to help our customers to achieve energy saving through an EMS system that
32 can assist them to take full advantage of TOU rates. Therefore, the proposed initiative
33 is fundamentally distinct from both the DR1 and DR3 initiatives.
34

35 e) The fundamental features of the EMS system are: 1) to help customers manage
36 energy usage and take advantage of TOU pricing, and 2) to assist in achieving
37 demand response load reductions.
38

39 This program will offer an EMS system (software) that, through the use of a number
40 of load control devices (e.g., switches) can manage the customers’ energy use and
41 reduce peak demand. The EMS will be programmed for and tailored to specific small
42 business applications to assist in initiating load control events for demand response
43 purposes. In addition, this initiative will offer continuous online technical support to
44 help customers to take advantage of TOU rates.

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The EMS system offered to Small Commercial customers is a fundamentally different product than an IHD. By contrast, the residential In-Home Display is primarily a device for providing energy information to homeowners to increase general awareness of their energy consumption and thereby motivates change in behaviour. Currently IHD's are not a software that is connected to load control devices/switches and therefore does not have automated elements.

Ontario Energy Board (Board Staff) INTERROGATORY #29 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 36 of 67

Preamble: HONI notes in regards to Initiative #4 that, unlike the OPA Residential Demand Response Program, its proposed Initiative covers the monthly fee required to allow customers to have access to the full use of the EMS system that is installed in their premises. In the CDM Code, it states at 2.3.3(a) that CDM Programs that will be considered duplicative of OPA-Contracted Province-Wide CDM Programs include, but are not limited to, CDM Programs that have different customer incentive levels on products or services already offered through the OPA-Contracted Province-Wide CDM Programs.

- a) Please discuss why HONI feels Initiative #4 is unique and should be granted Board approval based on the above statement stemming from 2.3.3(a) of the CDM Code.

Response

The Small Commercial Demand Response is a fundamentally different initiative than the Province-Wide Residential Demand Response Program as it has different objectives (e.g. Energy Management, Time-of-Use, and Demand Response), different product offerings with different features, and different support services to respond to the business needs of the eligible participants. The initiative therefore requires a different incentive structure designed for and targeted specifically at the small commercial market.

Ontario Energy Board (Board Staff) INTERROGATORY #30 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 37 of 67

Preamble: HONI notes that the energy management system that is provided to small commercial participants will also be used by Hydro One to initiate and execute load control events.

- a) Please discuss the process and details of the load control events mentioned above.

Response

- a) As indicated in Exhibit C, Tab 1, Schedule 2, Page 37 of 67, the total number of events between OPA and HONI should not exceed 15 a year. The activation protocol for this initiative will mirror that of the OPA peak saver initiative as specified in the following OPA document:

2009 Residential and Small Commercial Demand Response (Res DR) activation rules

The Res DR program will be dispatched for up to 40 hours of Load Control during the activation season (May 1st to September 30th). This limit will be exceeded if there are emergency reasons to do so. The IESO may deem emergency operating conditions at their discretion when they may call for Res DR activations as required supporting the Ontario electricity system.

Each Load Control Event will not be longer than a maximum of 4 hours. An event shorter than 4 hours is permitted.

Each Load Control Event will only occur on business days, i.e. not on week-ends or holidays.

The program will also have a test event at the start of each activation season to ensure that all the communication protocols between the Dispatch Administrator, Aggregation Operator and the participating LDCs are fully operational.

Program Triggers:

The primary signal used to initiate a Load Control Event is known as the primary trigger and is linked to system reliability.

If the primary trigger does not result in any Load Control Event during the time blocks (described in this document) over the course of the summer, then the

secondary trigger may be used to have a maximum of three Load Control Events each summer.

Primary Trigger:

The primary trigger for Res DR is the declaration of Energy Emergency Alert (EEA)¹ status at the IESO, which is referenced in the IESO's Systems Operations Manual, Part 7.4: IESO-Controlled Grid Operating Policies under the Emergency Operating State Control Actions. Any level of EEA status will be used to trigger the program. Same day and day-ahead EEA status will be tracked on IESO's System Status Report website (<http://www.ieso.ca/imoweb/marketdata/ssrsaa.asp>).

Standby Notice:

To use the primary trigger, the Dispatch Administrator will issue a Standby Notice² first, using the day-ahead or day-at-hand forecast on IESO's System Status Report website.

The day-ahead notification will be given by the Dispatch Administrator to the Aggregation Operator not later than 18:00 EST.

The day-at-hand notification will be given by the Dispatch Administrator to the Aggregation Operator (i) not earlier than 8:00 EST, (ii) not later than 16:00 EST and (iii) not less than two hours prior to the Activation Time.

Activation Notice:

Once a Standby Notice has been issued based on current or forecasted EEA status at the IESO, the hours of dispatch will be determined based on the lowest supply cushion values on the adequacy report (<http://www.ieso.ca/imoweb/marketdata/adequacy.asp>).

These hours of dispatch will be included in the Activation Notice³ provided by the Dispatch Administrator to the Aggregation operator to initiate a Load Control Event.

¹ The Energy Emergency Alert status at the IESO represents a communication standard developed by NERC that establishes a clear communication protocol in between interconnected reliability coordinators (ISO's) of potential or actual energy emergencies.

² Standby Notice is the process by which Dispatch Administrator informs the Operator that Curtailment may be required during a specified future period and in specified Groupings. The specified period may occur during the next day (referred to as the day-ahead), or the current day (referred to as the day-at-hand).

³ Activation Notice is the process by which the Dispatch Administrator informs the Operator that Curtailment must occur.

1 The Activation Notice will be given by the Dispatch Administrator to the
2 Aggregation Operators (i) not earlier than 08:00 EST, (ii) not later than 18:00 EST
3 and (iii) not less than one hour prior to the commencement of the Activation Period.

4
5 **Secondary Trigger:**
6

7 The secondary trigger is based on a combination of external temperature and system
8 demand, which would make it easier for program participants to understand the link
9 between marketing messages (that the program is likely to be activated on hot days
10 where system demand is high) and the days when a Load Control Event is triggered.

11
12 The secondary trigger can be used when the temperature is 30 degrees Centigrade
13 <http://www.theweathernetwork.com/weather/CAON0696>⁴ and the primary demand is
14 23,000 MW respectively⁵ (<http://www.ieso.ca/imoweb/marketdata/ssrsaa.asp>).
15

16 **Standby Notice:**
17

18 To use the secondary trigger the Dispatch Administrator will issue a Standby Notice
19 first, using the day-ahead or day-at-hand forecast of demand to be on or above 23,000
20 MW and the day-ahead or day-at-hand forecast of temperature to be on or above 30
21 degrees Centigrade.

22 The day-ahead notification will be given by the Dispatch Administrator to the
23 Aggregation Operator not later than 18:00 EST.

24 The day-at-hand notification will be given by the Dispatch Administrator to the
25 Aggregation Operator (i) not earlier than 8:00 EST, (ii) not later than 16:00 EST and
26 (iii) not less than two hours prior to the Activation Time.

27 **Activation Notice:**
28

29 Once a Standby Notice has been issued based on forecasted temperature and demand
30 values, the hours of dispatch will be based on the highest demand and temperature
31 values for that day, where forecasted demand and temperature will be on or above
32 23,000 MW and 30 degrees Centigrade respectively for at least one hour during the
33 Load Control Event.
34

35 These hours of dispatch will be included in the Activation Notice provided by the
36 Dispatch Administrator to the Aggregation operator to initiate a Load Control Event.

⁴ The same data source that the IESO uses for forecasting system demand

⁵ The OPA may revise the temperature and demand values in order to maintain an effective secondary trigger.

1 The Activation Notice will be given by the Dispatch Administrator to the
2 Aggregation Operators (i) not earlier than 08:00 EST, (ii) not later than 18:00 EST
3 and (iii) not less than one hour prior to the commencement of the Activation Period.

4
5 **Secondary trigger dispatch rules:**
6

- 7 • A secondary trigger will only be used a maximum of 3 times during each
8 activation season.
9 • If there is no Load Control Event using the primary trigger until the 5th of June,
10 then the secondary trigger will be used to dispatch the program once.
11 • If only one Load Control Event has taken place until the 5th of July, then the
12 secondary trigger will be used to dispatch the program once.
13 • If only two Load Control Events have taken place until the 1st of August then the
14 secondary trigger will be used to dispatch the program once.

Ontario Energy Board (Board Staff) INTERROGATORY #31 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 38 of 67

Preamble: When discussing the purpose of the Initiative, HONI notes in its second point – provide system benefits – that it will enable the utility to install a load control device in the customers' business, which, when active, will reduce system peak load and increase the reliability of the electricity grid.

- a) Please discuss if having a load control device installed is optional for the participant.
- b) Will customers receive the free EMS system regardless of whether or not they install a load control device?

Response

- a) No, installation of a load control device is not optional for participants. Since the OEB CDM targets include both peak demand savings and reduced energy consumption, participants must install the load control device to qualify for this initiative.
- b) No, customers will not receive a free EMS system if they do not install a load control device.

Ontario Energy Board (Board Staff) INTERROGATORY #32 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 39 of 67

Preamble: HONI has provided a table displaying the budget for its Small Commercial Demand Response Initiative with a total budget of \$15.2M.

- a) Please expand on the budget table provided with further detailed evidence showing the items that make up the following costs that have been included in the budget for:
 - i. Administrative Costs
 - ii. Marketing Costs
 - iii. Turn-key vendor Costs
 - iv. Turn-key vendor (load control & EMS installation) Costs
 - v. Fixed Allocable Overhead Costs
 - vi. Variable Overhead Costs
 - vii. Incentive Costs

Response

The following detailed evidence further expands on the budget table provided:

- i. Administrative Costs: This category includes direct costs associated with internal and external resources used for program management and administration.
- ii. Marketing Costs: This category includes all Third-Party marketing costs to promote the initiative, such as direct mail and bill inserts
- iii. Turn-Key vendor costs: This category includes turn-key vendor program management fee, EMS system and load control device(s) technology costs and installation, and maintenance costs.
- iv. Turn-key vendor (load control & EMS installation) Costs: This category includes estimated costs for the installation of the devices in a typical small commercial premise.
- v. Fixed Allocable Costs: These costs are associated with indirect support provided by various HONI departments (Supply Chain, Legal, Regulatory and Finance support) to the CDM Department and are applied to the fixed costs.

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Exhibit I

Tab 1

Schedule 32

Page 2 of 2

- 1 vi. Variable Overhead Costs: These costs are associated with indirect support provided
2 by various other HONI departments (Supply Chain, Legal, Regulatory and Finance
3 support) to the CDM Department and are applied to the variable costs.
4
- 5 vii. Financial Incentive Costs: This category covers the payment of the annual EMS
6 system access fee on behalf of the customer; and a \$10 incentive per event for up to
7 15 events in a year.
8

Ontario Energy Board (Board Staff) INTERROGATORY #33 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 39 of 67

Preamble: HONI has provided the cost-effectiveness test results for the Small Commercial Demand Response Initiative of: TRC = 1.7 and PAC = 1.9.

- a) Please confirm that HONI complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) Please provide the specific calculations, both TRC and PAC, which yielded the cost-effectiveness results shown in the application.

Response

- a) Hydro One confirms that we complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) As indicated in our submission, the cost effectiveness results are as follows:

Total Resource Cost:

Total Resource Cost (TRC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$25,410,127	\$14,581,006	\$10,829,121	1.7

Where TRC Test Ratio = Benefits / Costs

Program Administrator Cost:

Program Administrator Cost			
Benefits	Costs	Net Benefit	Test Ratio
\$25,410,127	\$13,008,522	\$12,321,606	1.9

Where PAC Ratio = Benefits / Costs

Participant Cost Test:

Participant Cost test			
Benefits	Costs	Net Benefit	Test Ratio
\$9,598,809	\$4,550,619	\$5,048,191	2.1

This test is not required as part of the OPA EM&V Protocol.

Where PC Ratio = Benefits / Costs

The following table outlines the inputs and assumptions used for the calculations of the cost effectiveness tests.

Measure and Input Assumption Sheet

Measure Name: Small Commercial DR

Efficient Technology & Equipment Description

This is an Energy Management and Demand Response Initiative that aims at helping approximately 85,000 small- and medium-size General Service customers (with an average monthly peak demand of up to 200kW) to reduce their energy consumption by 20GWh and peak system demand by 20MW over the term of the Initiative. Hydro One expects to enroll approximately 5,500 customers by the end of 2014.

The program will offer Energy Management Systems tailored to various small business operations as well as load control devices (e.g., switches) for end-use control. The Energy Management System (“EMS”) included in this Initiative will assist in initiating load control events for demand response as well as help customers to take advantage of TOU rates and achieve energy savingsⁱ.

Base Technology & Equipment Description

Commercial premises without Load Control and without an EMS system

Participants and Resource Savings Assumptions:

Participants

Up to 50kw General Service customers:

- 2011: 450 (program roll out starting July)
- 2012, 2013 and 2014: 1,500

Over 50kW but less than 200kW General Service customers:

- 2011: 50 (program roll out starting July)
- 2012, 2013 and 2014: 200

As indicated in our evidence, the total number of participants during the course of this initiative is approximately 5,500.

Electricity *kW and/or kWh*

Demand response:

a) Assumptions for customers with load less than 50kW:

The load reduction for customers with average demand less than 50kW is estimated at 3.2kW. (This estimate is in line with the value in the OPA's 2010 Measures and Assumptions List). With approximately 4,850 participants in this class of customers, the total impact was estimated to be 15.5MW. .

b) Assumptions for customers with load between 50kW and 200kW:

The average load for the 50kW to 200kW customer class in Hydro One's service territory is approximately 80kW. With an expected 10% average peak load reductionⁱⁱ, the total demand response load curtailment impact per customer is estimated at 8kW. With approximately 650 participants in this class of customers, the total impact was estimated to be 5.5MW.

The total expected load impact of this initiative for the above two classes of customers is approximately 21MW, which after free-ridership discount is 20MW as indicated in the evidence.

The load control savings used for the TRC analysis are spread over 8 costing periods (3 winter periods, 3 summer periods and 2 shoulder periods) based on the end-use profile for savings associated with Commercial Load Control Device which is the closest profile to approximate expected demand response impact for this initiative (Source: 2010 OPA Measures and Assumption List).

Energy Savings (Energy Management System):

The commercial customers with less than 200kW load, on average, consume about three times the energy consumption of residential customers. As a conservative estimate, the Energy Management System is assumed to achieve approximately 1,750kWh savings, which is twice the expected savings from a residential customer.

The total expected load impact of this initiative for all the participants is approximately 20.9GWh, which after free-ridership discount is 20.1GWh as indicated in the evidence.

The energy savings in the TRC analysis are spread over 8 costing periods (3 winter

periods, 3 summer periods and 2 shoulder periods) based on the end-use profile for savings associated with IHD devices which is the closest profile to approximate expected energy savings for this initiative (Source: 2010 OPA Measures and Assumption List).
Natural Gas <i>m3 or Btu or CFM</i>
Water

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Other Input Assumptions:

Equipment Life (<i>years</i>)
<ul style="list-style-type: none"> 10 years (based on industry standard for building automation systems as proxy for the Energy Management System used in this initiative)
Incremental Costs (<i>including equipment, operations & maintenance</i>)
<ul style="list-style-type: none"> ■ annual access fee to maintain a two-way communication system, provide online technical assistance and upkeep the system operations (hardware/software).ⁱⁱⁱ
Free Ridership %
<ul style="list-style-type: none"> In this initiative a 4% free-ridership rate is assumed, which is consistent with the OPA Residential Demand Response program.

Incentives

Incentive amount set at \$10 per load control event (up to 15 events per yearⁱ) plus \$120 (\$60 on registration and \$60 at year end) to subsidize the annual subscription fee to maintain a two-way communication system, provide online technical assistance and upkeep the system operations (hardware/software) . All incentives payments will expire December 31, 2014.

Program Cost (excluding incentives)

Program cost includes marketing, program management fees, EMS equipment and installation costs and EM&V. The average cost of the EMS system is estimated at [REDACTED] per installation ([REDACTED] for the equipment, [REDACTED] for maintenance and [REDACTED] for installation)^{iv}

Program Cost			
2011	2012	2013	2014
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

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ⁱ Preliminary studies on this technology were presented at the 20th Annual Esorce Forum and Exhibit, "Automating Demand Response in Commercial & Industrial Facilities", Sept 25-28, 2007

ⁱⁱ Open Automated Demand Response for Small Commercial Buildings, July 2009. Status Report and Associated Compliance Filings, Minnesota Electric and Natural Gas Conservation Improvement Program, 2008

ⁱⁱⁱ These estimates are based on Hydro One's direct experience with residential load control program costs over the last four years

^{iv} These estimates are based on Hydro One's direct experience with residential load control program costs over the last four years

Ontario Energy Board (Board Staff) INTERROGATORY #34 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 41-44 of 67

Preamble: HONI has provided a draft evaluation plan for its proposed Small Commercial Demand Response Initiative.

- a) Please discuss if HONI will combine its EM&V efforts for this program with Hydro One Brampton Networks Inc.?
- b) If the response to (a) is no, please expand on HONI's rationale for not combining its EM&V efforts with Hydro One Brampton Networks Inc. even though, if approved, the two utilities will be offering the same program.

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 8, part d.
- b) Please see response in (a).

Ontario Energy Board (Board Staff) INTERROGATORY #35 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 43-44 of 67

Preamble: Within the Draft Evaluation Plan for the Small Commercial Demand Response Initiative are three areas that HONI has noted further development is necessary. These three areas are the Data Collection Responsibilities to Support Program Evaluation, Evaluation Schedule and Budget, and the Evaluation Team.

- a) Please provide any and all updates to the Data Collection Responsibilities to Support Program Evaluation section.
- b) Has HONI agreed to terms with a third party EM&V expert to assist in ensuring that complete and appropriate collection of data to support program evaluation is acquired?
- c) If the answer to (b) is yes, who has HONI agreed to terms with?
- d) If the answer to (b) is no, please discuss the process and schedule for which HONI plans to have a third party EM&V expert in place.
- e) Please provide an update to the Evaluation Schedule and Budget table, updating all the items where HONI has "TBD".
- f) Please confirm that HONI included the total EM&V budget in the calculation when completing the cost effectiveness tests.
- g) Please provide an update to the Evaluation Team table, updating all the items where HONI has "TBD".

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 9, part a.
- b) Please refer to Exhibit I, Tab 1, Schedule 9, part b.
- c) Please see response in (b).
- d) Please refer to Exhibit I, Tab 1, Schedule 9, part d.
- e) Please refer to Exhibit I, Tab 1, Schedule 9, part e.
- f) Please refer to Exhibit I, Tab 1, Schedule 9, part f.
- g) Please refer to Exhibit I, Tab 1, Schedule 9, part h.

Ontario Energy Board (Board Staff) INTERROGATORY #36 List 1

Interrogatory

Municipal and Hospital Energy Efficiency Performance – Initiative #5

Reference: Exhibit C, Tab 1, Schedule 2, Page 46 of 67

Preamble: HONI notes that the proposed OPA-Contracted Province-Wide commercial and industrial CDM programs (i.e. Electricity Retrofit Incentive Program and the Power Savings Blitz) offer incentives based on capital investment and equipment replacement by the participant whereas the proposed Municipal and Hospital Energy Efficiency Performance Initiative focuses on organizational best practices in energy management and efficiency and overall energy performance improvements, therefore making it unique from the OPA offering.

- a) Please discuss the process that HONI followed in determining if the Municipal and Hospital Energy Efficiency Performance Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs. Provide all correspondence and documentation between HONI and the OPA that addresses the fact that the Municipal and Hospital Energy Efficiency Performance Initiative does not duplicate an OPA-Contracted Province-Wide CDM Program.
- b) Has HONI discussed customizing the ERIP and/or Power Savings Blitz programs with the OPA to include incentives based on organizational best practices in energy management and overall energy performance improvements?

Response

- a) The process that HONI followed in determining if the Municipal and Hospital Energy Efficiency Performance Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs is described in Exhibit B, Tab 1, Schedule 2, Page 3 of 24, and Exhibit C, Tab 1, Schedule 2, page 46 of 67, namely:

“Hydro One has acquired extensive understanding of the OPA-Contracted CDM Programs through its participation in the OPA design working groups. This knowledge, coupled with a comprehensive understanding of Hydro One’s customers within its service territory, allowed Hydro One to identify the CDM potential that is not addressed by the existing OPA-Contracted CDM programs. All Board-Approved CDM programs proposed in this Application are designed to target these ‘untapped’ areas and they are not duplicative of the existing OPA-Contracted CDM programs.”

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Exhibit I

Tab 1

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1 This program is non-duplicative of the OPA Province-Wide Programs. Please refer
2 to Exhibit I, Tab 1, Schedule 4, Attachment 1.

3

4 b) No. HONI has not requested the OPA to redesign its Province-Wide CDM Programs
5 to address the Municipal and Hospital Energy Efficiency Performance Initiative's
6 unique approach to energy efficiency.

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Ontario Energy Board (Board Staff) INTERROGATORY #37 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 46 of 67

Preamble: HONI notes that one element of Initiative #5 is that participants will be required to sign a memorandum of understanding (“MoU”) committing to a series of tasks.

- a) Please discuss what will happen if a participant fails to meet and/or adhere to any of the commitments found within the MoU.

Response

- a) Only organizations that are fully committed to the program will be enrolled. The MoU is intended to be signed at senior levels of an organization which will provide a certain level of commitment from senior management that they will indeed take advantage of all of the offering that the program will provide and that they will in turn undertake a series of tasks.

Should the participant fail to meet any of the commitments in the MoU then HONI will enter into discussions to determine what the barriers are and how to successfully overcome them.

In the event the barriers are not surmountable, then the customer will be ineligible for incentives and/or training and technical support offered by the initiative.

Ontario Energy Board (Board Staff) INTERROGATORY #38 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 50 of 67

Preamble: HONI has provided a table displaying the budget for its Municipal-Hospital Energy Efficiency Performance Initiative with a total budget of \$3.95M.

- a) Please expand on the budget table provided with further detailed evidence showing the items that make up the following costs that have been included in the budget for:
- i. Administrative Costs
 - ii. Marketing Costs
 - iii. CDM Specialist Costs
 - iv. Third Party Project Review Costs
 - v. Membership/Tools/Training Costs
 - vi. Performance Review/Audits Costs
 - vii. Fixed Overhead Costs
 - viii. Variable Overhead Costs
 - ix. Incentive Costs

Response

The following detailed evidence further expands on the budget table provided:

- i. Administrative Costs: typically this category of costs includes direct costs associated with internal and external resources used for program management and administration.
- ii. Marketing Costs: includes all Third-Party marketing costs to promote the initiative, such as direct mail and bill inserts.
- iii. CDM Specialist Costs: Third-Party CDM Consultant costs.
- iv. Third Party Project Review Costs: Cover the costs of Third-Party review of participant energy efficiency projects and/or overall performance and on-site inspections as required.
- v. Membership/Tools/Training Costs: These costs cover the amount available per participating customer for the enabling elements of the initiative available (Membership, training or tools).

- vi. Audits Costs: Cover the costs associated with feasibility assessments and/or audits for buildings or systems.
- vii. Fixed Overhead Costs: These costs are associated with indirect support provided by various Hydro One departments (Supply Chain, Call Centre, Legal, Regulatory and Finance support) to the CDM Department. and are applied to the fixed costs.
- viii. Variable Overhead Costs: These costs are associated with indirect support provided by various other Hydro One departments (Supply Chain, Call Centre, Legal, Regulatory and Finance support) to the CDM Department and are applied to the variable costs.
- ix. Incentive Costs: Cover the payment of efficiency incentives of \$0.075 per kWh for the greater of overall energy efficiency performance over benchmarked consumption, or the estimated efficiency (kWh) for retrofitted measures.

Ontario Energy Board (Board Staff) INTERROGATORY #39 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 50 of 67

Preamble: HONI has provided the cost-effectiveness test results for the Municipal-Hospital Energy Efficiency Performance Initiative of: TRC = 1.4 and PAC = 1.1.

- a) Please confirm that HONI complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) Please provide the specific calculations, both TRC and PAC, which yielded the cost-effectiveness results shown in the application.

Response

- a) HONI confirms that we complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) As indicated in our submission, the cost effectiveness results are as follows:

Total Resource Cost:

Total Resource Cost (TRC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$4,041,638	\$2,925,201	\$1,116,437	1.4

TRC Test Ratio = Benefits / Costs

Program Administrator Cost:

Program Administrator Cost			
Benefits	Costs	Net Benefit	Test Ratio
\$4,041,638	\$3,605,690	\$276,758	1.1

TRC Test Ratio = Benefits / Costs

Participant Cost (PC) Test

Participant Cost (PC) Test			
Benefits	Costs	Net Benefit	Test Ratio
6,811,200	294,145	6,517,055	23.2

PC Test Ratio = Benefits / Costs

The following table outlines the inputs and assumptions used for the calculations of the cost effectiveness tests:

Measure and Input Assumption Sheet

Measure Name: Municipal & Hospitals

Efficient Technology & Equipment Description

The Municipal and Hospital Energy Efficiency Performance Program provides monetary incentives to municipal and hospital customers for overall electrical energy efficiency reductions within facilities and across their portfolio. This initiative requires participants to commit to continuous electrical energy management and efficiency action plans resulting in improvements year over year. Hydro One expects that the unique offerings (as described in our submission) of the initiative will assist in transforming this segment by entrenching energy efficiency and energy conservation as a core best practice within their organizations.

Base Technology & Equipment Description

Current processes and practices

Resource Savings Assumptions:

Participants

Hydro One expects to enroll roughly 7.5% of the potential customers or a minimum of 6 hospitals and 27 Municipalities from 2011 to 2014

Breakdown by type of participants:

- 6 hospitals
- 15 large municipalities
- 8 medium municipalities
- 4 small Municipality

Electricity <i>kW and/or kWh</i>
<p>Peak Demand Savings: The average peak demand reduction per participant is estimated at 33kW for the duration of the initiative..</p> <p>The average annual energy saving is also estimated at 10%</p> <p>Energy Savings: The average energy savings per participant is estimated at 773MWh for the duration of the initiative..</p> <p>Persistence The results for each participant will consist of savings achieved through either equipment and/or behavioral changes that are assumed to persist from the time of customer enrollment to December 31, 2014.</p> <p>The incentive structure is designed such that participants will be paid for any incremental energy savings achieved from the date of customer participation to December 31, 2014.</p> <p>The energy savings in the TRC analysis are spread over 8 costing periods (3 winter periods, 3 summer periods and 2 shoulder periods) based on the end-use profile for this customer class derived from Hydro One data.</p>
Natural Gas <i>m3 or Btu or CFM</i>
<p>Gas savings are not included in the TRC analysis at this time. However, Hydro One is currently exploring the opportunities for collaborating with the gas utilities on this initiative.</p>
Water
<p>Water savings are not included in the TRC analysis at this time. However, Hydro One will be exploring opportunities for including water savings in this initiative</p>

Other Input Assumptions:

Equipment Life (years)
<ul style="list-style-type: none">Capital Equipment: 16 years (lighting measures were used as a proxy for a typical project; source: 2010 OPA Measures and Assumption List)
Incremental Costs (including equipment, operations & maintenance)
<p>Lighting measures were used as a proxy for a typical project; source: 2010 OPA Measures and Assumption List.</p> <ul style="list-style-type: none">\$20,000 (\$50*400 Fixtures):average incremental cost for a large municipality (retrofits from 400W Metal Halide to T5 technologies)\$10,000 (\$50*200 Fixtures): average incremental cost for a medium size municipality (retrofits from 400W Metal Halide to T5 technologies) <p>Likelihood of small municipalities to undertake capital projects is assumed to be minimal in comparison to medium and large size municipalities and so has not been considered for program modeling.</p>
Free Ridership %
<p>The Free Ridership rate is assumed to be 20% which was estimated based on the past experience with this segment and it will be subject to verification through the EM&V process.</p>
Incentives
<p>Participating customers will be eligible to receive a financial incentive at [REDACTED] for incremental energy performance improvements. Incentives will be paid out annually on the higher of the overall verified performance savings or the deemed energy savings from equipment retrofits. For a given participant, incentives will be paid out from year to year for only new incremental energy and load savings.</p>

Program Cost by year			
2011	2012	2013	2014

3

Ontario Energy Board (Board Staff) INTERROGATORY #40 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 52-56 of 67

Preamble: HONI has provided a draft evaluation plan for its proposed Municipal-Hospital Energy Efficiency Performance Initiative.

- a) Please discuss if HONI will combine its EM&V efforts for this program with Hydro One Brampton Networks Inc.?
- b) If the response to (a) is no, please expand on HONI's rationale for not combining its EM&V efforts with Hydro One Brampton Networks Inc. even though, if approved, the two utilities will be offering the same program.

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 8, part d.
- b) Please see response in (a).

Ontario Energy Board (Board Staff) INTERROGATORY #41 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 55-56 of 67

Preamble: Within the Draft Evaluation Plan for the Municipal-Hospital Energy Efficiency Performance Initiative are three areas that HONI has noted further development is necessary. These three areas are the Data Collection Responsibilities to Support Program Evaluation, Evaluation Schedule and Budget, and the Evaluation Team.

- a) Please provide any and all updates to the Data Collection Responsibilities to Support Program Evaluation section.
- b) Has HONI agreed to terms with a third party EM&V expert to assist in ensuring that complete and appropriate collection of data to support program evaluation is acquired?
- c) If the answer to (b) is yes, who has HONI agreed to terms with?
- d) If the answer to (b) is no, please discuss the process and schedule for which HONI plans to have a third party EM&V expert in place.
- e) Please provide an update to the Evaluation Schedule and Budget table, updating all the items where HONI has "TBD".
- f) Please confirm that HONI included the total EM&V budget in the calculation when completing the cost effectiveness tests.
- g) Please provide an update to the Evaluation Team table, updating all the items where HONI has "TBD".

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 9, part a.
- b) Please refer to Exhibit I, Tab 1, Schedule 9, part b.
- c) Please see response in (b).
- d) Please refer to Exhibit I, Tab 1, Schedule 9, part d.
- e) Please refer to Exhibit I, Tab 1, Schedule 9, part e.
- f) Please refer to Exhibit I, Tab 1, Schedule 9, part f.
- g) Please refer to Exhibit I, Tab 1, Schedule 9, part h.

Ontario Energy Board (Board Staff) INTERROGATORY #42 List 1

Interrogatory

Double Return Plus – Initiative #6

Reference: Exhibit C, Tab 1, Schedule 2, Page 58 of 67

Preamble: HONI describes the Double Return Plus Initiative and highlights the fact that it is based on targeting non-dispatchable load and that it also aims at reducing energy consumption, whereas the OPA's Demand Response programs are based on dispatchable load control and, as a result, have minimal energy savings.

- a) Please discuss the process that HONI followed in determining if the Double Return Plus Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs. Provide all correspondence and documentation between HONI and the OPA that addresses the fact that the Double Return Plus Initiative does not duplicate an OPA-Contracted Province-Wide CDM Program.
- b) Has HONI received confirmation from the OPA that OPA programs cannot be customized to meet the stated goals of the Double Return Plus program HONI has discussed in its application?

Response

- a) The process that HONI followed in determining if the Double Return Plus Initiative does not duplicate any of the OPA-Contracted Province-Wide CDM Programs is described in Exhibit B, Tab 1, Schedule 2, Page 3 of 24, and Exhibit C, Tab 1, Schedule 2, page 58 of 67, namely:

“Hydro One has acquired extensive understanding of the OPA-Contracted CDM Programs through its participation in the OPA design working groups. This knowledge, coupled with a comprehensive understanding of Hydro One's customers within its service territory, allowed Hydro One to identify the CDM potential that is not addressed by the existing OPA-Contracted CDM programs. All Board-Approved CDM programs proposed in this Application are designed to target these ‘untapped’ areas and they are not duplicative of the existing OPA-Contracted CDM programs.

This program is non-duplicative of the OPA Province-Wide Programs. Please refer to Exhibit I, Tab 1, Schedule 4, Attachment 1.

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Exhibit I

Tab 1

Schedule 42

Page 2 of 2

- 1 b) No. HONI has not requested the OPA to redesign its Province-Wide CDM Programs
- 2 to address the unique features of Double Return Plus Initiative (non-dispatchable load
- 3 control and energy consumption reduction).
- 4

Ontario Energy Board (Board Staff) INTERROGATORY #43 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 58-59 of 67

Preamble: HONI states at the bottom of page 58 that the OPA has already approved the Double Return program as a Custom Program distinct from the OPA's Demand Response 1/Demand Response 3 programs, and all three programs coexisted in the marketplace in 2008 and 2009.

- a) Please discuss why HONI has decided to come to the Board for approval of the Double Return Plus program rather than working with the OPA to offer the program as a customized demand response offering?
- b) Please provide the rationale for not pursuing administrative efficiencies and partnering with either the OPA or other LDCs, given the success and popularity of the first generation Double Return program amongst Hydro One's customers as well as other stakeholders, and deciding to apply for Board approval on a stand-alone basis.

Response

- a) In 2008 and 2009, the OPA had in place a "custom applications" process for LDCs, through which HONI secured OPA funding for the Double Return Program. In the 2011 to 2014 period, the OPA custom application process is discontinued and therefore HONI is no longer able to offer the program as a customized initiative.
- b) HONI has discussed the Double Return Plus initiative with other LDCs and is prepared to leverage resources where it is appropriate and cost effective to do so. As for partnering with the OPA, the Double Return Plus initiative should be assessed on a utility by utility basis to ensure it is a good fit for the LDCs' rate structure and appropriate for their customer base. Thus the application of the proposed initiative for a Province-Wide program remains a challenge.

1 **Ontario Energy Board (Board Staff) INTERROGATORY #44 List 1**

2
3 **Interrogatory**

4
5 Reference: Exhibit C, Tab 1, Schedule 2, page 59 of 67

6
7 Preamble: HONI notes that the Double Return Plus Initiative will also offer free expert
8 on-site visits to identify specific opportunities in customers' facilities.

- 9
10 a) Will the free expert on-site visits be a one-time event or happen periodically (i.e.
11 annually)?

12
13
14 **Response**

- 15
16 a) Site visits are provided upon customer request and they are entitled to a free on-site
17 visit on an annual basis.

Ontario Energy Board (Board Staff) INTERROGATORY #45 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 61 of 67

Preamble: HONI notes that the Double Return Plus Initiative targets the pursuit of continuous and deeper energy savings beyond the traditional commercial and institutional CDM programs that focus only on technology or equipment replacement.

- a) Please discuss if HONI suggested altering the OPA's demand response programs to allow for more than technology or equipment replacements during the consultation and working groups that developed the OPA-Contracted Province-Wide suite of CDM programs.
- b) If HONI did not offer this suggestion during the forum, please provide the rationale for not doing so.

Response

- a) No. Please see response to (b)
- b) HONI did not suggest altering the OPA's demand response programs for the following reasons:
 - DR1/DR3 is fundamentally different from the proposed initiative. DR1/DR3 are focused on building dispatchable load capacity on a contractual basis, while Double Return Plus is a non dispatchable initiative that focuses on managing customer peak load and achieving energy savings.
 - The financial incentive mechanisms of DR1/DR3 versus Double Return Plus are also fundamentally different. Double Return Plus incentives are based on utility specific delivery charges, while DR1/DR3 incentives are based on contractually agreed to payments.

Ontario Energy Board (Board Staff) INTERROGATORY #46 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 61 of 67

Preamble: HONI notes that the Double Return Plus Initiative is projected to achieve 21 MW peak reduction by the end of 2014 and that a portion of the peak reduction will have one year persistence attributable to behavioural changes, and the remaining peak reduction will have multi-year persistence attributable to the application of the load management system.

- a) Please provide further evidence showing the portion of peak reductions HONI projects that will be attributable to behavioural changes and the portion of peak reductions HONI projects that will be attributable to the load management system.

Response

- a) This program is expected to achieve 21MW in peak demand savings, 5MW of which are estimated to be attributable to the behavioral component, and the remaining 16MW to the load management component.

Ontario Energy Board (Board Staff) INTERROGATORY #47 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 62 of 67

Preamble: HONI has provided a table displaying the budget for its Double Return Plus Initiative with a total budget of \$4.1M.

- a) Please expand on the budget table provided with further detailed evidence showing the items that make up the following costs that have been included in the budget for:
- i. Administrative Costs
 - ii. Marketing Costs
 - iii. Site visits/verification costs
 - iv. Turn-key vendor/ load balancing costs
 - v. Fixed Overhead Costs
 - vi. Variable Overhead Costs
 - vii. Financial Incentive Costs

Response

The following detailed evidence further expands on the budget table provided:

- i. Administrative Costs: This category includes tracking results, financial monitoring, processing invoices and reporting to various stakeholders.
- ii. Marketing Costs: This category includes production of collateral material, direct mail, call centre, as well as a range of behind-the meter services such as online technical services.
- iii. Site visits/verification costs: Site visits include cost for third-party experts procured to identify specific opportunities in customers' facilities and generating audit reports for customers. Verification costs include work that HONI staff and Third Party vendors carry out to verify peak demand reduction, energy savings and other performance indicators.
- iv. Turn-key vendor/ load balancing costs: This category includes the funding for the Load Balancing system and the service fees for maintenance, data analysis and reporting, etc.

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Exhibit I

Tab 1

Schedule 47

Page 2 of 2

- 1 v. Fixed Overhead Costs: These costs are associated with indirect support provided by
2 various HONI departments (Supply Chain, Legal, Regulatory and Finance support) to
3 the CDM Department
4
- 5 vi. Variable Overhead Costs: These costs are associated with indirect support provided
6 by various HONI departments (Supply Chain, Legal, Regulatory and Finance
7 support) to the CDM Department
8
- 9 vii. Financial Incentive Costs: This category includes the performance incentive amount
10 offered to eligible customers and is based on the reduction of customer delivery
11 charges.
12

Ontario Energy Board (Board Staff) INTERROGATORY #48 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 63 of 67

Preamble: HONI has provided the cost-effectiveness test results for the Double Return Plus Initiative of: TRC = 11.3 and PAC = 7.4.

- a) Please confirm that HONI complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) Please provide the specific calculations, both TRC and PAC, which yielded the cost-effectiveness results shown in the application.
- c) Please discuss if HONI shared the cost effectiveness test results shown above with the OPA.
- d) If the response to (c) is that HONI has not shared the results with the OPA, please discuss the rationale for not doing so.

Response

- a) HONI confirms that we complied with Section 4.1.1 of the CDM Code and used the OPA's Cost Effectiveness Tests.
- b) As indicated in our submission, the cost effectiveness results are as follows:

Total Resource Cost:

Total Resource Cost (TRC) Test			
Benefits	Costs	Net Benefit	Test Ratio
\$25,746,222	\$2,222,580	\$23,000,166	11.3

Where TRC Test Ratio = Benefits / Costs

Program Administrator Cost:

Program Administrator Cost			
Benefits	Costs	Net Benefit	Test Ratio
\$25,746,222	\$3,402,626	\$21,820,120	7.4

Where PAC Test Ratio = Benefits / Costs

Participant Cost Test:

Participant Cost			
Benefits	Costs	Net Benefit	Test Ratio
\$10,586,622	\$493,571	\$10,093,051	21.4

This test is not required as part of the OPA EM&V Protocol.

Where PC Test Ratio = Benefits / Costs

The following table outlines the inputs and assumptions used for the calculations of the cost effectiveness tests:

Measure and Input Assumption Sheet

Measure Name: Double Return Plus

Efficient Technology & Equipment Description

The Double Return Plus Initiative (“DRP”) targets approximately 900 interval-metered commercial and industrial (“C/I”) customers with an average monthly peak load in excess of 200 kW. The objective of this Initiative is to reduce the customers’ peak demand, which, in turn, is expected to reduce the total system peak demand by up to 21 MW. This Initiative has an expected program cost of \$4.1 million (approximately \$200/kW) inclusive of incentives.

The Double Return Plus Initiative has two components: a peak demand reduction and an energy efficiency component. This Initiative encourages the customers to reduce their summer peak demand relative to their summer peak demand in the previous year by at least 5%. The load reduction and the energy efficiency savings will be achieved in part through operational changes and partly through the use of a load management system. The proposed Initiative will fund 50% of the cost of a load management system, up to a maximum of [REDACTED].

Base Technology & Equipment Description

Customers without a load management system

Resource Savings Assumptions:

Participants

Hydro One expects to enroll approximately 4% of the eligible participants on an annual basis (130 customers between 2011 and 2014). Participation rate of the Double Return Plus Initiative is based on the past experience with the Double Return program. The expected results for the proposed initiative have been adjusted downward to reflect the more stringent customer eligibility rules and requirements.

2011 -2012

60 participants

2013-2014

70 participants

Electricity *kW and/or kWh*

Peak Savings Assumptions per customers:

2011-2012

- an average of 240kW per participant through behavioral change only - 1 year persistence

(based on Hydro One's past experience)

- an average of 60kW per participant through Load Management - multi-year persistence

2013-2014

- an average of 240kW per participant through behavioral change only - 1 year persistence

Note: on average 50% of these results will be accounted for in the 2014 results

- an average of 60kW per participant through Load Management – multi-year persistence)

The final results in 2014 will consist of results achieved through the behavioural changes in the final year of the program plus all the results achieved through the Load Management system. This will result in an average of 162kW per participant from 2011 to 2014 to a total of 21MW for approximately 130 participants in the program.

Energy Savings Assumptions:

2011-2014

- an average of 220MWh per participant will be achieved through behavioral changes only
(based on Hydro One's past experience)

- an average of 55MWh per participant will be achieved through Load Management

The final results in 2014 will consist of all the MWh savings achieved over the course of this initiative. This will result in an average of approximately 400MWh per participant from 2011 to 2014 to a total of 52GWh for approximately 130 participants in the program

The energy savings in the TRC analysis are spread over 8 costing periods (3 winter periods, 3 summer periods and 2 shoulder periods) based on the end-use profile for this class of customers derived from previous program experience

Natural Gas *m3 or Btu or CFM*

Water

Other Input Assumptions:

Equipment Life (*years*)

Equipment life assumptions:

- 1 Year for behavioral
- 10 years for Load Management system

Load Balancing: Based on a presentation from a specialized demand response consultant

Incremental Costs (*including equipment, operations & maintenance*)

█ (Load Management system);
█ (annual server access fee) ;
assumptions based on discussions with third party vendors

Free Ridership %			
<ul style="list-style-type: none"> Free Ridership assumed to be zero. Based on previous Double Return results, where all savings were screened to exclude Free Riders 			
Incentives			
<ul style="list-style-type: none"> - an average of [REDACTED] per participant for the customer performance incentives (based on past experience¹) - up to [REDACTED] financial assistance towards 50% of the cost of the Load Management system. 			
Program Cost (excluding incentives)			
Program cost includes administration, marketing, and deployment (including Site Visits, etc.), and EM&V			
Program Cost by year			
2011	2012	2013	2014
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

- 1
- 2 c) No, HONI has not shared the cost effectiveness test results with the OPA for the
- 3 proposed Double Return Plus initiative.
- 4
- 5 d) The cost effectiveness of this initiative, in terms of TRC results, has been well
- 6 documented and publicly available since 2007, when HONI itemized all calculations
- 7 in the 2007 MARR Annual Report. HONI has also shared the cost effectiveness
- 8 calculations and results when applying for funding to OPA for the delivery of Double
- 9 Return in 2008 and 2009 as custom program.
- 10

¹ Past experience with Double Return program showed average rebate at \$10,000 for customer performance incentives.

Ontario Energy Board (Board Staff) INTERROGATORY #49 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 64-67 of 67

Preamble: HONI has provided a draft evaluation plan for its proposed Double Return Plus Initiative.

- a) Please discuss if HONI will combine its EM&V efforts for this program with Hydro One Brampton Networks Inc.?
- b) If the response to (a) is no, please expand on HONI's rationale for not combining its EM&V efforts with Hydro One Brampton Networks Inc. even though, if approved, the two utilities will be offering the same program.

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 8, part d.
- b) Please see response in (a).

Ontario Energy Board (Board Staff) INTERROGATORY #50 List 1

Interrogatory

Reference: Exhibit C, Tab 1, Schedule 2, Page 66-67 of 67

Preamble: Within the Draft Evaluation Plan for the Double Return Plus Initiative are three areas that HONI has noted further development is necessary. These three areas are the Data Collection Responsibilities to Support Program Evaluation, Evaluation Schedule and Budget, and the Evaluation Team.

- a) Please provide any and all updates to the Data Collection Responsibilities to Support Program Evaluation section.
- b) Has HONI agreed to terms with a third party EM&V expert to assist in ensuring that complete and appropriate collection of data to support program evaluation is acquired?
- c) If the answer to (b) is yes, who has HONI agreed to terms with?
- d) If the answer to (b) is no, please discuss the process and schedule for which HONI plans to have a third party EM&V expert in place.
- e) Please provide an update to the Evaluation Schedule and Budget table, updating all the items where HONI has "TBD".
- f) Please confirm that HONI included the total EM&V budget in the calculation when completing the cost effectiveness tests.
- g) Please provide an update to the Evaluation Team table, updating all the items where HONI has "TBD".

Response

- a) Please refer to Exhibit I, Tab 1, Schedule 9, part a.
- b) Please refer to Exhibit I, Tab 1, Schedule 9, part b.
- c) Please see response in (b).
- d) Please refer to Exhibit I, Tab 1, Schedule 9, part d.
- e) Please refer to Exhibit I, Tab 1, Schedule 9, part e.
- f) Please refer to Exhibit I, Tab 1, Schedule 9, part f.
- g) Please refer to Exhibit I, Tab 1, Schedule 9, part h.