



Released November 30, 2005

**THE YORK REGION DEMAND RESPONSE RFP**

**REQUEST FOR PROPOSALS**

**FOR APPROXIMATELY 20.0 MW OF DEMAND RESPONSE IN**

**NORTHERN YORK REGION**

**Issued: November 30, 2005**

**Proposal Submission Deadline: January 20, 2006 at 3:00 p.m. (EST)**

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## 1.0 INTRODUCTION

### 1.1 Background

On June 15, 2005, the Ontario Minister of Energy directed the Ontario Power Authority (the “**OPA**”) to commence several procurement processes, including one for 250 megawatts (MW) or more of demand side management and/or demand response initiatives from across the province, with a particular focus on the cities of Toronto, Mississauga, Brampton and Oakville (the “**Ministerial Directive**”). This Request for Proposals and all addenda properly added hereto (the “**York Region DR RFP**”) is just one of the initiatives that the OPA will be undertaking to meet the Ministerial Directive and enhance demand side management and demand response in Ontario.

The OPA has confirmed that, as a result of the rapid growth of the York Region, the electricity supply infrastructure in the area has exceeded its planned capability. The communities served by the Armitage Transformer Station (“**Armitage**”) have been identified as being among those with the greatest need. Indeed, the planning limits for the transformers at Armitage have already been exceeded. To address the critical issues faced by these communities, the OPA has recommended that immediate action be taken to increase the number of static capacitors at Armitage and to begin construction of a new transformer station in the vicinity of Holland Junction. However, urgent action is also required to implement local demand response as quickly as possible, preferably by May 1, 2006.

Accordingly, this York Region DR RFP has targeted Armitage for the first step in fulfilling the Ministerial Directive with respect to demand response, and invites interested parties to submit Proposals for demand response projects located in the Northern York Region as more particularly designated in the diagram attached as Appendix B.

In the near term, local demand response has a critical role to play in reducing the stress on Armitage. In the longer term, Hydro One has proposed transmission solutions that are currently under consideration by the Ontario Energy Board (the “**OEB**”). These proposed solutions, which include the construction of a new transformer station in the Holland Junction area, will alleviate the threat of overloading at Armitage in the longer term. Therefore, as set out in Section 5.0 below, the contract to be signed by Selected Proponents under this York Region DR RFP (the “**Contract**”) will be limited to a term of five (5) years (the “**Term**”).

This York Region DR RFP describes all of the terms and conditions relating to the OPA’s process of procuring approximately 20.0 MW of demand response (the “**Target Capacity**”) in the Northern York Region, which process will culminate in the execution of the OPA’s form of Contract by the Selected Proponent(s). The Contract has been posted to the section of the Ontario Electricity RFP website ([www.ontarioelectricityrfp.ca](http://www.ontarioelectricityrfp.ca)) dedicated to this York Region DR RFP (the “**RFP Website**”) for review by interested parties.

### 1.2 Communications

The York Region DR RFP, the Contract, and all addenda relating thereto will be public and accessible via the RFP Website. Interested parties are advised to examine all such documentation in detail and to:

- report any errors, omissions or ambiguities; and
- send any questions they may have regarding this York Region DR RFP and the Contract,

through the RFP Website, in writing, on or before the end of the Question and Comment Periods noted in the timetable in Section 4.1(a) (the “**Timetable**”). No such communications are to be directed to any person or in any manner other than through the RFP Website. All questions, comments, and responses will be posted on the RFP Website, but the identity of any interested party asking any question or posting any comment will not be revealed. It is the responsibility of any interested party to seek clarification by submitting questions or comments on any matter that it considers to be unclear. The OPA shall not be responsible for any misunderstanding with respect to any aspect of this York Region DR RFP or the Contract on the part of any interested party or Registered Participant.

As noted in the Timetable, the OPA will be holding a second public technical information session regarding this York Region DR RFP on December 2, 2005 for all interested parties. The session will be held from 10 a.m. to 12 p.m. at the Ontario Club in downtown Toronto (5th Floor, Commerce Court South, 30 Wellington Street West (Northeast Corner of Bay & Wellington)).

All interested parties that register pursuant to Section 1.3 and become a Registered Participant, as defined in Section 1.3, prior to the deadline set out in the Timetable will have an additional opportunity to ask questions and make comments during the second question and comment period, which will be restricted to Registered Participants.

With the exception of any questions and comments that are sent to the RFP Website during the first or second question and comment period as noted above, interested parties (which shall include Registered Participants and Proponents) may contact the OPA at any time during this procurement process in connection with a procedural matter related to the submission of a Proposal by sending an e-mail to [procurement.yorkdr@powerauthority.on.ca](mailto:procurement.yorkdr@powerauthority.on.ca). This e-mail account will be monitored by representatives of the OPA who will acknowledge receipt of each e-mail within a reasonable time after it has been received, and who may respond to any such inquiry and/or make such e-mail and its response public by posting them on the RFP Website without revealing the identity of the interested party or Registered Participant making such inquiry.

Proponents are advised that a failure on the part of a Proponent to restrict its communication with the OPA to the communications channels prescribed in this York Region DR RFP may lead to the disqualification of their Proposal(s).

### **1.3 Becoming a Registered Participant**

Interested parties are advised that, prior to submitting a Proposal in response to this York Region DR RFP, an interested party must first register and become a “Registered Participant” with respect to each proposed Project pursuant to this York Region DR RFP. To register, an interested party must complete and submit a York Region DR RFP registration form (the “**Registration Form**”) and pay to the OPA a non-refundable registration fee of \$5,000 plus GST (the “**Registration Fee**”). The Registration Form can be found at Appendix J of this York Region DR

RFP. The Registration Fee shall not be refundable under any circumstances including, but not limited to, circumstances where a Registered Participant decides not to submit a Proposal for the proposed Project under this York Region DR RFP. An interested party must complete a separate Registration Form and pay a separate Registration Fee for each Proposal that it intends to submit in response to this York Region DR RFP. An interested party will be required to pay all Registration Fees by way of a certified cheque or a bank draft issued by a financial institution listed in either Schedule I or II of the *Bank Act* (Canada) made out in favour of “Ontario Power Authority”.

The Registration Form and Registration Fee should be sent to the OPA before the deadline for becoming a Registered Participant on December 8, 2005 at the following address:

Ontario Power Authority  
Richmond-Adelaide Centre  
120 Adelaide Street West  
Suite 1600  
Toronto, Ontario  
M5H 1T1

Attention: York Region DR RFP

The onus remains solely with the Registered Participant to instruct courier and delivery personnel to deliver its Registration Form and Registration Fee to the exact location specified above by the deadline. The OPA will not be responsible for late deliveries.

Each Registered Participant will have the option to schedule up to two optional individual information sessions to discuss the proposed Project with representatives of the OPA’s project team during the period for individual information sessions with Registered Participants set out in the Timetable presented in Section 4.1(a).

All scheduling requests for information sessions should be sent by Registered Participants to [procurement.yorkdr@powerauthority.on.ca](mailto:procurement.yorkdr@powerauthority.on.ca) providing a contact name and phone number to arrange the information session(s).

The purpose of these individual information sessions is to provide each Registered Participant with an opportunity to meet with the OPA project team and to discuss the York Region DR RFP process, the Contract, and, on a confidential basis, the technical elements of their proposed Project. These information sessions are being offered only to Registered Participants and only as an aid to their understanding of this York Region DR RFP and the Contract. The Fairness Advisor will attend all individual information sessions, but there will be no verbatim recording of the information sessions. Interested parties are advised that information sessions do not form part of the evaluation process and there will be no pre-approval or pre-vetting of any Proposal or of any proposed Project during such sessions. Each information session will be divided into two parts:

### *Part 1 - Clarification of the RFP and the Contract*

During the first part of an individual information session, a Proponent will have the opportunity to submit comments and input with respect to this York Region DR RFP and the Contract. All such comments and input will be accepted for due consideration by the OPA and any new information that is provided by the OPA to a Proponent will be made available to all Registered Participants via the website.

### *Part 2 - Confidential Technical Discussion*

During the second part of an individual information session, a Proponent will have the opportunity to discuss the technical specifications of their proposed Project with the OPA on a confidential basis. However, the OPA will not render any opinion on the proposed Project and no discussion will be permitted with respect to a Proponent's Economic Bid Statement or matters affecting price. Notwithstanding the foregoing, a Proponent may seek clarification of the Contract terms during the second part of the information session. At the end of each session, a Registered Participant will be asked to declare what project-specific information is to be kept confidential. The OPA reserves the right to accept or reject the Registered Participant's declaration in whole or in part.

At the conclusion of each individual information session, the OPA will compile a summary review of the information received during the session. In the event that the OPA determines that a clarification of the requirements of this York Region DR RFP or the Contract is required, the OPA will post such clarifications to the RFP Website and, as applicable, revise the terms of this York Region DR RFP and the Contract. In addition, the Fairness Advisor will render a report on the conduct of these information sessions and such report will be posted to the RFP Website.

## **1.4 Ontario Power Authority**

On December 9, 2004, the Government of Ontario enacted the *Electricity Restructuring Act, 2004*, (the "Act"), which amended the *Electricity Act, 1998* and, among other things, established the OPA as a statutory corporation that is not a Crown agent. Under the Act, the OPA is authorized to call on the private sector when needed for new generating capacity and demand-side initiatives to be secured through competitive procurement processes. As the OPA may not have an approved integrated power system plan and an approved procurement process in place by the time the Contract(s) are scheduled to be entered into pursuant to this York Region DR RFP, the Ministerial Directive expressly authorizes and directs the OPA, pursuant to the Minister of Energy's authority under subsections 25.32(4) and (7) of the Act, to enter into the Contract(s) selected under this York Region DR RFP. The net costs to the OPA, which includes the costs incurred in respect of the Contract(s), will be recovered from all electricity consumers through appropriate settlement mechanisms.

Interested parties are advised that credit ratings for the OPA have been issued by Moody's and DBRS, and additional information about the OPA can be obtained from the OPA's website at [www.powerauthority.on.ca](http://www.powerauthority.on.ca)

### **1.5 Future Procurement Processes**

The York Region DR RFP is only one of several procurement processes that will be initiated by the OPA pursuant to the Ministerial Directive. Additional procurement initiatives for generating capacity and/or demand-side projects may follow, and participation in the York Region DR RFP shall not preclude participation in any other present or future OPA procurement initiatives for which an interested party is eligible.

This York Region DR RFP is not in any way intended to preclude, restrict, or otherwise discourage any interested party from proceeding with the development of new demand-side projects outside the scope of this York Region DR RFP.

### **1.6 Definitions**

Capitalized terms used in this York Region DR RFP have the respective meanings ascribed to them in the Glossary of Terms set out in Appendix A. Unless otherwise indicated, references to sections and appendices are references to sections and appendices in this York Region DR RFP.

### **1.7 No Exclusivity of Contract**

Interested parties are advised that the Contract(s), if any, to be executed by the OPA and any Selected Proponent shall not be exclusive contract(s) for the provision of the Deliverables described in Section 2.2. In submitting a Proposal a Proponent will be deemed to have acknowledged that the OPA may contract with others for the same or similar Deliverables or may otherwise obtain the same or similar Deliverables by other means and on different terms.

## 2.0 DELIVERABLES

### 2.1 General

The OPA is seeking Proposals for demand response projects with the ability to deliver reliable and verifiable demand reduction at Armitage in response to Operational Directives issued by the York Region DR Manager during the period commencing on May 1 and ending on September 30 of each year (the “**Season**”) and, to the extent that a Supplier has indicated in its Proposal that it is available to provide verifiable demand reduction at other times of the year, during other times of the year. Under the terms of the Contract, the verifiable demand reduction to be achieved in response to any Operational Directive must be achieved through the operation of the Control Equipment or DR Measures of the Project which reduces the demand of an end-user of Electricity. Interested parties should note that under the terms of the Contract, a Project shall not be given credit for demand reduction that is offset by an increase in demand or load in areas outside of the Northern York Region.

It is expected that Proposals will include three main demand response project types:

(a) Load Interruption Projects

Projects in which a measure or measures are undertaken to reduce electricity consumption in response to a dispatch signal. A typical Load Interruption project might involve Control Equipment that will allow appliances, such as swimming pool pumps or air conditioners, to be cycled on and off.

(b) Load Shifting Projects

Projects in which a measure or measures are undertaken to control the level of energy usage at a given time by shifting consumption from a period of peak demand to an off-peak period.

(c) Behind the Meter Generation Projects

Projects that involve generation that serves all or part of the electricity requirements of a load that would otherwise have been served from the IESO-Controlled Grid. This generation is located behind the revenue meter that is used to measure the consumption of electricity of the load from the IESO-Controlled Grid.

Regardless of whether a proposed Project utilizes one, or a combination of, the above technologies and project types, all Proponents will be required to demonstrate that each distinct component of the Project satisfies the minimum technical specifications set out below in Section 2.2. For greater certainty, any Project utilizing a combination of different project types will be required to satisfy the measurement and verification requirements set out in this York Region DR RFP in respect of each such technology.

The procurement requirements for this York Region DR RFP, including the Technical Specifications described in Section 2.2, have been formulated in close consultation with the Power System Planning Division of the OPA.

Following the evaluation of the Proposals received in response to this York Region DR RFP, the OPA reserves the right to enter into Contract(s) for more or less than the Target Capacity under the circumstances set out in Section 3.5(a), and subject to the approval of the OPA board of directors.

## 2.2 Description of Deliverables

Proponents of those Proposals selected by the OPA pursuant to this York Region DR RFP will be required to enter into the OPA's form of Contract for the provision of the Deliverables. A general description of the Contract, including an outline of the payment structure, is set out in Section 5.0, and the terms of the Contract will require the Proponent to develop and construct the Project and attain Commercial Operation thereof by the Commercial Operation Milestone Date(s), and to operate and maintain the Project during the Term in accordance with the provisions of the Contract.

Given the urgent need to procure demand response in Northern York Region, all proposed Projects must meet each of the following minimum technical specifications (the "**Technical Specifications**"):

- (a) the Project must have a minimum Contracted Demand Reduction of at least 1.0 MW, the full amount of which, subject to the terms of the Contract, must be available from 10:00 a.m. to 6:00 p.m. (local time) during Callable Hours to satisfy all Operational Directives during the Season, and 75% of which, subject to the terms of the Contract, must be available for all Callable Hours other than 10:00 a.m. to 6:00 p.m. (local time) to satisfy all Operational Directives during the Season;
- (b) the Project must be located in Northern York Region (as defined by the map set out in Appendix B) and affect demand on Armitage;
- (c) the proposed Commercial Operation Milestone Date or, where there are multiple Commercial Operation Milestone Dates, the final proposed Commercial Operation Milestone Date must be no later than May 1, 2007;
- (d) during any Season, the Project must be able to curtail the full amount of the Contracted Demand Reduction in response to Operational Directive(s):
  - (i) for a minimum period of six (6) hours at a time, on any day, between the hours of 8 a.m. and 8 p.m., within three (3) hours of receiving an Operational Directive; and
  - (ii) for a minimum total of 125 hours during the Season;

- (e) the Project's involvement in any other demand response program, or other similar programs involving the curtailment of electricity demand must be limited such that any Curtailment provided by the Project will be exclusively compensated for under the terms of the Contract and the Project must not be a participant in any other demand response program in the Province of Ontario pursuant to which the ratepayers of the Province of Ontario have provided or will provide funding to directly cover the capital costs of the Control Equipment or DR Measures of the proposed Project. For greater certainty, this shall also apply to any load or customer that is proposed to be one of the loads to be aggregated under a proposed Project;
- (f) to the extent that a proposed Project involves Behind the Meter Generation:
  - (i) the Project must meet all of the relevant requirements applicable to Behind the Meter Generation under the Market Rules, whether directly connected to a Transmission System, Local Distribution System, or end-user, including any requirements described in the IESO-approved amendments thereto;
  - (ii) at no time and at no individual site shall such Behind the Meter Generation supply electricity directly or indirectly to the IESO-Controlled Grid and/or to a Local Distribution System; and
  - (iii) the Project must be capable of operating during all of the Callable Hours of the Season. For greater certainty, a Project that is or will be subject to any operating restrictions under the terms of any permit or approval that may prevent the Project from operating during any such hour (for example, a Project that is subject to 'smog day' restrictions) is not eligible to participate in this York Region DR RFP; and
- (g) the Project must be capable of verifying demand reduction in response to Operational Directives.

Interested parties should note that demand response at two or more sites (or from two or more Loads) may be aggregated by the Proponent so as to be considered a single Project for purposes of this York Region DR RFP, the Proposal and the Contract provided that (i) such multiple Loads or sites are encompassed in a single Proposal with a Contracted Demand Reduction equal to the aggregate for the demand response proposed for each Load or site; and (ii) for purposes of the Contract, the aggregation of such multiple Loads or sites is otherwise treated as a single Load.

A Proponent will also be able to specify multiple Commercial Operation Milestone Dates in its Proposal, being dates on which the level of Contracted Demand Reduction will be increased to a new higher level of Contracted Demand Reduction. However, interested parties should note that, once the Contracted Demand Reduction is increased, the new higher level, subject to any further increases, shall remain fixed for the balance of the Term. There will be no limit on the number of Commercial Operation Milestone Dates that a Proponent may specify, but May 1, 2007 shall be the last possible date for a Commercial Operation Milestone Date. Section 5.3 contains a

summary of the requirements for achieving Commercial Operation in respect of any Commercial Operation Milestone Date.

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### 3.0 EVALUATION PROCESS

#### 3.1 Overview of Stages of Proposal Evaluation

The evaluation of Proposals will be conducted by the OPA in four (4) distinct stages. A Proposal must meet the requirements of each stage in order to proceed to the next stage. The four (4) stages are as follows:

**Stage 1 - Mandatory Requirements:** In Stage 1, each Proposal will pass or fail depending on whether the Proponent has provided in its Proposal each of the documents and all of the statements and information required by Section 3.2 (the “**Mandatory Requirements**”), which shall be used to confirm that the proposed Project meets each of the Technical Specifications set out in Section 2.2 and to evaluate the proposed Project pursuant to the rated criteria in Stage 2. Proposals that do not satisfy each of the Mandatory Requirements will not be evaluated further and will be disqualified. Each Proposal that passes Stage 1 will proceed to Stage 2.

**Stage 2 - Rated Criteria:** In Stage 2, each Proposal that passes Stage 1 will be awarded a point score, up to a maximum of 60, based on the Proponent’s responses to the information requested in Stage 1. In order to proceed to Stage 3, a Proposal must also achieve the minimum total point score of 30 points set out in Table 3.1. All Proposals that do not achieve such minimum required point scores will not be evaluated further and will be disqualified. Each Proposal that passes Stage 2 will proceed to Stage 3.

**Stage 3 - Economic Bid Evaluation:** In Stage 3, each Proposal that passes Stage 2 will be awarded a point score, up to a maximum of 40 points, based on the merits of its Economic Bid Statement.

**Stage 4 - Selection of Selected Proponents:** After the Proposal has been allocated its point score for Stage 3, the Proposal will then be ranked by the OPA on the basis of its Combined Point Score, which is the sum of the point scores awarded in Stage 2 and Stage 3, and Proponents will be selected in accordance with the methodology set out in Section 3.5.

TABLE 3.1

## SUMMARY OF EVALUATION PROCESS

EVALUATION STAGE		MAXIMUM POINT SCORES AWARDED
1	Stage 1 – Mandatory Requirements	Pass/Fail
2	Stage 2 – Rated Criteria (a) Project Description (b) M&V Plan (c) Project Maturity (d) Team Experience (e) Financial Plan (f) Risk Mitigation	10 5 15 10 10 10  <b>Stage 2 Total: 60</b>  <b>A proposed Project must achieve a total combined minimum total point score of 30</b>
3	Stage 3 – Economic Bid Evaluation	<b>Stage 3 Total: 40</b>  <b>Maximum Combined Point Score: 100</b>

### 3.2 Stage 1 – Evaluation of the Mandatory Requirements

Proposals will be assessed and examined to ensure that they satisfy each of the Mandatory Requirements. The evaluation of the Proposal against the Mandatory Requirements will be conducted based on the statements, information, and documentation provided by the Proponent in the Proposal. Any Proposal that does not satisfy each of the Mandatory Requirements will not be evaluated further and will be disqualified.

Proponents are advised that all statements, information, and documentation submitted as part of the Proposal are subject to verification and enforcement in accordance with the terms of this York Region DR RFP and the Contract. If such statements, information and documentation are determined by the OPA to be incorrect or misleading, the OPA reserves the right to re-evaluate the Proponent's compliance with the Mandatory Requirements in Stage 1 and, if applicable, to re-evaluate and revise any point scores awarded to the Proposal in Stage 2.

The documents set out in Section 3.2(a) through 3.2(f), together with the information and statements requested therein, constitute the "Mandatory Requirements".

- (a) Proposal Submission Form

The Proposal Submission Form is provided in Appendix C.

Where the Financial Plan provided by a Proponent in its response to the Financial Questionnaire sets out the names of equity providers to the Project, each such equity provider must also execute the Proposal Submission Form signed by the Proponent.

(b) Mandatory Requirements Checklist

The Mandatory Requirements Checklist is provided in item C of Appendix C.

(c) Proposal Security

Proposal Security must be payable to and in favour of the "Ontario Power Authority" in an amount which varies according to the size of the proposed Project. For Projects with a Maximum Contracted Demand Reduction of less than 5MW, the Proposal Security must be in the amount of \$2,000 per MW. For Projects with a Maximum Contracted Demand Reduction of 5 MW or more, but less than 20 MW, the Proposal Security must be in the amount of \$5,000 per MW. For Projects with a Maximum Contracted Demand Reduction of 20 MW or more, the Proposal Security must be in the amount of \$10,000 per MW subject to a total maximum of \$500,000. The Proposal Security shall be in the form of:

- (i) a certified cheque or a bank draft issued by a financial institution listed in either Schedule I or II of the *Bank Act* (Canada);
- (ii) an irrevocable and unconditional standby letter of credit issued by a financial institution listed in either Schedule I or II of the *Bank Act* (Canada), or such other financial institution having a minimum credit rating of (i) A- with S&P, (ii) A3 with Moody's, (iii) A low with DBRS, or (iv) A with Fitch IBCA, in the form attached as Appendix H; or
- (iii) a bid bond issued by a surety with a financial strength rating of A- or higher by A.M. Best in financial size category VIII or higher, in the form attached as Appendix H.

The failure by a Proponent to provide Proposal Security will result in the disqualification. The OPA reserves the right to disqualify a Proposal in the event that the Proponent fails to tender the Proposal Security in the amount and form required.

The Proposal Submission Form contains the Proponent's agreement that the OPA may draw upon the Proposal Security if the Proponent, having become a Selected Proponent, fails to sign the Contract or fails to deliver the Completion and Performance Security within ten (10) Business Days of the date on which the Proponent is given the final Contract to sign, or makes or has made a material misrepresentation in the Proposal, or is in breach or default of this York Region DR RFP.

Proposal Security will be returned to Proponents in accordance with Section 4.1(h).

(d) Economic Bid Statement

Each Proponent must submit one (1) completed Economic Bid Statement, in the form set out in Appendix F, in a separate, sealed, opaque envelope marked “Economic Bid Statement” followed by the name of the Proponent and the name of the proposed Project.

The values set out by a Proponent in its Economic Bid Statement must be entered precisely in numeric form using the format provided in Appendix F without further information, condition, or qualification whatsoever. Proponents are advised that any deviation from the required format of the Economic Bid Statement whatsoever, including, but not limited to, the provision of a price range, conditional price, qualified price, or an incomplete price, will result in the disqualification of the Proposal. Further, disclosure by the Proponent or any member or the Proponent Team of any of the elements of the Economic Bid Statement elsewhere in the Proposal or otherwise shall result in the disqualification of the Proposal.

The form of Economic Bid Statement provides that each Proponent must state a “Capacity Payment” for the Project, expressed as \$/MW-month, and an “Energy Rate” for the Project, expressed as \$/MWh. The Capacity Payment is to be the price per MW per month that the Proponent proposes to receive under the Contract to cover capital and financing costs for the development and construction of the Project. For greater certainty, the Capacity Payment should represent the amortized monthly fixed costs of the Project on a per-MW basis, adjusted for inflation, that the Supplier will receive each month (both during and outside of the Season) during the Term of the Contract. The Energy Rate will be used to calculate a DR Payment for the Project and is intended to be the amount that the Proponent will require to cover the variable operating costs of the Project for any period during which the Contracted Demand Reduction is supplied in response to an Operational Directive.

All of the values set out in the Economic Bid Statement shall be exclusive of any applicable GST and PST payable by the Buyer under the Contract and shall remain fixed throughout the Term of the Contract. No adjustments shall be made to any such value for inflation. For all purposes, it will be assumed that inflation was taken into account by the Proponent in arriving at such values.

Interested parties should note that arithmetic errors contained in a Proponent’s Economic Bid Statement are the sole responsibility of the Proponent and that the OPA will be unable to communicate any perceived arithmetic error to a Proponent.

(e) Technical Questionnaire

All technical information relating to a proposed Project must be provided by responding to the questions set out in the Technical Questionnaire set out in Appendix D. The information provided in response to such questions will form the basis upon which the Evaluation Team will (i) confirm

whether a Project satisfies the Technical Specifications set out in Section 2.2; and (ii) apply the various Rated Criteria to the proposed Project. In addition to its responses, a Proponent will also be required to submit certain supporting documents such as a map indicating the specific location of Project sites or in the case of a proposed Project involving the management or aggregation of third party Loads the specific locations of individual Project sites or the areas being targeted by the Proponent.

The Measurement and Verification Plan, the Detailed Project Description, and the Team Experience Description are all items that a Proponent will be required to provide as part of its response to the Technical Questionnaire. A failure on the part of a Proponent to provide any of these items will constitute an incomplete response to the Technical Questionnaire and will result in disqualification of the Proposal.

(f) Financial Questionnaire

All financial information relating to a proposed Project must be provided by responding to the Financial Questionnaire set out in Appendix E. For greater certainty, the information and documentation provided in response to the questions in the Financial Questionnaire will form the basis upon which the Evaluation Team will apply the rated criterion relating to the Financial Plan of the proposed Project.

Apart from the completion of any blanks, bullets, or similar uncompleted information, a Proponent may not make amendments to the pre-printed wording of the forms of documents set out in Sections 3.2(a) through (f), inclusive. All forms required to be submitted by a Proponents will be made available on the RFP Website in a writable PDF format after the final York Region DR RFP has been filed. Any amendments made to the forms of such documents, whether on the face of such forms or contained elsewhere in the Proposal, may result in disqualification of the Proposal.

**3.3 Stage 2 - Rated Criteria**

In Stage 2, the Technical Questionnaire and the Financial Questionnaire will be reviewed against six (6) Rated Criteria to assess the maturity and quality of the proposed Project. Each Proposal will be awarded up to sixty (60) points based on the evaluation of the rated criteria described below.

The Stage 2 Rated Criteria are as follows:

<b>TABLE 3.3</b>		
<b>SUMMARY OF RATED CRITERIA</b>		
<b>RATED CRITERIA</b>		<b>MAXIMUM POINT SCORES AWARDED</b>
a.	Project Description	10
b.	M&V Plan	5
c.	Project Maturity	15
d.	Team Experience	10
e.	Financial Plan	10
f.	Risk Mitigation	10
<b>TOTALS</b>		<b>60</b>
<b>Minimum Required Total Point Score</b>		<b>30</b>

The information set out in a Proposal (as required by the Mandatory Requirements) must contain sufficient detailed information to allow the OPA to evaluate the merits of a proposed Project. For greater certainty, Projects utilizing a combination of different technologies or project types as described in Section 2.1 will be prorated for the purposes of applying the Rated Criteria to the distinct components of the Project.

(a) Project Description

The Project Description criterion has been designed to ensure that the Evaluation Team has sufficient information to determine whether the proposed Project meets the requirements of this York Region DR RFP and is based on reliable methodologies and technologies.

For purposes of this criterion, a Project will be evaluated based on the information provided by a Proponent in the executive summary of the proposed Project and in response to questions in the Technical Questionnaire (the “**Detailed Project Description**”). However, interested parties are advised that superfluous information will not be considered by the Evaluation Team and should therefore be avoided. Additionally, interested parties are advised that a metered Load or a customer that is to be aggregated cannot be enrolled or participate in more than one Project unless the Proponent can clearly verify the separation or allocation of the specific Load.

For this criterion, each Proposal will have a maximum score of ten (10) points on the basis of the information provided in the Detailed Project Description evaluated across the following five (5) sub-criteria: (i) the level of site or Load control; (ii) the type of Control Equipment or DR Measures used in the Project; (iii) daily Curtailment availability; and (iv) seasonal Curtailment availability.

(i) Level of Site or Load Control: This sub-criterion will have a maximum of three (3) points, representing 30% of the overall Project Description criteria score. Higher points will be awarded for Projects that have made greater progress in obtaining control over the Project site(s) and/or Loads. Interested parties are advised that all Project Descriptions should clearly indicate the nature of the Proponent's control over the relevant site(s) and/or Load(s), and where applicable, the status of site acquisition(s), a list of all of the permits, licences, approvals and impact assessments that are required in connection with the proposed Project and the current status of such permits, licences, approvals and assessments (see Section 3.3(c)(ii) below). Where a Project requires control over a specific site or sites, or a specific Load or Loads, points will be allocated from highest to lowest for the following scenarios:

- (A) the Proponent owns the site(s) and/or Load(s);
- (B) the Proponent has an agreement to access the site(s) and/or Load(s);
- (C) the Proponent has a letter of intent, memorandum of understanding, or other evidence of a future agreement to access the site(s) and/or Load(s); or
- (D) the Proponent has no evidence of control or access to the site(s) and/or Load(s).

(ii) Type of Control Equipment or DR Measures Used in the Project: This sub-criterion will have a maximum of 2.25 points, representing 23% of the overall Project Description criteria score. Higher points will be awarded for Projects using proven technology (i.e., those with a greater number of existing installations and those with a proven length in service), and that demonstrate mitigated technology risks. Interested parties are advised that all Detailed Project Descriptions should clearly indicate whether the Project is based on Load Interruption, Load Shifting, Behind the Meter Generation or a combination thereof. The Project Description should describe in detail the nature and type of all Control Equipment and/or DR Measures to be used in the Project, including:

- (A) a clear indication of how such equipment, software and associated services will enable the Proponent to (1) curtail or reduce demand for electricity on Armitage in response to an Operational Directive; and (2) verify the Load reduction as a result of the operation of the Control Equipment and/or DR Measures; and
- (B) an outline of the integrity of the proposed Control Equipment and/or DR Measures to be implemented, including:
  - (1) the number of existing installations using the Control Equipment and/or DR Measures;

- (2) the number of years the technology and/or DR Measures has been commercially implemented;
- (3) results to date;
- (4) technical integrity of the Control Equipment and/or DR Measures; and
- (5) potential flaws and ways to mitigate them.

- (iii) Daily Curtailment Availability: This sub-criterion will have a maximum of 2.25 points, representing 23% of the overall Project Description criterion score. Higher points will be awarded for Projects that can curtail in excess of the minimum required six (6) hours and for Projects that can respond to Operational Directives upon less than the three (3) hours of advance notice that is required. Interested parties are advised that all Detailed Project Descriptions should clearly indicate the maximum number of hours that the Project is able to provide the Contracted Demand Reduction between the hours of 8 a.m. and 8 p.m. (local time) when requested. If the Proposal is selected, the stated Daily Curtailment Availability and the notice that is required to respond to Operational Directives will both be incorporated into the terms of the Contract.
- (iv) Seasonal Curtailment Availability: This sub-criterion will have a maximum of two (2) points, representing 20% of the overall Project Description criterion score. Higher points will be awarded for Projects that can curtail in excess of the minimum required 125 hours per Season. If the Proposal is selected the stated Seasonal Curtailment Availability will be incorporated into the terms of the Contract.
- (v) Availability Beyond the Season: This sub-criterion will have a maximum of 0.5 points, representing 5% of the overall Project Description criterion score. Projects capable of Curtailment at any time outside of the Season will be awarded the maximum score for this sub-criterion. Interested parties are advised that the Project Description may specify a Contracted Demand Reduction for months outside of the Season that is different from the Contracted Demand Reduction applicable during the Season. All Project Descriptions should clearly indicate for the months during the Season and, if applicable, for the months outside of the Season, both the maximum number of hours the Project is able to curtail Load and the Contracted Demand Reduction. For certainty, Projects that offer Curtailment in months outside of the Season, if selected, will be required to maintain such availability under the terms of the Contract.

(b) Measurement and Verification Plan

The Measurement and Verification Plan criterion has been established to ensure that the Proponent has a plan in place to ensure that any and all curtailment provided by a Project is capable of being reliably measured and verified for purposes of the Contract.

The Proponent will be rated on its proposed Measurement and Verification Plan in respect of the use of Control Equipment to accomplish the demand reduction that the Proponent is intending to achieve by virtue of the proposed Project.

Since demand response can be provided in several ways, the Plan should state whether the Project is based on Load Interruption, Load Shifting, or Behind the Meter Generation.

The Measurement and Verification Plan should be consistent with the Measurement and Verification Guidelines for DR attached as Appendix L, where applicable, and should, for example, contain descriptions of how the baseline will be measured; how the Project will be monitored, including measurement techniques and data collection frequency; and clearly demonstrate the use and effectiveness of the Control Equipment in achieving the Contracted Demand Reduction, as well as the electrical location(s) of the Load(s).

The type of measurement and verification proposed in the Measurement and Verification Plan will be evaluated out of a maximum of five (5) points. The maximum points will be awarded to Projects using interval meter data exclusively for 100% of the Load being curtailed. For these purposes interval meter data will include data from either wholesale market meters or sub meters. Preference will also be given at intermediate levels for Projects using some interval meters rather than sampling. Fewer points will be awarded to Projects using load modelling methodologies or using a proxy for energy usage rather than monitoring energy usage, Projects not utilizing override and failure monitoring, and Projects using lower confidence levels and not over-sampling.

(c) Project Maturity

The Project Maturity criterion is designed to ensure that a sufficient amount of work has gone into the proposed Project such that there is a reasonable degree of likelihood that the Project will achieve its Commercial Operation Date(s) by the proposed Commercial Operation Milestone Date(s).

Considering the immediate need for demand response initiatives in Northern York Region, Proposals will be evaluated on their ability to commence commercial operation as soon as possible. The Project Maturity criterion will have a maximum score of fifteen (15) points. For all projects other than those utilizing Behind the Meter Generation, the Project Maturity criterion will be evaluated based on the weighted scores of the following sub-criteria: (i) proposed Commercial

Operation Milestone Date(s); (ii) achievement of Commercial Operation Milestone Date(s); and (iii) status of applicable permits or approvals. For Behind the Meter Generation Projects, the following sub-criterion will also be considered: (iv) status of required impact assessments.

- (i) Commercial Operation Milestone Date(s) – This sub-criterion will have a maximum of five (5) points for all Projects (including Behind the Meter Generation) representing 33% of the overall score for Project Maturity.

Higher points will be awarded for Projects with earlier Commercial Operation Milestone Dates, in particular Commercial Operation Milestone Dates of June 1, 2006 or earlier. Projects with early Commercial Operation Milestone Dates that will be increasing the initial amount of Contracted Demand Reduction on subsequent dates up until May 1, 2007 will be awarded points on a pro-rated basis. Interested parties should note, however, that a Commercial Operation Milestone Date cannot be attained without Commercial Operation of at least 1.0 MW of Contracted Demand Reduction.

- (ii) Achievement of Commercial Operation Milestone Date(s) – For Projects other than those involving Behind the Meter Generation, this sub-criterion will have a maximum of five (5) points, representing 33% of the overall score for Project Maturity. For Behind the Meter Generation Projects, this sub-criterion will have a maximum score of 2.5 points, representing 17% of the overall score for Project Maturity. Higher points will be awarded for milestone dates that demonstrate the proposed Commercial Operation Milestone Date is realistic and achievable. Interested parties should note that the Evaluation Team will consider all supporting documentation in determining the likelihood of a Project achieving Commercial Operation by its stated Commercial Operation Milestone Date(s). The amount of points awarded for Projects with earlier Commercial Operation Milestone Dates will be affected by the level of apparent reasonableness of such dates as perceived by the Evaluation Team.

For Projects that are based on aggregation, the extent to which agreements to secure Third Party Load are either in place or in progress will be considered as evidence of the likelihood of the Project achieving Commercial Operation by its stated Commercial Operation Milestone Date(s). Highest points will be awarded to Projects that have secured 100% of their Third Party Load(s). Second-highest points will be awarded to Projects that have secured less than 100%, but more than 75% of their Third Party Load(s). Third-highest points will be awarded to Projects that have secured between 50% and 75% of their Third Party Load(s). Fewer points will be awarded to Projects that have secured less than 50% of their Third Party Load(s).

- (iii) Status of Permits or Approvals – This sub-criterion will have a maximum of five (5) points for Projects other than those utilizing Behind the Meter Generation, representing 33% of the overall score for Project Maturity. Where the Project includes Behind the Meter Generation, this sub-criterion will have a maximum of 3.75 points, representing 25% of the Project Maturity score. Higher points will be awarded for Projects where no permits or approvals are required or in the case of Projects requiring permits or approvals, where higher levels of permits or approvals have been obtained and/or applied for.
- (iv) Impact Assessments for Behind the Meter Generation – This sub-criterion, which only applies to Projects with Behind the Meter Generation, will have a maximum of 3.75 points, representing 25% of the overall score for Project Maturity. Higher points will be awarded for Projects not requiring any impact assessments, followed by Projects that have made the most progress to obtaining the required impact assessments. Projects involving Behind the Meter Generation should include the following information in their Detailed Project Description, as applicable: status of the System Impact Assessment, the Customer Impact Assessment, and/or the Connection Impact Assessment.

(d) Team Experience

The Team Experience criterion is designed to ensure that the project team that has been assembled by the Proponent has a sufficient level of experience with Projects substantially similar to the Project being proposed such that there is a reasonable degree of likelihood that the Project will reach Commercial Operation and will be developed in accordance with acceptable industry standards.

The Proponent will be rated on its prior experience in the planning and development of previous/existing demand response projects. For the purposes of this Section (d), “**Proponent Team**” includes any person who is an employee, director, officer or contractor of the Proponent and who is expected by the Proponent to play a significant role in the Project before and after the Commercial Operation Date.

Proponents are asked to provide specific and detailed information regarding the role played by each member of the Proponent Team engaged in the demand response Project(s). Proposals should describe the relevant experience in the form of resumes, curriculum vitae and any professional designation(s). The maximum score of ten (10) points will be awarded based on the level of experience that the project team has with successful projects. Highest points will be allocated to Projects where both management and staff of the project team have demonstrated successful experience with the type of Project being proposed or with a similar project that is presently under

operation. Fewer points will be awarded where only part of the Project Team has relevant experience or where previous project experience is less relevant to the Project being proposed.

(e) Financial Plan

The Financial Plan criterion is designed to ensure that the Proponent's Financial Plan is sound and that either the Proponent has secured the necessary financing for the Project or there is a reasonable degree of likelihood that the Proponent will be able to secure the necessary financing and be able to develop the Project within the proposed timeframe and in the manner that is described in the Proposal.

A financial plan consists of the detailed financial plan description, the Proponent's response to the Financial Questionnaire (attached as Appendix E) and all supporting financial information that is provided by the Proponent (the "**Financial Plan**"). The detailed financial plan description that a Proponent is required to submit must specify the legal form of the entity that is to develop, finance, own and operate the Project and all sources of current and future financing or credit support for the proposed Project, including the names of all sources of financing, the characterization of each source as either equity, debt, or other (i.e., neither debt nor equity) and cost overrun support, if any.

For this criterion, the Financial Plan for each Proposal will be awarded up to a maximum of ten (10) points based on the following two (2) sub-criteria: (i) the contribution or level of commitment from all financing sources and the financial strength of such financing sources (maximum of eight (8) points); and (ii) the Financial Plan's provision for cost overrun or contingency support (maximum of two (2) points).

(i) Status and Strength of Commitment

The contribution or level of commitment from all financing sources and the financial strength of such sources will be evaluated and awarded a score ranging from zero (0) to eight (8) according to the following methodology:

- Highest points will be awarded to a Financial Plan that demonstrates that all of the financing necessary for the development of the Proposed Project is already in place and will be available to the Proponent upon execution of the Contract in the event that the Proponent becomes a Selected Proponent;
- Intermediate point scores will be awarded to a Financial Plan that demonstrates that the Proponent has received Firm Commitments from all of the sources of financing listed in the Financial Plan description provided by the Proponent; and

- Lower point scores will be awarded to a Financial Plan that demonstrates that the Proponent has received Soft Commitments from all of the sources of financing listed in the Financial Plan description provided by the Proponent.

A “**Firm Commitment**” means an agreement from an equity provider, lender, or source of financing other than debt or equity which states, at a minimum, that such equity provider, lender, or other provider, as applicable, has reviewed this York Region DR RFP, the Contract, and the financial model (including projected costs and revenues) of the proposed Project, and that it agrees to advance or provide the amount of equity, debt, or other financing, as applicable, for the Project specified in the commitment letter by the milestone date for financial closing specified by the Proponent in response to the Technical Questionnaire, subject to the satisfaction of specific objective conditions. The commitment letter must disclose any and all of such objective conditions.

A “**Soft Commitment**” means a commitment term-sheet or indication of intent from an equity provider, lender, or source of financing other than debt or equity to advance or provide the amount of equity, debt, or other financing, as applicable, for the Project specified in the commitment letter by the milestone date for financial closing specified by the Proponent in response to the Technical Questionnaire, which commitment does not meet the requirements of a Firm Commitment.

For purposes of this criterion, a commitment that is conditional on amending the Contract, in any manner inconsistent with Section 11.3 thereof will be considered to be neither a Firm Commitment nor a Soft Commitment.

In addition to the contribution or level of commitment, the Evaluation Team will also evaluate the relative financial strength of each source of financing and adjust the point scoring of the status and strength of commitment sub-criterion accordingly. For purposes of the point allocation, higher points will be awarded in respect of financing sources that demonstrate a greater ability to meet their commitment to the Proponent. A Firm Commitment from a source with greater financial strength will receive a higher score than a Firm Commitment from a source with less financial strength.

For debt sources of financing, a Category A Lender will be considered to have a greater ability to meet its commitment to the Proponent than a Category B Lender. The Evaluation Team reserves the right to deem a contribution or commitment from a source of debt that does not meet the requirements of a Category A Lender or Category B Lender as constituting a lesser commitment on the part of such lender.

In determining the relative strength of sources of equity financing, the types of indicators that the Evaluation Team will consider will include the following:

- the Tangible Net Worth of the equity provider;
- whether the equity provider has an Investment Grade Credit Rating;
- any confirmation letters from a financial institution or other entity, meeting the minimum requirements of a Category A Lender, that the equity provider has credit available under an approved facility sufficient to fund its equity contribution; and
- a strong Debt to EBITDA ratio, preferably no greater than 7:1.

An equity provider whose characteristics include significant indicators of financial strength will be considered to have a greater ability to meet its commitment to the Proponent. The Evaluation Team reserves the right to deem a contribution or commitment from an equity provider that lacks sufficient indicators of financial strength as constituting a lesser commitment on the part of such equity provider.

For all other sources of financing, the Evaluation Team shall evaluate the relative financial strength of the source based on the information provided by the Proponent.

In evaluating the relative financial strength of each source of financing, the Evaluation Team will also consider the currency of any financial statements provided by the Proponent and whether such financial statements are audited or unaudited.

It is understood that a Financial Plan may be comprised of multiple types of financing from multiple sources with varying degrees of financial strength. To the extent that a Financial Plan identifies multiple types and sources of financing, each such source will be given a pro-rated score according to its percentage contribution to the overall total project financing. The Proponent shall receive the resulting combined point score for all sources of financing.

(ii) Cost Overrun or Contingency Support

Where the Financial Plan of a Proposal includes cost overrun support or contingency support mechanisms, a maximum of two (2) points will be awarded depending on the nature and extent of such cost overrun or contingency support.

(f) Risk Mitigation

Considering the specific and urgent need for demand reduction in Northern York Region, a proposed Project will also be assessed and awarded points on the basis of the Proponent's

mitigation of specific elements of risk that are not covered in the other rated criteria which risks relate to the Project being developed successfully and on time. For this Risk Mitigation criterion each Proposal will receive a maximum score of ten (10) points. For this criterion each Project will be assessed according to its Statement of Risks (described below) and based on the relative level of risk associated with the Proposal as compared to other Proposals. Those Proposals that are found to represent a lower overall level of risk, which may be as a result of the Proponent's demonstration of significant risk mitigation actions or measures associated with the Project, will be awarded more points than those that represent a higher level of risk.

As part of its response to the Technical Questionnaire, a Proponent will be required to provide a statement setting out all risks associated with the timely development of the Project (the "**Statement of Risks**"). Where specific risks are addressed elsewhere in the Proposal, the Statement of Risks should contain appropriate references to identify where these risks are addressed. The Statement of Risks should be accompanied by a description of actions and measures on the part of the Proponent to mitigate against such risks and all supporting materials as may be required to assure the OPA that, if selected, the Project will be developed in accordance with the Proposal and achieve Commercial Operation by the stated Commercial Operation Milestone Date(s).

The following is a non-exhaustive list of potential risks that a Proponent may wish to consider in preparing its Statement of Risks:

- If applicable, risks associated with proposed aggregation of multiple loads. In evaluating a Project that is based on aggregation, the Evaluation Team will consider the level of aggregation that is required, the level of aggregation that has been achieved as of the date of the Proposal, as well as the content of any proposed or existing agreements with Third Party Loads. In addition, the Project's marketing plan will be evaluated to determine whether the Proponent's plan for securing its anticipated Load is sound and that there is a reasonable degree of likelihood that such Load will be secured in a timely and efficient manner.

In considering the marketing plan of a Project based on aggregation, the Evaluation Team will consider the level and sophistication of the Proponent's outreach to potential Third Party Loads, and whether the Proponent has obtained relevant customer lists, or whether measures are in place or planned to obtain such lists. The Evaluation Team will consider whether the Proponent has targeted and researched specific market segments, utilizing data, surveys or other estimates which provide information necessary to profile the targeted Load(s). Furthermore, the Evaluation Team will consider whether similar marketing plans have previously been utilized successfully (by the Proponent or otherwise) to secure loads for aggregation.

- Uncertainty with respect to unsatisfied permitting requirements.
- Risks associated with the Proponent's ability to achieve all necessary internal approvals within the required time frame.
- Risk that members of the Proponent Team will not continue to be involved in the Project as indicated in the Proposal.
- Risks of any litigation or similar proceeding that may have a material effect on the ability of the Project to proceed.

Proponents are advised that they should list all of the potential risks associated with their Project. For example, any apparent inconsistencies, errors or omissions on the face of a Proposal that are not clarified by a Proponent in response to a request for clarification issued by the OPA, or any assumptions contained in the Proposal relating to the development of the Project that are not supported by the information contained in the Proposal, may be considered an unmitigated risk.

### 3.4 Stage 3 - Economic Bid Evaluation

#### (a) Overview

All Proposals that have passed Stages 1 and 2 will have their Economic Bid Statements opened, and each such Proposal will be awarded up to forty (40) points based on its Evaluated Cost, as calculated in accordance with the four-step methodology set out below.

#### (b) Step 1 - Calculating Evaluated Cost

As prescribed by the form of Economic Bid Statement attached as Appendix F, each Economic Bid Statement must include: (1) a Capacity Payment for the Project, expressed in \$/MW per month; (2) an Energy Rate expressed in \$/MWh.

For purposes of the Stage 3 evaluation only, the Capacity Payment and Energy Rate will be combined into a single unit called the "**Evaluated Cost**" by converting the Energy Rate into a monthly DR Payment and adding it to the monthly Capacity Payment amount listed in the Economic Bid Statement. For purposes of this conversion, it will be assumed that there will be mandatory nominal Callable Hours of 125 hours per Season. By way of example, a Proposal for a 1.0 MW size project with a Capacity Payment of \$5,000 per MW per month and an Energy Rate of \$100/MWh will have an Evaluated Cost of \$6,042 per MW-month. The calculation is as follows:  $\$100 \times 125 \text{ hours (nominal Callable Hours)} = \$12,500 \text{ annually} = \$1042 / \text{month} + \$5,000 \text{ per MW per month} = \$6,042 \text{ per MW-month}$ .

#### (c) Step 2 - Setting the Price Ceiling

The Evaluated Cost for all of the remaining Proposals shall be taken together to calculate the Weighted Average Cost of all such Proposals, which will be used to establish a price ceiling equal to 125% of such Weighted Average Cost (the “**Price Ceiling**”). All of the Proposals having an Evaluated Cost that exceeds the Price Ceiling shall be set aside and shall not be considered any further unless the OPA elects to exercise its right to recalculate the Price Ceiling, as set out below.

In the event that the total proposed Maximum Contracted Demand Reduction for all of the Proposals having an Evaluated Cost that is less than or equal to the initial Price Ceiling is less than 20.0 MW, then the OPA shall have the right, but not the obligation, to increase the Price Ceiling to a value that is no greater than 135% of the initial Weighted Average Cost (the “**Adjusted Price Ceiling**”), and to continue to evaluate all remaining Proposals having an Evaluated Cost that is less than or equal to the Adjusted Price Ceiling.

(d) Step 3 – Calculating Point Score

The Evaluated Cost for all remaining Proposals will then be ranked into deciles, from the lowest to the highest. Proposals in the lowest decile will receive ten (10) points and Proposals in the second lowest decile will receive nine (9) points, this pattern of point allocation will continue for all deciles with the Proposals in the highest decile receiving one (1) point. If the Evaluated Cost of a Proposal straddles more than one decile, then the points awarded to that Proposal will be pro-rated. These allocated points will then be multiplied by four (4) to calculate total points out of a maximum of forty (40). If any Proposal becomes invalid at any time during the Economic Bid Evaluation, such Proposal will be disregarded and the OPA will conduct the Economic Bid Evaluation again.

**3.5 Stage 4 - Selection of Selected Proponents**

(a) Developing the Initial Stack

The point scores awarded to each Proposal in Stage 2 and Stage 3 above will be added together to form a Combined Point Score for each Proposal.

All Proposals will be placed in order in a stack from the highest to lowest Combined Point Score (the “**Stack**”) such that the aggregated Maximum Contracted Demand Reduction of all of the Proposals in the Stack approximates the Target Capacity. For projects that have specified different amounts of Contracted Demand Reduction applicable during the Season versus outside of the Season, only the Maximum Contracted Demand Reduction applicable during the Season will be utilized for purposes of Stack selection and approximation of the Target Capacity.

If the aggregate Maximum Contracted Demand Reduction of the Proposals determined at this stage to be in the Stack is equal to the Target Capacity, or exceeds the Target Capacity by no more

than 5.0 MW, the resulting Stack will be the final Stack. If the aggregate Maximum Contracted Demand Reduction of the Stack exceeds 25.0 MW, the OPA reserves the right to either accept or reject the Proposal with the highest Evaluated Cost.

The OPA will then recommend the Proposals in the final Stack as its selected Proposals for the approval of the OPA Board of Directors.

(b) Potential for Need to Repeat Evaluation in Event a Proposal is No Longer Valid

If for any reason a Proposal ceases to be valid, such as if a Selected Proponent does not execute the Contract and/or post Completion and Performance Security in accordance with Section 4.1(i), all remaining Proposals in the final Stack determined in accordance with Section 3.5(a) shall be left in the "final" Stack and the Stack shall once again be completed by selecting additional Proposals as required using the methodology set out in (a) above. The OPA reserves the right to conduct such a re-evaluation at any time as it becomes aware that a Proposal is no longer valid up until the time at which the OPA has executed and delivered to Selected Proponents all Contracts.

(c) Final Determination of Proposals to be Recommended for Selection

The resulting Stack will represent Proposals with the highest Combined Point Scores that, taken together, deliver an aggregate Maximum Contracted Demand Reduction approximate to the Target Capacity. The OPA reserves the rights set out in Section 3.5(a) in respect of the selection of the Selected Proponents, including the selection of the final Stack.

#### 4.0 TERMS AND CONDITIONS

#### 4.1 General Information and Instructions

(a) Timetable

The Timetable with respect to the entire procurement process for the York Region DR RFP is set out below.

Release of draft RFP	October 28, 2005
Release of draft Contract	November 4, 2005
Technical Information Session (public)	November 7, 2005
First Question and Comment Period (public)	November 7, 2005 to November 18, 2005
Release of final Contract and final RFP	November 30, 2005
Technical Information Session (public)	December 2, 2005
Deadline to become a Registered Participant	December 8, 2005 at 3:00:00 p.m. (EST)
Individual Information Sessions with Registered Participants	December 9, 2005 to December 16, 2005
Second Question and Comment Period	December 9, 2005 to January 20, 2006
Deadline for Issuing Addenda to the York Region DR RFP	January 27, 2006
Proposal Submission Deadline	February 14, 2006 at 3:00:00 p.m. (EST)
Evaluation of Proposals and determination of Selected Proponents	February/March 2006
Submission of Completion and Performance Security and Execution of Contracts	March 2006

Registered Participants are welcome to schedule the second of their two (2) optional individual information sessions with the OPA during the week beginning on January 9, 2006.

The OPA reserves the right to accelerate and postpone the dates set out above. The acceleration or postponement of any date prior to the Proposal Submission Deadline shall be made by way of notice to Registered Participants and shall be published to the RFP Website. The acceleration or postponement of any date following the Proposal Submission Deadline shall be made by way of notice to Proponents only.

(b) Addenda to the York Region DR RFP

This York Region DR RFP may be amended only by addendum in accordance with this Section. If the OPA, for any reason, determines that it is necessary to provide additional information relating to this York Region DR RFP, such information will be communicated by posting an addendum on the RFP Website on or prior to the Deadline for Issuing Addenda for this York Region DR RFP. Each addendum will be deemed to form an integral part of this York Region DR RFP.

Each addendum may contain important information including significant changes to this York Region DR RFP, and interested parties and Registered Participants are responsible for visiting the RFP Website as often as is necessary to ensure that they obtain all of the addenda to this York Region DR RFP and other notices issued by the OPA from time to time. Proponents must confirm their receipt of all of the addenda issued by the OPA in the Proposal Submission Form attached as Appendix C.

(c) Post-Deadline Addenda and Extension of Proposal Submission Deadline

If any addendum is issued after the Deadline for Issuing Addenda, the OPA may at its discretion extend the Proposal Submission Deadline for a reasonable amount of time having regard to the circumstances.

(d) Barred Submissions

Interested parties are advised that, if any Proponent or any member of a Proponent Team is or has been in default under any Clean Energy Supply (CES) Contract, Renewable Energy Supply (RES) Contract, Renewable Energy Supply II (RES II) Contract, or Demand Response (DR) Contract, or where the OPA alleges or has alleged a breach under any of such contracts, such Proponent cannot participate as a Registered Participant or as a Proponent under the York Region DR RFP, and any Proposal received by the OPA from such Proponent will not be considered.

(e) Submission of Proposals

(i) General Information

A Proponent may submit Proposals for more than one Project, subject to the non-collusion requirements set out in the Proposal Submission Form attached as Appendix C. Interested parties are advised that only one Proposal may be submitted by a Proponent in respect of each proposed Project.

Interested parties are responsible for submitting Proposals on time at the location specified below and for ensuring that the Proposals are complete in every respect.

Proponents should note that a Proponent's entire Proposal must be submitted by the Proposal Submission Deadline.

(ii) Submission Requirements

To be considered, a Proposal must be received no later than the Proposal Submission Deadline at the following address:

Ontario Power Authority  
Richmond-Adelaide Centre  
120 Adelaide Street West  
Suite 1600  
Toronto, Ontario  
M5H 1T1

Attention: York Region DR RFP

The onus remains solely with the Proponent to instruct courier and delivery personnel to deliver its Proposal to the exact location specified above by the Proposal Submission Deadline. The OPA will not be responsible for late deliveries.

A Proponent must submit one (1) original hard copy of its Proposal prominently marked "Original Copy", and ten (10) additional collated copies of its Proposal and one (1) complete electronic version of the Proposal provided on a CD ROM.

The Proponent must also submit one (1) original hard copy of its Proposal Security, which should be contained in a separate envelope marked "Proposal Security", and one (1) original hard copy of its Economic Bid Statement, which should be contained in a separate envelope marked "Economic Bid Statement". The entire Proposal, together with the Proposal Security and the Economic Bid Statement, should be contained in a sealed package.

On the outside of the sealed package, using the Proposal Return Label attached at Appendix I, the word "Proposal" should be prominently marked with the "York Region DR RFP" title as set out on the cover page of the York Region DR RFP, with the full legal name of the Proponent and its return address. To the extent that the failure to affix the specified label to the submission envelope or package results in the Proposal arriving late at the OPA, the Proposal will be disqualified and returned unopened to the Registered Participant.

The Proposal must be in English only, and should be typed or printed neatly in black ink on both sides of 8.5 x 11 inch paper (except for maps, plans etc.), and all pages should be numbered sequentially. Proposals should be collated and organized in a user-friendly manner, containing detailed responses and referencing any attached substantiating documentation.

Except where expressly set out to the contrary in the York Region DR RFP, all Proposals shall become the property of the OPA and shall not be returned to the Proponent.

(iii) Proponents to Follow Instructions

Proponents should structure their Proposals in accordance with the instructions in the York Region DR RFP. Where information is requested in the York Region DR RFP, any response made in a Proposal should reference the applicable section numbers of the York Region DR RFP where such request is made.

(iv) Amending or Withdrawing Proposals

At any time prior to the Proposal Submission Deadline, a Proponent may amend or withdraw a submitted Proposal. Any such withdrawal shall not entitle the Proponent to a refund of its Registration Fee paid pursuant to Section 1.3. The right of Proponents to amend or withdraw prior to the Proposal Submission Deadline includes amendments or withdrawals wholly initiated by Proponents and amendments or withdrawals in response to subsequent information provided by addenda to the York Region DR RFP. Any amendment to a Proposal made prior to the Proposal Submission Deadline should clearly indicate what part of the Proposal the amendment is intending to affect or replace.

After the Proposal Submission Deadline, a Proponent shall not be able to amend its Proposal, although the OPA reserves the right to request clarification and other information with respect to a Proposal in accordance with Section 4.1(l). A Proponent is not entitled to withdraw a Proposal after the Proposal Submission Deadline.

(v) Confidential Information of OPA

All information provided by or obtained from the OPA in any form in connection with the York Region DR RFP, either before and after the issuance of the York Region DR RFP, is the sole property of the OPA and must be treated as confidential, and

- (A) is not to be used for any purpose other than replying to the York Region DR RFP and the performance by the Proponent under the Contract;
- (B) must not be disclosed without the prior written authorization of the OPA; and

(C) shall be returned by the Proponent to the OPA immediately upon the request of the OPA.

(vi) Confidential Information of the Proponent

Information provided by a Proponent is subject to, and may be released in accordance with, the provisions of the *Freedom of Information and Protection of Privacy Act* (Ontario). At the option of the Proponent, the Proponent will clearly indicate in a separate Confidentiality Statement, in a form provided by the Proponent, those portions of the Proposal that contain proprietary or confidential information for which confidentiality is to be maintained by the OPA and the Evaluation Team. Such portions of the Proposal will be clearly marked "Proprietary and Confidential" by the Proponent. In the event that no Confidentiality Statement is provided, the Proponent will be automatically deemed, by submission of the Proposal, to certify to the OPA that no portion of the Proposal contains proprietary or confidential information for which confidentiality is to be maintained by the OPA and the Evaluation Team.

The confidentiality of any such information identified by the Proponent will be maintained by the OPA and the Evaluation Team, except where an order by the Information and Privacy Commission, a court, or a tribunal requires the OPA to do otherwise.

Notwithstanding the foregoing, the OPA shall not be required to maintain the confidentiality of any such information that:

- (A) is or becomes generally available to the public without fault or breach on the part of the OPA and the Evaluation Team of any duty of confidentiality owed by the OPA and the Evaluation Team to the Proponent or to any third party;
- (B) the OPA and the Evaluation Team can demonstrate that it had been rightfully obtained by the OPA and the Evaluation Team without any obligation of confidence from a third party who had the right to transfer or disclose it to the OPA and the Evaluation Team free of any obligation of confidence;
- (C) the OPA and the Evaluation Team can demonstrate that it had been rightfully known by or in the possession of the OPA and the Evaluation Team at the time of disclosure, free of any obligation of confidence when disclosed; or
- (D) has been independently developed by the OPA and the Evaluation Team.

Proponents are advised that their Proposals will, as necessary, be disclosed on a confidential basis to the Evaluation Team, the Fairness Advisor, the OPA's counsel, and other advisers retained for the purpose of evaluating or participating in the evaluation of the Proposals and the York Region DR RFP process.

(vii) Irrevocability

Proposals shall be irrevocable in the form submitted by the Proponent for sixty (60) days from the Proposal Submission Deadline.

(f) Conflict Between Proposal and York Region DR RFP

Any conflict or inconsistency between the terms of the York Region DR RFP and the Proposal shall be resolved by interpreting such documents in the following order from highest priority to lowest priority, namely:

- (i) the York Region DR RFP; and
- (ii) the Proposal,

where the York Region DR RFP shall govern over the Proposal to the extent of any conflict or inconsistency.

(g) Changes to Proponent Team

Proponents are advised that no changes in the Proponent Team or any lenders identified in the Proposal in connection with any source of financing, and set forth by the Proponent in its response in the York Region DR RFP, shall be permitted between the Proposal Submission Deadline and the execution of the Contract, except with the explicit consent of the OPA. Any substitution made without the consent of the OPA will result in disqualification of the Proposal.

(h) Cancellation or Return of Proposal Security

- (i) For each Proponent whose Proposal fails Stage 1 or Stage 2, the applicable Proposal Security will be cancelled or returned within ten (10) Business Days of the Proponent being notified that it has failed to progress in the evaluation process to the next Stage.
- (ii) For each Proponent whose Proposal passes Stage 2 but is not selected in Stage 4 (including those Proposals that are disqualified in Stage 3), the applicable Proposal Security will be returned or cancelled within ten (10) Business Days of the OPA's announcement of all of the Suppliers.

(iii) For each Supplier, the applicable Proposal Security will be cancelled or returned upon delivery of the Completion and Performance Security due under the terms of this York Region DR RFP and the Contract by the Supplier.

(i) Selected Proponents

The Evaluation Team will make its recommendation to the OPA as to the Selected Proponents, subject to the approval of the OPA board of directors. The OPA will notify each Selected Proponent in writing of its status, and each Selected Proponent will then be required to submit the Completion and Performance Security and the Contract executed by the Selected Proponent, within ten (10) Business Days of the date on which the Selected Proponent was given the Contract to sign.

Should a Selected Proponent of a Project fail to submit the required Completion and Performance Security and deliver the executed Contract within the required timeframes, the Evaluation Team may recommend, and the OPA may agree, that another Proponent be selected in its place. Proponents are advised that, where a Proponent fails to deliver the Completion and Performance Security and the executed Contract, the OPA shall be entitled to draw upon the Proposal Security.

The OPA will execute the Contract once the Completion and Performance Security and the Contract, as signed by the Selected Proponent, have been received by the OPA. At this point, the Selected Proponent shall become the “**Supplier**” and the OPA shall become the “**Buyer**”. The OPA reserves the right to make a public announcement with respect to any Contract with a Supplier once any such Contract has been fully executed.

(j) Portions of Proposal Incorporated into Contract

Certain provisions of the Proposal will be incorporated into the Contract, as follows, namely:

- Name of Project;
- Name of Proponent and principal place of business;
- Commercial Operation Milestone Date(s);
- Contracted Demand Reduction and Maximum Contracted Demand Reduction for the Season, as well as the Daily Curtailment Availability, Seasonal Curtailment Availability and the notice required to respond to Operational Directives as set out in the Technical Specifications;
- Capacity Payment; and

- Energy Rate.

(k) No Liability for Costs and Expenses

Each Proposal will be prepared at the sole cost and expense of the Proponent. Proponents will bear all costs and expenses in connection with their Proposal, including any costs incurred in the review of the York Region DR RFP and any expert advice required in responding to the York Region DR RFP. The OPA and its advisors shall not be liable to pay any Proponent costs under any circumstances. In particular, the OPA will not reimburse the Proponent in any manner whatsoever in the event of rejection of any or all Proposals or in the event of the cancellation of the York Region DR RFP. By submitting a Proposal in response to the York Region DR RFP, the Proponent irrevocably and unconditionally waives any claims against the OPA and its advisors relating to the Proponent's costs and expenses. Further, the OPA will not, and is under no obligation to, reimburse any interested party that becomes a Registered Participant, whether or not such Proponent submits a Proposal.

(l) Reserved Rights of the OPA

All interested parties are advised that the OPA reserves the following rights set out below.

Clarification of Proposals

- (i) The OPA reserves the right, within forty-five (45) days following the Proposal Submission Deadline, to request that any Proponent clarify or make changes to its Proposal and such Proponents shall submit responses to such request within five (5) Business Days following receipt of such request, or within such shorter time as the OPA may require. Clarification requests will be made by telephone, fax or email communication to the Proponent's primary contact person or, if necessary, to any alternate contact person(s) listed in the Proposal. The OPA may, in its sole discretion, choose to meet with some or all of the Proponents to discuss aspects of their Proposals.
- (ii) The OPA may require Proponents to submit supplementary documentation in response to a specific request clarifying any matters contained in their Proposals or the OPA may prepare a written interpretation of any aspect of a Proposal and seek the respective Proponent's acknowledgement of that interpretation and only such documentation specifically requested and accepted by the OPA, and written interpretations which have been acknowledged by the relevant Proponents, shall be considered to form part of the Proposals of those Proponents.
- (iii) The OPA is not obliged to seek clarification or interpretation of any aspect of a Proposal.

Incomplete Proposals

- (iv) The OPA reserves the right, in its sole discretion, to reject any Proposal whether or not completed properly and whether or not it contains all required information. Without prejudice to this right, the OPA may request clarification where any Proponent's intent is unclear and may, in its sole discretion, waive or request amendment where, in the opinion of the OPA, there is an irregularity or omission in the information that is to be submitted in a Proposal.

Conduct of the York Region DR RFP

- (v) The OPA reserves the right to cancel this York Region DR RFP for any reason without any obligation or any reimbursement to the Proponents. In the event that OPA exercises its reserved right to cancel this York Region DR RFP, all Registration Fees that have been received from Registered Participants will be refunded by the OPA.
- (vi) The OPA is not bound to accept any Proposal and may proceed as it determines, in its sole discretion, following receipt of the Proposals. The OPA reserves the right to accept or reject Proposals in whole or in part, to discuss different or additional terms to those included in the York Region DR RFP or in any Proposal or to amend or modify any term of the York Region DR RFP. The OPA may invalidate this York Region DR RFP and may issue a second request for proposals in its sole discretion.
- (vii) The OPA reserves the right to select every Proposal submitted in response to this York Region DR RFP even if the total Maximum Contracted Demand Reduction of all such Proposals exceeds the Target Capacity.
- (viii) Proposals that are unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, omissions, erasures, alterations, or irregularities of any kind may, in the OPA's sole discretion, be considered informal and may be rejected.
- (ix) Proposal Submission Forms, Economic Bid Statements, and other portions of the Proposal which are improperly prepared may, in the OPA's sole discretion, be considered informal and may be rejected.
- (x) Failure to provide the Proposal Security, as required, may, in the OPA's sole considered, result in the Proposal being considered informal and may be rejected.
- (xi) The OPA may, at its sole and absolute discretion, waive any informality or irregularity.
- (xii) The OPA may make public the names of any or all Registered Participants, Proponents and members of their respective teams.

- (xiii) The OPA may contact any equity provider or debt provider identified in a Proposal, including obtaining information on any such equity provider or debt provider, whether directly from the equity provider or debt provider or from any third party.
- (xiv) The OPA may verify with any Proponent or with a third party any information set out in a Proposal.
- (xv) The OPA may check references other than those provided by any Proponent.
- (xvi) The OPA may disqualify any Proposal that contains material misrepresentations or any other materially inaccurate or misleading information.
- (xvii) The OPA may disqualify any Proponent or the Proposal of any Proponent who has engaged in conduct prohibited by the York Region DR RFP.

These reserved rights are in addition to any other express rights or any other rights which may be implied in the circumstances, and the OPA shall not be liable for any expenses, costs, losses or any direct or indirect damages incurred or suffered by any Registered Participant or Proponent or any third party resulting from the OPA exercising any of its express or implied rights under the York Region DR RFP.

By submitting a Proposal, the Proponent, on its own behalf and on behalf of each member of the Proponent Team to which it belongs, authorizes the collection by the OPA of the information set out under Sections 4.1(1)(xiii), (xiv), and (xv).

(m) Governing Law of the York Region DR RFP Process

This York Region DR RFP process shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.

(n) Notification of Outcome of the York Region DR RFP

Once all Suppliers have delivered their required Completion and Performance Security to the OPA and have executed their respective Contracts, all Proponents who have not become Suppliers will be notified by the OPA in writing of the outcome of the York Region DR RFP procurement process and the award of the Contracts to the Suppliers.

(o) Debriefing

Proponents who did not become Suppliers may request a debriefing after receipt of a notification of contract award to Suppliers. Requests must be made within thirty (30) days of the notification to Proponents which did not become Suppliers. All such requests should be sent to

[procurement.yorkdr@powerauthority.on.ca](mailto:procurement.yorkdr@powerauthority.on.ca) The intent of the debriefing information session is to assist the Proponent in presenting a better proposal in subsequent procurement opportunities. Any debriefing provided is not offered for the purpose of providing an opportunity to challenge the York Region DR RFP procurement process.

(p) Prohibited Communications

The OPA may, in its sole and absolute discretion, without any liability, cost or penalty, and in addition to any other remedies available to it at law, revoke a Registered Participant's or Proponent's status as a Registered Participant or Proponent (without any refund of the Registration Fee) and reject any Proposal proposed to be submitted or actually submitted by a Registered Participant or Proponent, as the case may be, if any Registered Participant or Proponent or any of their respective employees, agents, contractors or representatives discusses the York Region DR RFP, any Proposal, or the terms of the Contract with any representative or agent of the OPA, the OPA's board of directors, the Evaluation Team and any advisors thereof, except through the channels expressly prescribed in the York Region DR RFP.

No Registered Participant or Proponent or any of their respective employees, agents, contractors or representatives shall directly or indirectly communicate with the media in relation to the York Region DR RFP, any Proposal, or the Contract without first obtaining permission of the OPA, pursuant to a request made through the RFP Website.

No Registered Participant or Proponent shall engage in any Conflict of Interest communications or in any communications that would violate the prohibition against collusion set forth in the Proposal Submission Form.

## **5.0 DESCRIPTION OF THE CONTRACT**

### **5.1 Overview**

A Selected Proponent will be required to execute the Contract as “Supplier”, and the OPA shall be the “Buyer”. The Contract shall take effect from the date it is signed by both parties and shall expire at the end of the term for the applicable contract, as outlined below.

The Contract requires the Supplier to design, build, operate and maintain the Project as outlined in its Proposal, using good engineering and operating practices and in compliance with the applicable Market Rules and applicable laws and regulations. Proponents are solely responsible for obtaining and maintaining federal, provincial and municipal permits, licences and approvals that are currently, or may, in the future, be required for the development, construction and operation of the Project. Pursuant to the terms of the Contract, all Projects shall be required to attain Commercial Operation by the Commercial Operation Milestone Date(s), which shall be not later than May 1, 2007 as described in Section 2.2(c) of this York Region DR RFP. However, in order to encourage Suppliers to attain Commercial Operation and be available to deliver demand response during the summer of 2006, the Contract allows Suppliers that achieve Commercial Operation on or before August 31, 2006 to begin receiving payments in respect of such early operation.

A Supplier shall be required to operate the Project in accordance with the terms of the Contract. Depending on the nature of the Project, a Supplier may be required to become a market participant, and to the extent that the Project involves generation, the Supplier shall be subject to the requirements of the Market Rules. According to the terms of the Contract, the Buyer shall not take title to any products of the facilities constructed as a result of this York Region DR RFP.

The Contract will be issued by the OPA in final form in accordance with the timetable set out in Section 4.1(a) above, and interested parties are advised to review the Contract in its entirety for a detailed and complete description of the parties’ respective rights and obligations, and not simply those selected provisions that are summarized in this York Region DR RFP. Interested parties are advised that the terms and conditions set out in the Contract are not subject to negotiation. Rather, the finalization of the Contract will be limited to the completion of any blanks, bullets, or similar incomplete information, the attachment of any exhibits that are required in order to tailor the Contract to the particular Project and, subject to the agreement of the Supplier, to address any provisions rendered inapplicable as a result of the *Electricity Restructuring Act, 2004* (Ontario) and any regulation thereunder.

### **5.2 Structure of the Contract**

A Selected Proponent will execute a Contract pursuant to which the Selected Proponent, as the Supplier, will use the Control Equipment or DR Measures, throughout the Term, to curtail the electricity demand of the Load in response to Operational Directives from the York Region DR Manager. The Contract will be

effective upon the date of execution and the Term shall commence on either (i) May 1, 2007; or (ii) the first Commercial Operation Date if the Project's first Commercial Operation Date occurs on or before August 31, 2006. The Term shall end on either (i) September 30, 2012; or (ii) if a Supplier that has achieved Commercial Operation prior to August 31, 2006 so chooses, on September 30, 2011.

Under the terms of the Contract, in order to achieve Commercial Operation, each of the following three events must have occurred:

- (a) the Measurement and Verification Plan submitted by the Supplier must have been approved by the Buyer;
- (b) the Supplier must have agreed to abide by such DR Protocols as may be established by the York Region DR Manager and demonstrated its readiness to do so in a manner that has been confirmed by the York Region DR Manager; and
- (c) the Supplier shall have delivered a Verification Certificate to the Buyer attesting to certain matters more particularly set out in the Contract including the level of completion of the Project, the location of the Connection Point(s), if applicable, and the ability of the Project to curtail the electricity demand of the Load as a direct result of the operation of the Control Equipment or DR Measures in response to Operational Directives in the amounts and for the periods required by the Contract.

In order to achieve Commercial Operation in the first instance, a Supplier must satisfy the test for Commercial Operation in respect of at least 1.0 MW of Contracted Demand Reduction for the Project.

### 5.3 Contracted Demand Reduction

Each Contract will specify the maximum number of MW, 100% of which is applicable for the hours of 10:00 a.m. to 6:00 p.m. and 75% of which is applicable for the hours 8:00 a.m. to 10:00 a.m. and 6:00 p.m. to 8:00 p.m., that the Supplier may be required to curtail in the event that an Operational Directive is issued (the "**Contracted Demand Reduction**"). A Supplier that elects to offer availability during months outside of the Season may specify a separate Contracted Demand Reduction to be applicable during the Season and during months outside of the Season. For certainty, Suppliers will be allowed to curtail a magnitude of demand that is equal to 150% of the Contracted Demand Reduction during any Operational Directive as explained in Section 5.4 below. Under the terms of the Contract, the Supplier may indicate multiple Commercial Operation Milestone Dates upon which the amount of Contracted Demand Reduction for the Project will be increased. To the extent that a Supplier has specified more than one Commercial Operation Milestone Date in its Proposal, the Supplier will be required to meet the third branch of the test for Commercial Operation set out in Section 5.2(c) above in respect of any additional demand reduction that the Supplier has indicated will be available as of a particular Commercial Operation Milestone Date before any adjustments will be made to the amount of Contracted Demand Reduction under the Contract.

The ultimate Contracted Demand Reduction for a Project, being the amount of Contracted Demand Reduction specified in a Proposal as of the last Commercial Operation Milestone Date, shall be the maximum Contracted Demand Reduction (the “**Maximum Contracted Demand Reduction**”) and once Commercial Operation for the Maximum Contracted Demand Reduction has been achieved it shall be the amount of Contracted Demand Reduction that shall apply for the balance of the Term. As stated elsewhere, the last possible Commercial Operation Milestone Date that may be specified by a Proponent in its Proposal is May 1, 2007.

All Commercial Operation Milestone Dates and the corresponding amounts of Contracted Demand Reduction shall be incorporated into the Contract and a failure on the part of a Supplier to achieve Commercial Operation by the stated Commercial Operation Milestone Dates will result in default and may be subject to certain financial consequences under the terms of the Contract.

#### 5.4 Compensation

Suppliers under the Contract will be compensated for providing the demand response capacity, as well as for providing the actual Curtailment of electricity demand in response to Operational Directives. For certainty, a Supplier will be compensated under the terms of the Contract for any Curtailment provided in response to an Operational Directive, the magnitude of which may be up to 150% of the Maximum Contracted Demand Reduction, regardless of the magnitude of demand reduction that the Supplier is obligated to deliver in response to such Operational Directive. Accordingly, the payments from the Buyer to the Supplier under the Contract will be comprised of the two (2) components described below. Both components shall be exclusive of applicable GST and PST payable by the Buyer in respect of the Contract.

(a) Capacity Payment

The Capacity Payment for the Project, expressed in Canadian Dollars per MW for each month of the year, is to be the amount per MW per month that the Supplier will receive under the Contract to cover the fixed costs of the Project. This amount will be paid by the Buyer to the Supplier each month, regardless of whether Operational Directives are issued.

(b) Energy Rate and DR Payment

The Energy Rate, expressed in Canadian Dollars per MWh, is the amount that a Supplier will receive under the Contract in order to cover the variable operating cost of the Supplier for the periods of Curtailment in response to Operational Directives. Each month a Supplier shall receive a DR Payment equal to the Energy Rate multiplied by the total Curtailment for the month.

The total monthly payment from the Buyer to the Supplier, as described in greater detail in the Contract and subject to any reductions as set out below, shall be equal to the monthly Capacity Payment plus the cumulative monthly DR Payment, if any.

### 5.5 Reductions in Payment for Failures to Perform

Pursuant to the terms of the Contract, a failure on the part of the Supplier to curtail demand at the level specified in any Operational Directive, either in the magnitude or for the duration required, during any Operational Directive will result in a reduction in the amount otherwise payable from the Buyer to the Supplier. The amount by which the Capacity Payment from the Buyer to the Supplier will be reduced shall be determined by the factor calculated in accordance with the following formula, as further explained in the Contract, and the rules set out below:

$(DR_M) \div (CA_M)$	
where:	
$DR_M$	is the amount of demand reduction, expressed in MWh, delivered by the Supplier during the Operational Directive for which the positive difference of the demand response called for in the Operational Directive less the Curtailment provided by the Supplier is greatest during the month.
$CA_M$	is the amount of demand reduction, expressed in MWh, called for in the Operational Directive for which the positive difference of the demand response called for in the Operational Directive less the Curtailment provided by the Supplier is greatest during the month.

By way of example, if during the month of July there are three (3) Operational Directives issued, each time requiring a curtailment of 10 MW for one (1) hour (or 10 MWh), and the Supplier delivers 10 MWh, 8 MWh and 6 MWh respectively in response to the three (3) Operational Directives, the Capacity Payment for that month will be reduced by 40%. In this example the  $DR_M$  is 6 MWh, the  $CA_M$  is 10 MWh, resulting in a factor of 3/5 which is applied to the Capacity Payment.

During the Term, the first month in which the Supplier fails to respond to an Operational Directive by providing Curtailment at the level specified in the Operational Directive, the above formula will be applied to the Capacity Payment owing to the Supplier for such month. However, the maximum amount by which the Capacity Payment will be reduced during the first such month shall be capped at 50% of the Capacity Payment otherwise owing to the Supplier. In any subsequent month in which the Supplier fails to curtail demand at the level specified in any Operational Directive, the above formula will be applied to reduce the Capacity Payment without limitation, such that the Capacity Payment could be \$0 in the event that zero MWh of demand reduction is delivered in response to an Operational Directive issued during the month. For certainty, if at the time an Operational Directive is issued, the Supplier has already curtailed the entire Contracted Demand Reduction, the Supplier will be deemed to have satisfied its Curtailment obligation provided that the Supplier can verify as required under the terms of the Contract that the demand response was equal to the full amount of demand response specified by the Operational Directive and for the full duration of the Operational Directive.

## 5.6 Operating Characteristics and Methodologies

### (a) During the Season

In any month during the Season, the Supplier may be directed by the York Region DR Manager to curtail the electricity demand of the Load in an amount not to exceed the applicable Contracted Demand Reduction. The York Region DR Manager may, once per day, issue one Operational Directive to a Supplier (via telephone, fax, email or other electronic signal) on at least three (3) hours' advance notice requiring the Supplier to curtail an amount up to the Contracted Demand Reduction for a specified period during Callable Hours. Pursuant to the terms of the Contract, the Supplier shall agree to respond to such Operational Directives by curtailing the electricity demand of the Load through the use of the Control Equipment or DR Measures in response to the Operational Directive.

### (b) During Other Months

In all other months outside of the Season, those Suppliers that have indicated their availability to be called upon to provide demand response in such months may be directed by the York Region DR Manager to curtail the electricity demand of the Load in an amount not to exceed the applicable Contracted Demand Reduction (which may be specified separately as between the Season and outside the Season). The York Region DR Manager may, once per day, issue one Operational Directive to a Supplier (via telephone, fax, email or other electronic signal) on at least three (3) hours' advance notice requiring the Supplier to curtail an amount up to the applicable Contracted Demand Reduction for a specified period during Callable Hours. Pursuant to the terms of the Contract, the Supplier shall agree to respond to such Operational Directives by curtailing the electricity demand of the Load through the use of the Control Equipment or DR Measures in response to the Operational Directive.

In the event the amount of demand response required by the York Region DR Manager in any given period of time is less than the total amount of Contracted Demand Reduction from all of the available Suppliers, the York Region DR Manager will call on available Suppliers in the order of their Energy Rates, from lowest to highest, until the required demand response has been met. For greater certainty, the York Region DR Manager will not consider any Supplier's ability to curtail an amount of electricity demand beyond their stated Contracted Demand Reduction for the purposes of dispatching.

## 5.7 Measurement and Verification

Pursuant to the terms of the Contract, no payments shall be made in respect of a given month until such time as an executed Verification Certificate has been delivered to the Buyer. In order to be considered by the Buyer in the preparation of a payment statement for a given month, the Verification Certificate must be delivered to the Buyer within ten (10) Business Days following the end of the month. A Verification

Certificate that is delivered more than ten (10), but less than ninety (90) Business Days, following the end of a month will be considered by the Buyer in the preparation of the statement for the month in which the Verification Certificate is received by the Buyer. Under the terms of the Contract, the Buyer shall not make, nor shall it owe, any payments to the Supplier in respect of a month for which the Supplier fails to deliver a Verification Certificate for the given month before the ninetieth (90<sup>th</sup>) Business Day following the end of such month.

The Measurement and Verification data for any period in which Curtailment was required must demonstrate the use and effectiveness of the Control Equipment or DR Measures.

The type of Measurement and Verification Plan that will be required will depend on the type of project in question. The basic elements of a Measurement and Verification Plan for each of the three basic project types are set out below. Interested parties should refer to the Measurement and Verification Guidelines for DR set out in Appendix K and should also note that OPA will accept changes to the baseline calculation methodology substantially similar to those contained in the document entitled "TDRP Clarification I" issued by the IESO which can be found at [http://www.ieso.ca/imoweb/pubs/consult/DmdResp/dr\\_TDRP\\_Clarification\\_I.pdf](http://www.ieso.ca/imoweb/pubs/consult/DmdResp/dr_TDRP_Clarification_I.pdf).

(a) Measurement and Verification for Projects Based on Load Interruption

Comparison to Baseline

The amount of demand reduction actually delivered by the Project will be determined based on the difference between the baseline Load less the actual Load during the period of any Operational Directive. The baseline Load for a particular load hour will be based on the average of the Load during the same load hour on the highest ten (10) of the past eleven (11) such load hours on each of the eleven (11) Business Days immediately preceding the date on which the demand response was provided. For load hours where verified demand reduction occurred using the Control Equipment or DR Measures, the baseline Load will be increased by the amount of such demand reduction.

Preferably, interval meter data will be the basis for establishing baseline Loads and for determining the actual level of demand response provided in response to Operational Directives. A Supplier must provide such measurement and verification data as is required pursuant to its approved Measurement and Verification Plan to demonstrate that it has curtailed the Load using the Control Equipment or DR Measures.

Adjustments to Baseline Load

Adjustments to the baseline Load may be proposed by the Proponent. An example of a possible adjustment might include, but is not limited to, vacation or maintenance shut downs. Acceptance of any adjustment will be solely at the discretion of the Buyer. Proponents may also propose the

use of a weather correction adjustment to their baseline Load calculation methodology. Proponents proposing the use of a weather correction adjustment in their baseline Load calculation must detail the proposed method and provide the rationale for it. Allowance for a weather correction adjustment and selection of the adjustment mechanism applied will be at the Buyer's sole discretion.

(b) Measurement and Verification for Projects Based Behind the Meter Generation

When the Control Equipment for the Project is comprised of Behind the Meter Generation, the generator must be metered, and the Measurement and Verification Plan must make the relevant metered data available to the Buyer to confirm that the demand response required to meet the Operational Directive was accomplished through the use of the generator.

(c) Measurement and Verification for Projects based on Load Shifting

When Control Equipment or DR Measures enable Load Shifting capabilities and the Load Shifting is routinely implemented by the Load to the point where a baseline-based approach to measurement and verification is not reasonably possible, then the Measurement and Verification Plan must include provisions to demonstrate to the satisfaction of the Buyer that the Supplier curtailed the Load using the Control Equipment or DR Measures.

**5.8 Environmental Attributes**

The Buyer will assign to the Supplier, at no cost to the Supplier, all of the Buyer's rights existing as of October 28, 2005 in the credits and allowances provided under the Ontario Emissions Trading Program ("OETP") which pertain to the Project.

Subject to the foregoing, the Supplier shall obtain on behalf of the Buyer, and the Buyer shall retain, all rights, title, and interest in all Environmental Attributes related to the Project. The Supplier shall not participate in any other programs with respect to any Environmental Attributes associated with the Project without the prior written consent of the Buyer, which consent may be unreasonably withheld

**5.9 Remedies for Supplier Default**

Given the importance that has been placed by the Buyer on the Supplier attaining Commercial Operation of the Project by the corresponding Commercial Operation Milestone Date(s) set out by the Supplier, in the event that Commercial Operation is not attained by the corresponding Commercial Operation Milestone Date(s), the Contract shall require the Supplier to pay to the Buyer, as liquidated damages and not as a penalty, an amount to be specified in the Contract. Upon the occurrence of such event, the Supplier shall be in default unless the Supplier has paid all accrued liquidated damages and the full amount of the required Completion and Performance Security is being held by the Buyer. The Supplier will not be able to cure a default with respect to a delay in achieving Commercial Operation by paying the applicable liquidated

damages where Commercial Operation is delayed beyond (i) May 1, 2007 for Projects with an initial Commercial Operation Milestone Date prior to May 1, 2007, and (ii) May 1, 2008 for Projects with an initial Commercial Operation Milestone Date of May 1, 2007.

The Buyer's rights and remedies for a Supplier Event of Default (as defined in the Contract) will depend on the nature of such event of default, but will include the following:

- (a) the Supplier will forfeit the entire monthly payment otherwise payable to the Supplier for the settlement month in which such Supplier Event of Default occurs, as liquidated damages and not as a penalty;
- (b) the Buyer may levy a performance assessment set-off as liquidated damages and not as a penalty, equal to three (3) times the average total monthly payment payable to the Supplier for the most recent three (3) months that fall in the Season (or the number of settlement months that have elapsed from the Term Commencement Date that fall in the Season if less than three (3) settlement months have elapsed), in the event of repeated failures;
- (c) termination of the Contract, at the Buyer's option; and
- (d) automatic termination of the Contract.

Also, a failure by the Supplier to achieve a minimum availability of the Control Equipment or DR Measures, as a percentage of the Maximum Contracted Demand Reduction as specified in the Contract, will be considered a Supplier Event of Default and shall give rise to the additional rights and remedies of the Buyer set out above, as applicable. However, if the Control Equipment or a DR Measures are unavailable as a result of an event of force majeure, which for clarity shall not include failure to attain required licensing or permitting, the hours during which the Control Equipment or DR Measures are unavailable will not be included in the calculation of the minimum availability.

#### **5.10 Planned Outages and Declarations by Supplier**

A Supplier under a Contract may declare that it is unavailable due to planned facility operations and maintenance, subject to certain restrictions to be set forth in the Contract. However, a Supplier shall be prohibited from scheduling planned outages during the period from May 1 to September 30 in any given year.

Any declaration by a Supplier that it is unavailable must be made with at least one (1) Business Day's prior written notice to the York Region DR Manager and the Buyer, and no such declaration will be valid unless supported by a verification statement from the DR Verification Consultant. The verification statement provided by the DR Verification Consultant must demonstrate that the Load from which the relevant curtailment of electricity demand would otherwise have been drawn was operating below the normal load

levels during the relevant period. For each day that a Supplier is validly declared unavailable, the Capacity Payment for that month will be reduced on a *pro rata* basis, but no other damages shall be assessed.

In the event that the Supplier is only partially able to curtail the electricity demand of the Load as a result of a Load outage or a Control Equipment outage, upon receiving an Operational Directive, the Supplier will only receive a portion of the Capacity Payment in accordance with the formula set out above in Section 5.5, and the Buyer shall have the right to pursue additional remedies as, if applicable, set out in Section 5.9.

Where applicable, a Supplier must comply with the Market Rules, including outage and maintenance planning requirements thereof.

#### **5.11 Enrolment in Other Programs**

Suppliers are reminded of the requirements set out in Section 2.2(e) that the Project's involvement in any other programs must be limited such that any Curtailment provided by the Project will be exclusively compensated for under the terms of the Contract and the Project must not be a participant in any other demand response program in the Province of Ontario pursuant to which the ratepayers of the Province of Ontario have provided or will provide funding to directly cover the capital costs of the Control Equipment or DR Measures of the proposed Project.

Notwithstanding the foregoing, if the Supplier wishes to enrol the Project under any other demand management program during the Term of the Contract, it will do so in full recognition that it must continue to meet all commitments under the Contract and will only do so with the prior written consent of the Buyer. For greater certainty, such other programs include the Transitional Demand Response Program (TDRP) or the Hour Ahead Dispatchable Load (HADL) administered by the IESO, or any future IESO-administered demand response programs and any other future demand response initiatives or programs of the OPA.

#### **5.12 Counterparty**

The OPA will be the counterparty to the Selected Proponents under the Contract, provided that the OPA shall be entitled to assign any Contract on the terms set out in the Contract. It is intended that the costs of the Contracts be recovered from all electricity consumers through appropriate settlement mechanisms.

### APPENDIX A: GLOSSARY OF TERMS

The definitions of those capitalized terms and acronyms utilized in this York Region DR RFP, unless otherwise stated to be definitions contained in the Contract are provided below.

TERM OR ACRONYM	DEFINITION
A.M. Best	Means A.M. Best Company or its successors.
Act	Means the <i>Electricity Restructuring Act, 2004</i> as described in Section 1.4.
Adjusted Price Ceiling	Has the meaning given to it in Section 3.4(c).
Ancillary Services	Means, as defined in the Market Rules, any services necessary to maintain the reliability of the IESO-Controlled Grid, including but not limited to frequency control, voltage control, reactive power and Operating Reserves.
Armitage	Means the Armitage Transformer Station, as identified in the Map in Appendix B.
Behind the Meter Generation	Has the meaning given to it in Section 2.1(c).
Bid Bond Form	Means the form attached as Appendix H.
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.
Buyer	Means the OPA, or its successors or permitted assigns.
Callable Hours	Means the hours, on Business Days, between 8:00 a.m. and 8:00 p.m., local time.
Capacity Payment	Has the meaning given to it in Section 3.2(d).
Capital	Means the total money on hand and other real and personal property owned by each equity provider and debt provider financing the Project.
Capital Lease	Means any lease of property, personal, real or mixed, under which an equity provider is the lessee and which would be capitalized on a balance sheet of the equity provider prepared as of such date in accordance with GAAP.
Category A Lender	Means either, a financial institution listed in Schedule I or Schedule II of the Bank Act (Canada) or a financial institution or other entity that is not listed in Schedule I or Schedule II of the <i>Bank Act</i> (Canada) but has at least one of the following minimum credit ratings: (a) A with S&P, (b) A3 with Moody's, (c) A low with DBRS, or (d) A with Fitch IBCA.
Category B Lender	Means a lender that is not a Category A Lender, but that has a Tangible Net Worth of at least \$1,750,000/MW of Contracted Demand Reduction.
Clean Energy Supply (CES) Contract	Means a contract for clean energy supply executed pursuant to the Request for Proposals for 2,500 MW of New Clean Generation and Demand-Side Projects, issued by the Ontario Ministry of Energy on September 14, 2004.

TERM OR ACRONYM	DEFINITION
Combined Point Score	Means the total of the point scores awarded to the Proposal in Stages 2 and 3.
Commercial Operation	Shall have the meaning given in the Contract and as described in Section 5.2.
Commercial Operation Date	Means the date on which Commercial Operation of the Project is first attained for the Contracted Demand Reduction specified in the Proposal.
Commercial Operation Milestone Date(s)	Means the date(s) set out in the Proposal by which the Project shall achieve Commercial Operation, which date(s) shall be no later than May 1, 2007.
Completion and Performance Security	Means the financial security that the Selected Proponent is required to provide to the Buyer upon the execution of the Contract as additional assurance that, among other things, the Selected Proponent will meet the project milestones for the Project as specified in its Proposal, and will diligently operate and maintain the Project over the Term in accordance with the Contract.
Confidentiality Statement	Means the confidentiality statement set out in Section 4.1(e)(vi).
Conflict of Interest	Includes any situation or circumstance where, in relation to the York Region DR RFP process, the Proponent has an unfair advantage or engages in conduct, directly or indirectly, that may give it an unfair advantage, including (i) having or having access to information in the preparation of its Proposal that is confidential to the OPA or the Government of Ontario and not available to other Proponents; (ii) communicating with any official or representative of the OPA or the Government of Ontario or members of the Evaluation Team with a view to influencing preferred treatment in the York Region DR RFP process; or (iii) engaging in conduct that compromises or could be seen to compromise the integrity of the open and competitive York Region DR RFP process and render that process non-competitive and unfair.
Connection Impact Assessment	Means a connection impact assessment referred to in Section 3.3(c)(iv).
Connection Point	Means the point or points of connection, as defined in the Market Rules, between the Load of the Project and the IESO-Controlled Grid. For certainty, the Connection Point will be defined by reference to electrical connection points.
Contract	Means the demand response contract between the Supplier of a Project and the Buyer as set out in this York Region DR RFP.
Contracted Demand Reduction	Means, for the purposes of the Contract, the electricity demand, expressed in MW that will be curtailed by the Supplier based on the operation of the Project and as a direct result of the Control Equipment or DR Measures, during the duration of any Operational Directive.
Control Equipment	Means, for the purposes of the Contract, the new capital equipment, software and associated services of the Project that enable the Supplier to curtail the electricity demand of the Load in response to Operational Directives.

Released November 30, 2005

TERM OR ACRONYM	DEFINITION
Curtailment	Means, for a specified period of time during the Term, the aggregate amount of electricity, expressed in MWh that is curtailed by the Project in response to Operational Directives during such period, in accordance with the Contract.
Customer Impact Assessment	Means a customer impact assessment referred to in Section 3.3(c)(iv).
Daily Curtailment Availability	Means the number of hours in any day that the Project will be available to curtail the electricity demand from the Load in response to Operational Directives as stated by the Proponent in the Proposal.
DBRS	Means Dominion Bond Rating Service Limited and its successors.
Debt	Means, in relation to an equity provider, at any time, without duplication, all debts and liabilities, present or future, to which any equity provider is or may become subject by reason of any obligations incurred on or before the time of calculation, whether contingent, unliquidated or otherwise, including, without limitation: (a) money borrowed and premiums (if any) and accrued/deferred interest (if any); (b) the principal, accrued or deferred interest, if any, and premiums, if any, in respect of any debenture, bond, note, loan stock or similar instrument; any accounts payable and accrued liabilities; (c) any deferred or future tax liabilities and deficits under any pension plans; (d) outstanding obligations in respect of any letter of credit issued on its behalf, acceptance, bill discounting or note purchase facility and any receivables purchase, factoring or discounting arrangement, which carries recourse to the equity provider; (e) all Capital Lease obligations; (f) all marked to market amounts; (g) the amount of any recourse to any equity provider, in respect of any sale, securitization or other asset-backed financing of receivables or other assets; (h) any other transaction having the commercial effect of (1) a financial borrowing or (2) any other raising of money (other than by or in respect of the issue of share equity); and (i) all debts and liabilities of any other person referred to in this definition either (1) guaranteed directly or indirectly in any manner by an equity provider, or (2) having the commercial effect of being guaranteed directly or indirectly by an equity provider.
Deliverables	Means everything developed for or provided to the Buyer in the course of performing under a Contract or agreed to be provided to or on behalf of the Buyer by the Supplier or its employees agents or subcontractors.
Demand Response (DR) Contract	Means a contract for demand response executed pursuant to the Request for Proposals for 2,500 MW of New Clean Generation and Demand-Side Projects, issued by the Ontario Ministry of Energy on September 14, 2004.
Detailed Project Description	Means the description of the Project required under the Technical Questionnaire, which will provide information necessary to apply certain of the Rated Criteria.
Dollar, dollars, or \$	Means Canadian dollars and cents, unless otherwise specifically set out.
DR Measures	Means the demand response measures or protocols that are implemented by the Supplier as part of the Project in order to curtail the Electricity demand of the Load.
DR Payment	Has the meaning given to it in Section 5.4(b).

TERM OR ACRONYM	DEFINITION
DR Protocol	Means any procedures or requirements relating to a Project that may be established by the York Region DR Manager, as described in Section 5.2(b).
DR Verification Consultant	Means, for purposes of the Contract, a technical consultant, independent of the Supplier, mutually acceptable to the Buyer and the Supplier whose role is to verify, among other things, that the requested electricity demand was curtailed by the Supplier in response to an Operational Directive.
EBITDA	Means, for a fiscal year for an equity provider, the aggregate of its (a) Net Income, plus (b) Interest Expense, plus (c) taxes, plus (d) depreciation, plus (e) amortization plus (f) any extraordinary (or non-recurring) items.
Economic Bid Evaluation	Means the economic evaluation set out in Section 3.4.
Economic Bid Statement	Means the form of Economic Bid Statement set out in Appendix F.
Energy Rate	Has the meaning given to it in Section 3.2(d).
Environmental Attributes	Means environmental attributes associated with a generating facility having low environmental impact, and includes, without limitation, emission reduction credits and rights to any fungible or non-fungible attributes, and any and all ownership rights relating to the nature of the energy source as may be defined and awarded through applicable legislation or voluntary programs.
EST	Means Eastern Standard Time.
Evaluated Cost	Has the meaning given to it in Section 3.4(b).
Evaluation Team	Means, collectively, the OPA's personnel and advisors retained for the purpose of evaluating or participating in the evaluation of the Proposals.
Fairness Advisor	Means the person who is retained by the OPA to provide (i) enhanced assurance to Proponents and other stakeholders that the selection and contracting processes are fair and transparent and (ii) a written statement that attests that the procurement process was conducted in an objective and fair manner.
Financial Plan	Has the meaning given in Section 3.3(e).
Financial Questionnaire	Means the financial questionnaire, the form of which is set out in Appendix E.
Firm Commitment	Has the meaning given to it in Section 3.3(e).
Fitch IBCA	Means Fitch IBCA, Duff & Phelps, a division of Fitch Inc., or its successors.
GAAP	Means Canadian or U.S. generally accepted accounting principles approved or recommended from time to time by the Canadian Institute of Chartered Accountants or the Financial Accounting Standards Board, as applicable, or any successor institutes, applied on a consistent basis.
Hour-Ahead Dispatchable Load (HADL)	Means the demand response program of this name administered by the IESO, and as described in Section 5.11.
Hydro One	Means Hydro One Networks Inc.

TERM OR ACRONYM	DEFINITION
IESO	Means the Independent Electricity System Operator of Ontario, or its successor.
IESO-Controlled Grid	Means the IESO-Controlled Grid as defined by the Market Rules.
Include, Including, include, or including	Means including without limitation.
Information and Privacy Commission	Means the Information and Privacy Commissioner/Ontario as established under the <i>Freedom of Information and Protection of Privacy Act</i> , Ontario, the <i>Municipal Freedom of Information and Protection of Privacy Act</i> , Ontario and the <i>Personal Health Information Protection Act</i> , Ontario.
Interest Expense	Means, for any period, the sum of (a) all cash payments made on account of any interest on Debt; plus (b) all fees payable in respect of any letters of credit or guarantees; plus (c) the interest component of any payments on Capital Leases; plus (d) the discount amount of any bankers' acceptance issued by the equity providers; plus (e) all financing, stamping, standby, commitment and other similar fees payable by the equity providers; plus (f) commitment commission; plus (g) other fees, costs and expenses in the nature of financing costs.
Investment Grade Credit Rating	Means a minimum credit rating of (i) BBB- with S&P, (ii) Baa3 with Moody's, (iii) BBB low with DBRS, or (iv) BBB- with Fitch IBCA, if applicable.
Letter of Credit Form	Means the form attached as Appendix G.
Load	Means the load or loads directly associated with an end-user's consumption of electricity, that will be curtailed by the Supplier as a direct result of the operation of the Control Equipment or DR Measures.
Load Interruption	Means a measure or measures which are undertaken to reduce electricity consumption in response to a dispatch signal as described in Section 2.1(a).
Load Shifting	Means a measure or measures which are undertaken to control the level of energy usage at a given time by shifting consumption from a period of peak demand to a period of off-peak demand as described in Section 2.1(b).
Local Distribution System	Means a system for conveying electricity at voltages of 50 kilovolts or less and includes any structures, equipment or other things used for that purpose.
Mandatory Requirements	Has the meaning given in Section 3.2.
Mandatory Requirements Checklist	Means the Mandatory Requirements Checklist attached as item C in Appendix C.
Market Rules	Means the rules made under section 32 of the <i>Electricity Act, 1998</i> (Ontario), as amended from time to time.
Maximum Contracted Demand Reduction	Means for the purposes of the Contract, the maximum and final value (in MW) for the Contracted Demand Reduction of a Project following all increases, if any, which value must be established by attainment of a Commercial Operation Milestone Date no later than May 1, 2007.
Measurement and Verification Plan	Means the criterion described in Section 3.3(b).
Measurement and Verification Guidelines for DR	Means Issue 1.0 of IESO_PRO_0105 - Market Manual 5: Settlements Part 5.10: Transitional Demand Response Program, Appendix C:

TERM OR ACRONYM	DEFINITION
	Measurement and Verification Protocol Development.
Measurement and Verification Plan	Means the criterion which evaluates the method proposed by a Proponent to measure and verify demand reduction, as described in Section 3.3(b).
Ministerial Directive	Means the directive issued by the Minister of Energy on June 15, 2005 directing the OPA to commence procurement processes including one for up to 250 MW or more of demand side management and/or demand response initiatives from across the province, with a particular focus on the cities of Toronto, Mississauga, Brampton and Oakville.
Ministry of Energy	Means the Ministry of Energy of the Government of Ontario.
Moody's	Means Moody's Investors Service, Inc. or its successors.
MW	Means megawatt.
MWh	Means megawatt-hour.
Net Income	Means, for any equity provider for any period, net income for such equity provider for such period determined in accordance with GAAP.
Northern York Region	Means the area identified on the maps in Appendix B
OEB	Means the Ontario Energy Board.
Ontario Emissions Trading Program	Means the Ontario Emissions Trading Program operating under Regulation 397/01 of the <i>Environmental Protection Act</i> (Ontario).
OPA	Means the Ontario Power Authority.
Operational Directive	Means, for the purposes of the Contract, an operational directive to curtail the electricity demand of the Load in an amount not exceeding the Contracted Demand Reduction, issued by the York Region DR Manager to the Supplier (or to a representative of the Supplier with the authority to curtail the electricity demand of the Load) a minimum of three (3) hours in advance of the time at which the Curtailment of the Load is to commence and which specifies the duration of the Curtailment in whole hours, which shall be a minimum of six (6) hours, subject to any increased availability as stated in a Proposal, within Callable Hours.
Project	Means, for the purposes of the Contract, the demand response project to be constructed, developed and operated by the Supplier under a Contract, and includes the Control Equipment and the Load.
Project Description	Means the criterion described in Section 3.3(a).
Project Maturity	Means the criterion described in Section 3.3(c).
Proponent	Means an entity or person that submits one or more Proposals in response to this York Region DR RFP.
Proponent Team	Means, collectively, a Proponent and all entities and persons (including equity providers named in the Proposal) involved in the preparation of the Proponent's Proposal(s) under the York Region DR RFP and/or required by the Proponent to successfully implement its Proposal(s) for the York Region DR RFP and to comply with the Contract. For greater certainty, members of the Proponent Team shall include the Proponent and the Proponent's technical, financial and legal advisors, and any other person otherwise assisting the Proponent

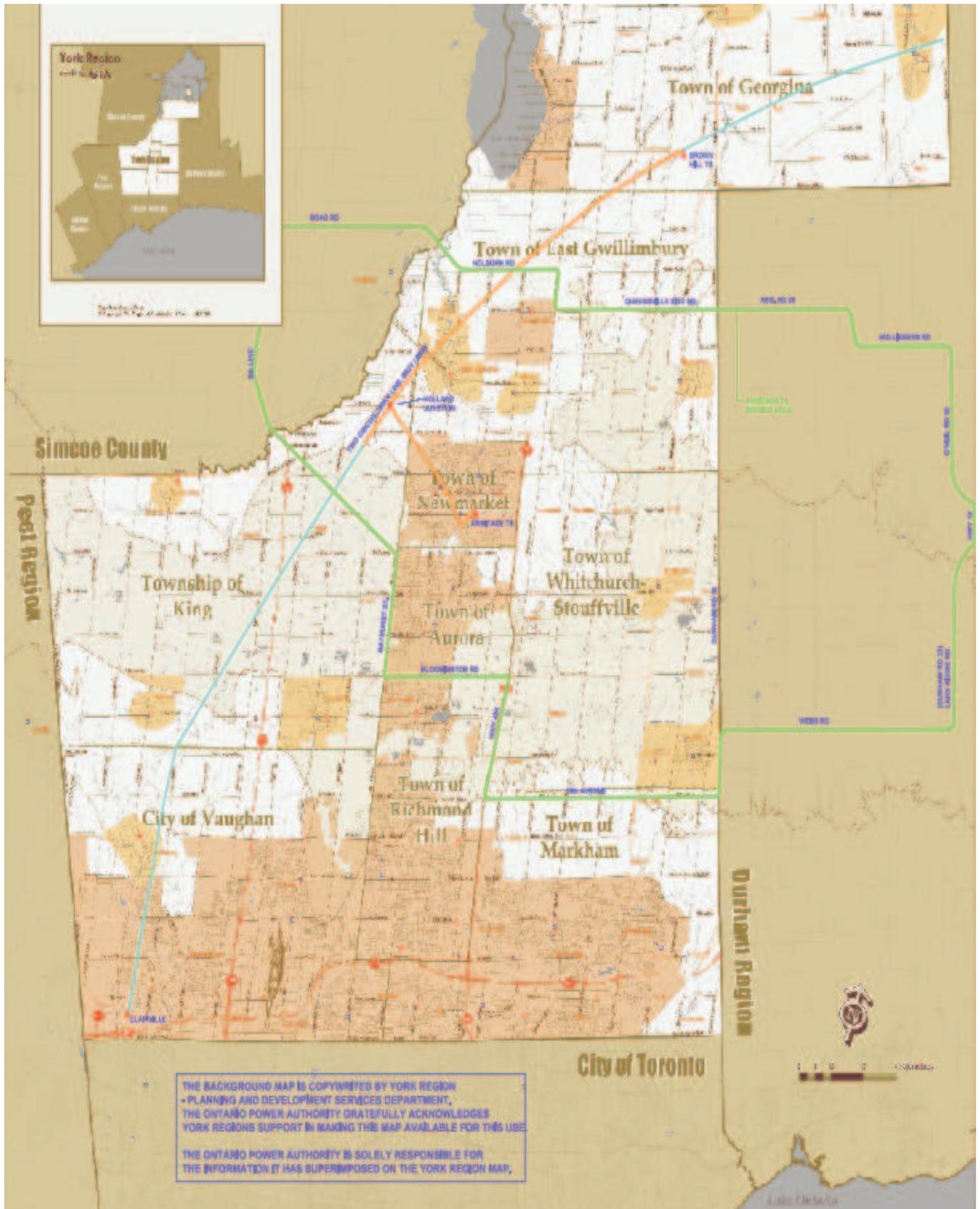
TERM OR ACRONYM	DEFINITION
	in the preparation of its Proposal(s), but shall not include any lenders or any technical or legal advisors to lenders.
Proposal	Means a proposal made pursuant to this York Region DR RFP.
Proposal Security	Means the financial security submitted with the Proposal as described in Section 3.2(c).
Proposal Submission Deadline	Means January 20, 2006 at 3:00:00 p.m. (EST).
Proposal Submission Form	Means the proposal submission form attached as Appendix C.
Rated Criteria	Means each of the Project Description, Measurement and Verification, Project Maturity, Team Experience, Financial Plan and Risk Mitigation criteria as described in Section 3.3.
Registration Fee	Means the non-refundable registration fee of \$5,000 (plus G.S.T.) payable by an interested party that wishes to become a Registered Participant as described in more detail in Section 1.3.
Registration Form	Means the registration form that must be submitted by an interested party that wishes to become a Registered Participant as described in more detail in Section 1.3.
Registered Participant	Has the meaning given to it in Section 1.3.
Renewable Energy Supply (RES) Contract	Means a contract executed pursuant to the Request for Proposals for 300 MW of Renewable Energy Supply, issued by the Ontario Ministry of Energy on June 24, 2004.
Renewable Energy Supply (RES) II Contract	Means a contract executed pursuant to the Request for Proposals for up to 1,000 MW of Renewable Energy Supply from Renewable Generating Facilities with a Contract Capacity of Between 20.0 MW and 200.0 MW, Inclusive, issued by the Ontario Ministry of Energy on June 17, 2005.
Renewable Energy Supply (or RES) III Contract	Means a contract executed pursuant to the Request for Proposals for up to 200.0 MW of Renewable Energy Supply from Renewable Generating Facilities with a Contract Capacity of Between 0.25 MW and 19.9 MW, Inclusive, issued in draft by the Ontario Ministry of Energy on July 12, 2005.
RFP Website	That part of the website referenced as <a href="http://www.ontarioelectricityrfp.ca">www.ontarioelectricityrfp.ca</a> dedicated to this York Region DR RFP process.
Risk Mitigation	Means the criterion described in Section 3.3(f).
S&P	Means the Standard and Poor's Rating Group (a division of McGraw-Hill Inc.) or its successors.
Season	Means from May 1 to September 30.
Seasonal Curtailment Availability	Means the number of hours in any Season that the Project will be available to curtail the electricity demand from the Load in response to Operational Directives as stated by the Proponent in the Proposal.
Section	Means each section of this York Region DR RFP.
Selected Proponent	Means a Proponent whose Proposal has been selected and accepted by the Ontario Power Authority, in accordance with the York Region DR RFP.
Soft Commitment	Has the meaning given to it in Section 3.3(e).
Stack	Has the meaning given to it in Section 3.5(a).

TERM OR ACRONYM	DEFINITION
Stage 1	Means the first stage of the evaluation of Proposals under the York Region DR RFP, being the evaluation of the Mandatory Requirements, as set out in Section 3.2.
Stage 2	Means the second stage of the evaluation of Proposals under the York Region DR RFP, being the evaluation of the Rated Criteria, as set out in Section 3.3.
Stage 3	Means the third stage of the evaluation of Proposals under the York Region DR RFP, being the Economic Bid Evaluation, as set out in Section 3.4.
Stage 4	Means the fourth stage of the evaluation of Proposals under the York Region DR RFP, being the selection of Selected Proponents, as set out in Section 3.5.
Statement of Risks	Has the meaning given to it in Section 3.3(f).
Supplier	Means a Proponent that has executed a Contract.
System Impact Assessment	Means a system impact assessment referred to in Section 3.3(c)(iv).
Tangible Net Worth	Means, in respect of a Supplier, at any time and without duplication, an amount determined in accordance with GAAP, and calculated as (a) the sum of capital stock, preferred stock, paid-in capital, contributed surplus, retained earnings, capital reserves, and cumulative translation adjustment (whether positive or negative), minus (b) the sum of any amounts shown on account of any common stock reacquired by the Supplier, patents, patent applications, service marks, industrial designs, copyrights, trade marks and trade names, and licenses, prepaid assets, goodwill and all other intangibles.
Target Capacity	Means approximately 20.0 MW of demand response.
Team Experience	Means the criterion described in Section 3.3(d).
Team Experience Description	Means the description of all experience that members of the Project team have in developing similar projects, which shall be provided in response to questions in the Technical Questionnaire.
Technical Questionnaire	Means the technical questionnaire, the form of which is set out in Appendix D.
Technical Specifications	Has the meaning given to it in Section 2.2.
Term	Means that period of time commencing upon the Term Commencement Date and running for five years.
Term Commencement Date	Means the later of the Commercial Operation Date, being the first date on which the Project demonstrates that it has achieved Commercial Operation, and the date of the Contract, provided that in the case of a Project with multiple Commercial Operation Milestone Dates, the first Commercial Operation Date shall be used.
Third Party Load	Means Load of an entity being aggregated for the purposes of an aggregation Project under this York Region DR RFP.
Timetable	Means that timetable of events set out in Section 4.1(a).
Transitional Demand Response Program (TDRP)	Means the demand response program of this name administered by the IESO, and as described in Section 5.11.
Transmission System	Means a system for conveying electricity at voltages of more than 50 kilovolts and includes any structures, equipment or other things used

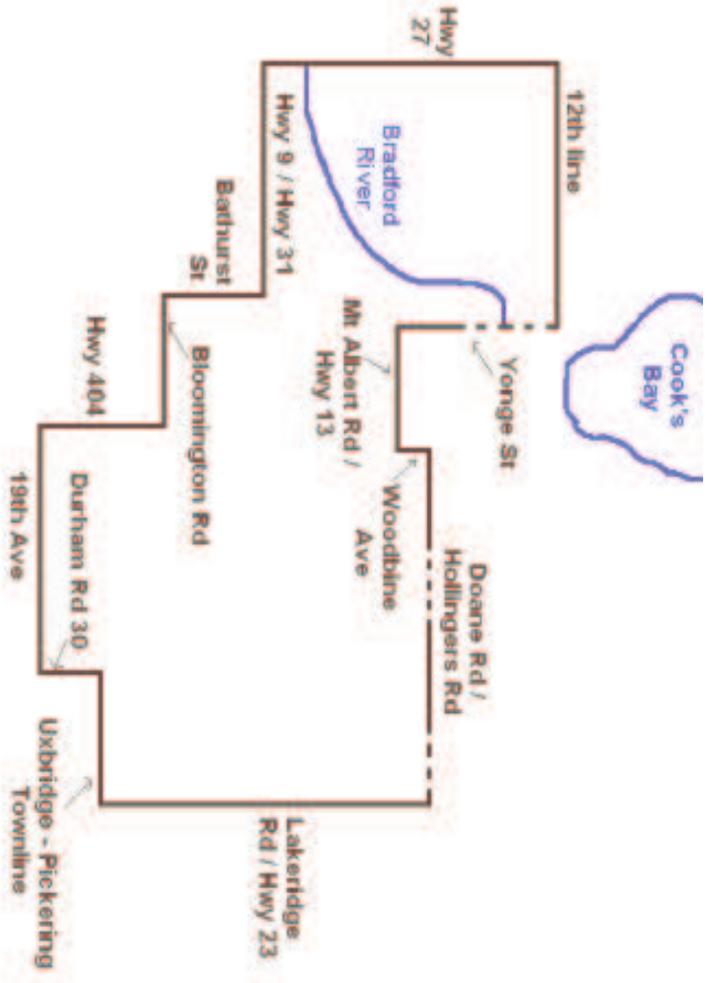
TERM OR ACRONYM	DEFINITION
	for that purpose.
Verification Certificate	Means a certificate, delivered by the DR Verification Consultant, in a form required by the Contract, certifying the matters described in Section 5.7.
York Region DR Manager	Means the party responsible for issuing Operational Directives under the Contract as described in Section 5.6, at the request of either Hydro One or the IESO.
York Region DR RFP	Means this request for proposals, and all addenda to it.

APPENDIX B: MAP OF NORTHERN YORK REGION

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Released November 30, 2005



**APPENDIX C: PROPOSAL SUBMISSION FORM**

**TO: ONTARIO POWER AUTHORITY**

**RE: IN THE MATTER OF** our proposal dated January ●, 2006 to which this Proposal Submission Form is an integral part (the “Proposal”) prepared by ● (the “Proponent”), and submitted in response to a request for proposals issued by the Ontario Power Authority dated November 30, 2005, as amended, regarding the supply of up to 20.0 MW of Demand Response Projects (the “York Region DR RFP”),<sup>1</sup> I am duly authorized by the Proponent, including the persons, firms, corporations and advisors joining in the submission of this Proposal, to execute this Proposal Submission Form.<sup>2</sup> I solemnly declare and promise as follows:

**A. Proposal Validity and Security**

1. All statements, specifications, data, confirmations, and information that have been set out in the Proposal are complete and accurate in all material respects.
2. I consent pursuant to subsection 17(3) of the *Freedom of Information and Protection of Privacy Act* (Ontario) to the disclosure, on a confidential basis, of the Proposal by the OPA to the Evaluation Team and the OPA’s other advisers retained for the purpose of evaluating or participating in the evaluation of the Proposal.
3. I have received and reviewed the York Region DR RFP, together with any and all addenda thereto either posted on the [www.ontarioelectricityrfp.ca](http://www.ontarioelectricityrfp.ca) website or mailed to the Proponent from time to time, up to and including the Deadline for Issuing Addenda, and agree to be bound by the terms of the York Region DR RFP.
4. I have received and reviewed the final Contract issued by the OPA, together with any and all addenda thereto posted on the [www.ontarioelectricityrfp.ca](http://www.ontarioelectricityrfp.ca) website from time to time, up to and including the Deadline for Issuing Addenda, and agree to be bound by the terms of the Contract.
5. I am not nor is any member of the Proponent Team the subject of any bona fide legal proceedings, investigation or regulatory hearings that could materially impact the financial condition of the Proponent or any of the entities involved in financing and operations for the proposed Project.
6. I agree that, if Proponent is chosen by the OPA to sign a Contract, the OPA shall be able to draw upon the full amount of the Proposal Security: (i) if the Proposal contains any material misrepresentation; or (ii) if the

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<sup>1</sup> All capitalized terms used in this Form of Offer, unless otherwise stated, have the meanings ascribed to them in this York Region DR RFP

<sup>2</sup> Where equity providers are engaged in the Proponent’s submission, each must separately execute this Appendix.

Proponent fails to provide to the OPA the required Completion and Performance Security within ten (10) Business Days of the date on which the OPA requests the Proponent to provide the required Completion and Performance Security; or (iii) if the Proponent fails to deliver the executed Contract within two (2) Business Days from the time the Proponent has received a final copy of the Contract.

7. I agree that, in the event that the Proponent becomes a Selected Proponent, the Proponent will provide the OPA with the required Completion and Performance Security, and once the OPA has provided the Contract to the Proponent the Proponent will sign the Contract and return such executed Contract to the OPA within two (2) Business Days from the time it has received copy of the Contract from the OPA.

#### **B. Non-Collusion**

1. I acknowledge and represent that no person, firm or corporation, nor any person duly representing the Proponent and/or participating in the submission of the Proposal, has directly or indirectly entered into any discussion, communication, agreement or arrangement with any other proponent, whereby the Proponent, in order to induce acceptance of the Proposal by the OPA, has paid or is to pay or provide to any other proponent anything of value, and that the Proponent has not, directly or indirectly entered into any discussion, communication, arrangement or agreement with any other proponent or proponents that could have the effect of reducing competition in respect of the subject matter of this York Region DR RFP.

2. I acknowledge and represent that no officer, director, employee or representative of the Proponent, including any partner, owner, advisor of the Proponent, has in any way communicated, colluded, conspired, connived or agreed with, directly or indirectly, any other proponent, potential proponent, firm or person, in connection with this York Region DR RFP, to submit a collusive or sham bid, to refrain from bidding, to manipulate or ascertain the price(s) of other proponents or potential proponents, or to obtain through any unlawful act an advantage over other proponents or the OPA.

3. I acknowledge and represent that the prices submitted in the Proposal have been arrived at in an entirely independent and lawful manner by the Proponent without any communication or consultation with any other proponent or potential proponent or foreknowledge of the prices to be submitted in response to the York Region DR RFP by other proponents or potential proponents, on the part of the Proponent, its officers, partners, owners, providers, employees and representatives, or advisors, including myself.

4. I acknowledge and represent that the Proponent has submitted only one Proposal in respect to this York Region DR RFP.

#### **C. Mandatory Requirements Checklist**

I enclose herewith as part of the Proposal responses to all mandatory submission requirements, as set out below:

Document	Yes	Page
<b>Appendix C Proposal Submission Form</b>		
<b>Appendix D Technical Questionnaire</b>		
<b>Appendix E Financial Questionnaire</b>		
<b>Appendix F Economic Bid Statement</b>		
<b>Proposal Security in the amount and form prescribed in the York Region DR RFP</b>		

**D. Bid Irrevocable**

I understand that the terms of the Proposal will remain irrevocable for sixty (60) days of the Proposal Submission Deadline.

**E. Conflict of Interest**

I hereby confirm that there is not now nor was there in the past any actual or potential Conflict of Interest relating to the preparation of our Proposal, nor do I foresee any actual or potential Conflict of Interest in performing the contractual obligations contemplated in the York Region DR RFP.

**[or if applicable, strike out the above paragraph and include as text in square brackets a listing of all actual or potential Conflicts of Interest]**

The following is a list of actual or potential Conflicts of Interest relating to the preparation of our Proposal or the performance of the contractual obligations described in the York Region DR RFP:

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In submitting the Proposal, no member of the Proponent Team, nor myself, has any knowledge of or any ability to avail ourselves of confidential information of the OPA (other than the confidential information which has been disclosed by the OPA to the Proponents in the normal course of conducting this RFP) which is relevant to the Contracts, its pricing or the York Region DR RFP evaluation process.

The following individuals, whether as employees or advisors of the Proponent, or in any other capacity (a) participated in the preparation of our Proposal; and (b) were employees of the OPA and have ceased such employment since [insert date]:

Name of Individual:
Job Classification (of last position with OPA):
Ministry/Agency (where last employed with OPA):
Last Date of Employment with OPA:
Name of Last Supervisor with OPA:
Brief Description of Individual's Job Functions (at last position with OPA):
Brief Description of Nature of Individual's Participation in Preparation of Proposal:

**(Repeat above for each identified individual)**

I agree that, upon request, I will provide the OPA with a Conflict of Interest Declaration from each individual identified above in a form to be prescribed by the OPA.

**F. Proof of Insurance**

By signing this Proposal Submission Form, I acknowledge the Proponent's willingness, should it become a Selected Proponent, to provide proof of insurance coverage as required in the Contract [**Note: Review requirement in Contract.**]. If successful, the Proponent we will provide proof of insurance coverage in the form of a valid certificate of insurance prior to the execution of the Contract.

**G. Offer**

I hereby offer to perform all of the obligations as indicated in the RFP document in consideration of the OPA paying the Proponent in accordance with the terms, conditions and provisions set out in the York Region DR RFP.

I have carefully examined the York Region DR RFP documents (including all addenda) and have a clear and comprehensive knowledge of the Deliverables required under the York Region DR RFP. By submitting our Proposal, each of the undersigned and the Proponent agree and consent to the terms, conditions and provisions of the York Region DR RFP.

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**H. Execution of Agreement**

I understand that, in the event our Proposal is successful and is selected by the OPA, in whole or in part, I agree submit the Completion and Performance Security on the terms set out in the York Region DR RFP and to finalize and execute the Contract in accordance with the terms of the York Region DR RFP, including all addenda.

Signature of Witness:	Signature of Proponent Representative:
Name of Witness:	Name and Title:  Date of Signature:  I have authority to bind the Proponent

[If equity providers are involved, replicate the signature box below to correspond to the number of equity providers]

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**APPENDIX D: TECHNICAL QUESTIONNAIRE**

**TO: ONTARIO POWER AUTHORITY**

**RE: Technical Questionnaire prepared and submitted by [insert interested party name] (the “Proponent”) in response to a Request for Qualifications issued by the Ontario Power Authority for approximately 20.0 megawatts (MW) of demand response in the Northern York Region dated November 30 , 2005, as amended (the “York Region DR RFP”).**

All capitalized terms used in this Proposal Submission Form, unless otherwise stated, have the meanings ascribed to them in the York Region DR RFP.

The onus remains solely on the Proponent to provide any and all information, including supporting documentation and evidence, to show that all requirements set out in the York Region DR RFP are met. Where supporting evidence or documentation is provided, please reference the applicable section number outlined in this Appendix D.

**1. Information Regarding the Proponent**

(a) Proponent’s registered legal business name and any other name under which it carries on business:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(b) Proponent’s address, telephone and facsimile numbers:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(c) Name, address, telephone and facsimile numbers of the contact person(s) for the Proponent:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(d) Name of the person who is primarily responsible for the Proposal:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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(e) Name of the person who will be managing the operation of the proposed deliverables:

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(f) Whether the Proponent is an individual, a sole proprietorship, a corporation, a partnership, a joint venture, an incorporated consortium or a consortium that is a partnership or other legally recognized entity:

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(g) Name(s) of the proprietor, where the Proponent is a sole proprietor; each of the directors and officers where the Proponent is a corporation; each of the partners where the Proponent is a partnership and applicable combinations of these when the Proponent is a joint venture or consortium, whichever applies:

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(h) Whether the Proponent intends, if selected pursuant to the York Region DR RFP, at any time during the Term of the Contract to use the services of another person, in connection with the management of the Deliverables to be provided pursuant to the Contract. If so, attach full details:

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- (i) Whether the Proponent is a partner, director, officer, shareholder of, or a contributor of capital to another individual, sole proprietorship, corporation, partnership, joint venture, or a consortium that has as its principal business the provision of deliverables similar to the deliverables required pursuant to the York Region DR RFP. If so, provide full details by way of attachment.

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- (j) By checking the box below, confirm that an Executive Summary of the Proposed Project is included with this Proposal.

Yes, an Executive Summary is included.

(interested parties should note that an Executive Summary should provide an accurate description of the Proposed Project and should not exceed two (2) pages in length)

2. **Ability to satisfy the required Technical Specifications**

Evidence of the Proponent’s ability to meet each of the Technical Specifications is provided below:

- (a) By checking the boxes bellow, confirm that the proposed Project will:
  - (i) be capable of responding to Operational Directives issued by the York Region DR Manager during the period commencing on May 1 and ending on September 30 of each year during the Term of the Contract;
 

Yes, documentation of this fact enclosed.
  - (ii) have a minimum Contracted Demand Reduction of at least 1.0 MW, the full amount of which, subject to the terms of the Contract, is available from 10:00 a.m. to 6:00 p.m. (local time) during Callable Hours to satisfy all Operational Directives during the Season, and 75% of which, subject to the terms of the Contract, is available for all Callable Hours other than 10:00 a.m. to 6:00 p.m. (local time) to satisfy all Operational Directives during the Season;

Yes, documentation of this fact enclosed

- (iii) be located in Northern York Region (as defined by the map set out in Appendix B) and affect demand on Armitage;

Yes, documentation of this fact enclosed

- (iv) have a proposed Commercial Operation Milestone Date that is no later than May 1, 2007;

Yes, documentation of this fact enclosed

- (v) be able to curtail the Load during any Season in response to Operational Directive(s):

Yes, documentation of this fact enclosed

for a minimum period of six (6) hours at a time, on any day, between the hours of 8 a.m. and 8 p.m., within three (3) hours of receiving an Operational Directive;

Yes, documentation of this fact enclosed

and

for a minimum total of 125 hours during any Season;

Yes, documentation of this fact enclosed

- (vi) limit its involvement in any other demand response program, or other similar programs involving the curtailment of electricity demand such that any Curtailment provided by the Project will be exclusively compensated for under the terms of the Contract and the Project is not be a participant in any other demand response program in the Province of Ontario pursuant to which the ratepayers of the Province of Ontario have provided or will provide funding to directly cover the capital costs of the Control Equipment or DR Measures of the proposed Project. For greater certainty, this shall also apply to any load or customer that is proposed to be one of the loads to be aggregated under a proposed Project;

Yes, documentation of this fact enclosed

(vii) to the extent that a proposed Project involves Behind the Meter Generation:

meet all of the relevant requirements applicable to Behind the Meter Generation under the Market Rules, whether directly connected to a Transmission System, Local Distribution System, or end-user, including any requirements described in the IESO-approved amendments thereto;

Yes, documentation of this fact enclosed

not supply electricity at any time and at any individual site, directly or indirectly, to the IESO-Controlled Grid and/or to a Local Distribution System;

Yes, documentation of this fact enclosed

and

not be limited by permit or approval restrictions during any Season (for example, there cannot be any 'smog day' restrictions on its operations);

Yes, documentation of this fact enclosed

and

(viii) be capable of verifying demand reduction in response to Operational Directives.

Yes, documentation of this fact enclosed

(b) State each of the proposed Commercial Operation Milestone Date(s) and the corresponding levels of Contracted Demand Reduction.

Commercial Operation Milestone Date mm/dd/yyyy	Contracted Demand Reduction applicable during the Season	Contracted Demand Reduction applicable outside of the Season (if any)
	_____MW	_____MW

(Proponents are reminded that the earliest possible Commercial Operation Milestone Date under the Contract is May 1, 2006 and the latest possible Commercial Operation Milestone Date under the Contract is May 1, 2007. Furthermore, the minimum Contracted Demand Reduction is 1.0 MW and Contracted Demand Reduction can only increase at successive Commercial Operation Milestone Dates. The information provided in this Section will be utilized for the purposes of the Rated Criteria.)

3. **Rated Criteria Information**

Project Description

- (a) Describe the steps that have been taken to date to ensure that the stated Commercial Operation Milestone Date(s) is (are) achieved.


- (b) Describe the steps that will be taken to ensure that the stated Commercial Operation Milestone Date(s) is (are) achieved.



- (c) Describe the level of site or Load control by listing all Project sites and/or Loads and for each Project site or Load, whether the Proponent (i) owns the site(s)/Load(s); (ii) has an agreement to access the site(s)/Load(s); (iii) has a letter of intent, memorandum of understanding, or other evidence of a future agreement to access the site(s) and/or Load(s); or iv) has no evidence of control or access to the site(s) and/or Load(s).

<u>Site or Load Description</u>	<u>Type of Control</u>

- (d) Describe the type of Control Equipment or DR Measures used in the proposed Project and provide any information known about existing installations of this type of Control Equipment or DR Measures elsewhere.



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- (e) State the number of hours that the proposed Project will be available to curtail the full amount of the Contracted Demand Reduction in any 24-hour period.

\_\_\_\_\_ hrs

- (f) State the number of hours of notice that the proposed Project will require in order to respond to an Operational Directive

\_\_\_\_\_ hrs

- (g) State the total number of hours that the proposed Project will be available to curtail the Full amount of the Contracted Demand Reduction during the Season (May 1 to September 30) in any calendar year.

\_\_\_\_\_ hrs

- (h) By checking the box below, state whether the proposed Project will be available to curtail the full amount of the Contracted Demand Reduction during anytime outside of the Season.

Yes, the proposed project can curtail demand outside of the Season and will be available to curtail the Full Amount of the Contracted Demand Reduction for a total of \_\_\_\_\_ hours outside of the Season;

;

or

No, the proposed project cannot curtail demand outside of the Season.

Measurement and Verification Plan

- (i) By checking the box below, state whether a Measurement and Verification Plan is included in the Proposal.

Yes, a Measurement and Verification Plan is included with this Proposal; or

No, a Measurement and Verification Plan is not included with this Proposal.

- (j) Describe the Measurement and Verification Plan for the proposed Project by identifying the methodology by which demand reduction will be measured and verified based on the operation of the Control Equipment or DR Measures.


- (k) By checking the box bellow, confirm whether the Measurement and Verification Plan will include interval metering.

Yes, the Measurement and Verification Plan includes interval metering; or

No, the Measurement and Verification Plan does not include interval metering.

- (l) By checking the box bellow, confirm whether the Measurement and Verification Plan substantially complies with the Measurement and Verification Guidelines for DR attached as Appendix K to the York Region DR RFP.

Yes, the Measurement and Verification Plan complies with the guidelines; or

No, the Measurement and Verification Plan does not comply with the guidelines.

Project Maturity

(m) Describe what, if any, permits and approvals are required for the proposed Project to achieve Commercial Operation and indicate the status of any applications to obtain such.

<u>Required Impact Assessment</u>	<u>Status of Application</u>

- (n) If the proposed Project involves or includes Behind the Meter Generation, state what impact assessments, if any, are required to achieve Commercial Operation of the Project and describe the status of any efforts made to obtain such impact assessments.

<u>Required Impact Assessment</u>	<u>Status of Application</u>

Team Experience

- (o) List demand response projects that the Proponent or members of the Proponent Team have planned and developed, that are located anywhere in North America, other than the proposed Project.


- (p) For any facility(s) identified in section (o) above, list such facilities that have entered into Commercial Operation, meaning that they have commenced operation in compliance with all

laws and regulations after the completion of construction, and completion of connection to a transmission and/or distribution system (if applicable).


- (q) For any facility(s) identified in sections (o) or (p) above, list such facilities that are of the same type as the proposed Project, being a project that utilizes the same Control Equipment or DR Measures as the proposed Project.


- (r) For any facilities identified in section (o) or (p) above, confirm that the Proponent, or any members of its Proponent Team, were in a Managerial Capacity with respect to the planning and development of such demand response project(s) for at least one (1) continuous year in the function of project organization, technical design, and financing by checking one of the boxes below.

(For the purposes of this requirement, “Managerial Capacity” means an assignment with the organization in which the individual personally; (i) manages the organization, department, subdivision, function or component; (ii) supervises and controls the work of other supervisory, professional or managerial employees, or manages an essential function within the organization or department or subdivision of the organization; (iii) has authority to hire and fire or recommend personnel actions or, if no other employee is

directly supervised, functions at a senior level within the organizational hierarchy or with respect to the function managed; and (iv) exercises discretion over the day-to-day operations of the activity or function for which the individual has authority.)

Yes, the Proponent or Proponent Team Member maintained a Managerial Capacity for at least one year;

or

No, the Proponent or Proponent Team Member did not maintain a Managerial Capacity for at least one year;

- (s) For any facilities identified in section (o) or (p) above, describe any non-managerial role played by the Proponent or any member of its Proponent Team with respect to the planning, development or operation of such demand response project(s).


- (t) Identify which member or members of the Proponent Team have the Managerial or staff experiences listed above, and describe such experience(s) in the form of a resume, curriculum vitae and professional designation(s) attached to this Statement of qualifications.

	<input type="checkbox"/> resume, c.v., and designations attached
	<input type="checkbox"/> resume, c.v., and designations attached
	<input type="checkbox"/> resume, c.v., and designations attached
	<input type="checkbox"/> resume, c.v., and designations attached
	<input type="checkbox"/> resume, c.v., and designations attached
	<input type="checkbox"/> resume, c.v., and designations attached

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	<input type="checkbox"/> resume, c.v., and designations attached
	<input type="checkbox"/> resume, c.v., and designations attached
	<input type="checkbox"/> resume, c.v., and designations attached

Risk Mitigation

(u) By checking the box below confirm that a Statement of Risks has been submitted along with this Proposal.

Yes, a Statement of Risks is attached.

or

No, a Statement of Risks is not attached.

Interested parties are reminded that the Statement of Risks should set out all of the potential risks associated with the timely development of the Project. The Statement of Risks should be accompanied by a description of actions and measures on the part of the Proponent to mitigate against such risks and all supporting materials as may be required to assure the OPA that, if selected, the Project will be developed in accordance with the Proposal and achieve Commercial Operation by the stated Commercial Operation Milestone Date(s).

Dated at ● this ● day of ● 2005.

*[Insert name of Proponent]*

By: \_\_\_\_\_

Name: ●

Title: ●

By: \_\_\_\_\_

Name: ●

Title: ●

I/we have the authority to bind the Proponent.

**APPENDIX E: FINANCIAL QUESTIONNAIRE**

Proponents are required to complete this Financial Questionnaire in full, including the attachment of additional documents as and where requested.

1. By checking the box below confirm that a detailed financial plan description has been submitted along with this Proposal.

Yes, a detailed financial plan description is attached.

No, a detailed financial plan description is not attached.

(Interested parties should note that a detailed financial plan description must specify the legal form of the entity that is to develop, finance, own and operate the Project and all sources of current and future financing or credit support for the proposed Project, including the names of all sources of financing, the characterization of each source as equity, debt or other (i.e. neither equity nor debt) financing and cost overrun or contingency support, if any.)

2. **Complete Description of the Financing Plan of the Project**

(a) Using the table below, repeated for each source of financing, funding or credit support, set out all sources of current and future financing, funding or credit support for the project, including the names of all sources and the amounts of (i) debt, (ii) equity and (iii) other funds being provided. Loans from affiliated entities, project partners, and loans that are subordinated to the primary or senior project financing should be reported as equity.

<b>Name of Entity providing Financing:</b>
<b>Type of Financing [i.e. equity, debt, or other (if other, describe source)]:</b>
<b>Amount of Funds to be Provided:</b>
<p><b>Confirm which of the following is attached in respect of the entity identified above:</b></p> <p><input type="checkbox"/> a confirmation letter stating that the funds to be provided are available to the Proponent as of the date of this Proposal [or will be available upon execution of the Contract in the event that the Proponent becomes as a Selected Proponent];</p>

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<input type="checkbox"/> evidence of a Firm Commitment for the funds to be provided;  <input type="checkbox"/> evidence of a Soft Commitment for the funds to be provided;
<b>Evidence of the relative financial strength of the financing entity as set out in Section 3.3(e) of the York Region DR RFP is attached to this Proposal:</b>  <input type="checkbox"/> Yes, the most recent financial statements, credit information or other financial information, as applicable, is attached.

- (b) State the total amount of financing for the project provided from each of: (i) equity, (ii) debt, and (iii) other sources, and the total amount of financing for the Project, based on the information set out in Question 1.a. above.

\_\_\_\_\_

**Total Equity Financing:**

\_\_\_\_\_

\_\_\_\_\_

**Total Debt Financing:**

\_\_\_\_\_

\_\_\_\_\_

**Total Financing from Other Sources:**

\_\_\_\_\_

\_\_\_\_\_

**Total of All Sources of Financing for the Proposed Project:**

\_\_\_\_\_

\_\_\_\_\_

**APPENDIX F: ECONOMIC BID STATEMENT**

**NOTE TO PROPONENTS:** For instructions and assumptions regarding the completion and submission of this Economic Bid Statement, please refer to Section 3.4 of the York Region DR RFP.

Name of Proponent:	_____ _____ _____
Name of Project:	_____ _____ _____

Capacity Payment:        \$ \_\_\_\_\_ /MW-month

Energy Rate:            \$ \_\_\_\_\_ /MWh

Dated at ● this ● day of ● 2006.

*[Insert name of Proponent]*

By: \_\_\_\_\_

Name: ●

Title: ●

By: \_\_\_\_\_

Name: ●

Title: ●

I/we have the authority to bind the Proponent.

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**APPENDIX G: PROPOSAL SECURITY (LETTER OF CREDIT FORM)**

DATE OF ISSUE:	[Insert Date]
APPLICANT:	[Insert Proponent's Name]
BENEFICIARY:	Ontario Power Authority
AMOUNT:	●
EXPIRY DATE:	[Insert Expiry Date, being a minimum of one hundred and twenty (120) days after the Proposal Submission Deadline]
EXPIRY PLACE:	Toronto Counters of the issuing financial institution
CREDIT RATING:	[Insert credit rating only if the issuer is not a financial institution listed in either Schedule I or II of the <i>Bank Act</i> (Canada)]
TYPE:	Irrevocable and Unconditional Standby Letter Of Credit Number: ●

We hereby authorize you to draw on [insert name of Bank and Bank's address] in respect of irrevocable and unconditional standby letter of credit No. ● (the "Credit"), for the account of the Applicant up to an aggregate amount of \$● (Canadian dollars) available by your drafts at sight, accompanied by the Beneficiary's signed certificate stating that:

"The Proponent, whose Proposal has been selected and accepted by the Beneficiary, [has failed to sign the Contract or has failed to deliver the Completion and Performance Security within ten (10) Business Days of the date on which the Proponent was given the final Contract to sign,] or [has made a material misrepresentation in the Proposal,] or [is in breach or default of the York Region DR RFP] and therefore the Beneficiary is entitled to draw upon the Credit in the amount of the draft attached hereto. All capitalized terms used in this certificate that have not been defined herein have the meanings ascribed to them in the York Region DR RFP." [as applicable]

Drafts drawn hereunder must bear the clause "Drawn under irrevocable and unconditional Standby Letter of Credit No. [insert number] issued by [the bank] dated [insert date]".

This Credit is issued in connection with the Request for Proposals for approximately 20.0 MW of Demand Response in Northern York Region issued by the Ontario Power Authority dated ●, 2006, as amended (the "York Region DR RFP") and the Proposal dated [insert date of Proposal] submitted by the Proponent in response thereto (the "Proposal").

We engage with you that all drafts drawn under, and in compliance with the terms of this Credit will be duly honoured, if presented at the counters of [insert the bank] in Toronto, [insert bank's address] at or before 5:00 p.m. (EST) on [insert the expiry date].

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It is a condition of this Credit that if there should be an interruption of the issuing bank's business upon the expiry date, arising out of any of the circumstances provided for in Article 17 of the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication No. 500, this Credit shall automatically be extended to the first following day on which the issuing bank resumes business. This Credit is subject to the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication No. 500. This Credit shall be governed by and construed in accordance with the laws of the Province of Ontario, without regard to principles of conflict of laws. The place of jurisdiction shall be the Courts of the Province of Ontario.

**[BANK OR QUALIFIED FINANCIAL INSTITUTION]**

By: \_\_\_\_\_

**AUTHORIZED SIGNATORY**

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**APPENDIX H: PROPOSAL SECURITY (BID BOND FORM)**

**BID BOND**

Bond No.: ●

Bond Amount: \$(●)

**[Insert Proponent's name]** as Principal, hereinafter called the Principal, and **[insert Surety's name]** a corporation created and existing under the laws of **[insert originating jurisdiction]** and duly authorized to transact the business of Suretyship in the Province of Ontario as Surety, hereinafter called the Surety, are held and firmly bound unto the Ontario Power Authority as Obligee, hereinafter called the Obligee, in the amount of ●/100.00 Dollars (\$●) of lawful money of Canada, for the payment of which sum the Principal and the Surety binds itself, its heirs, executors, administrators, successors and assigns, jointly and severally.

WHEREAS, the Principal has submitted a written proposal to the Obligee dated the **[insert date of Proposal]**, hereinafter called the Proposal, for the development and operation of a demand response project in the Province of Ontario, in response to a Request for Proposals for approximately 20.0 MW of Demand Response in Northern York Region issued by the Ontario Power Authority dated ●, as amended, hereinafter called the York Region DR RFP. All capitalized terms used in this Bid Bond that have not been defined herein have the meanings ascribed to them in the York Region DR RFP.

The condition of this obligation is that the Principal has failed to sign the Contract within ten (10) Business Days of the date on which the Principal was given the final Contract to sign, or has failed to deliver the Completion and Performance Security within ten (10) Business Days of the date on which the Principal was given the final Contract to sign, or has made a material misrepresentation in the Proposal, or is in breach or default of the York Region DR RFP, in which case the Principal and the Surety will pay unto the Obligee the entire amount of the Bid Bond; otherwise, this obligation shall be null and void.

The Principal and the Surety shall not be liable for a greater sum than the Bond Amount.

Any suit under this Bond must be instituted before the expiration of twelve (12) months from the date of this Bond.

No right of action shall accrue hereunder to or for the use of any person or corporation other than the Obligee named herein, or the successors or assigns of the Obligee.

The Surety confirms that as of the date of this Bond, it has a financial strength rating of A- or higher by A.M. Best in financial size category VIII or higher.

IN WITNESS WHEREOF, the Principal and the Surety have Signed and Sealed this Bond this ● day of ●, 2006.

**[PRINCIPAL]**

By: \_\_\_\_\_

Name: ●

Title: ●

I/we have the authority to bind the Principal.

**[SURETY]**

By: \_\_\_\_\_

Name: ●

Title: ●

I/we have the authority to bind the Surety.

**APPENDIX I: PROPOSAL RETURN LABEL**

AFFIX THIS LABEL TO YOUR PROPOSAL SUBMISSION PACKAGE ENVELOPE

Prospective Proponent to complete the following:  
(Full Legal Name and Address)

NAME \_\_\_\_\_

**RFP No. 2005-York DR**

(In addition, set out name of Proponent named in  
the Statement of Qualifications, if different from the above)

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

Date: January 20, 2006

**PROPOSAL SUBMISSION DEADLINE:****Time: 3:00:00 pm (EDT)**

CONTACT \_\_\_\_\_

PHONE NO. \_\_\_\_\_

FAX NO. \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

Ontario Power Authority  
Richmond-Adelaide Centre  
120 Adelaide Street West  
Suite 1600  
Toronto, Ontario, M5H 1T1

**Attention: York Region DR RFP**

The Postal Code is to aid in identifying the building only. The onus remains solely with Prospective Proponents to instruct courier/ delivery personnel to deliver Proposal submissions to the exact floor location specified above by the Proposal Submission Deadline. Prospective Proponents assume sole responsibility for late deliveries if these instructions are not strictly adhered to.

Released November 30, 2005

**APPENDIX J: REGISTRATION FORM**

Any information provided in this form will be kept confidential by the OPA and will not be used in the evaluation of proposals. We request that all parties wishing to register as Registered Participants under the York Region DR RFP complete this Registration Form and submit it to the OPA by **December 8, 2005**, together with the Registration Fee of \$5,000 (plus GST). All Registration Fees must be paid by way of certified check or a bank draft from an institution listed in Schedule I or II of the *Bank Act* (Canada) and made out in favour of "Ontario Power Authority". Parties that do not submit a completed Registration Form and the Registration Fee to the OPA will not be eligible to submit a Proposal in response to the York Region DR RFP.

Email: [procurement.yorkdr@powerauthority.on.ca](mailto:procurement.yorkdr@powerauthority.on.ca) or Fax: 416-967-1947.

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Project Size (MW): \_\_\_\_\_

Project Type: \_\_\_\_\_

Proponent: \_\_\_\_\_

Primary Contact Person : \_\_\_\_\_

E-mail: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Dated this \_\_\_\_\_ day of December 2005.

**[Registered Participant]**

\_\_\_\_\_  
 Per: (authorized signing officer)  
 (Print Name)  
 (Title)  
 (Phone Number)  
 (Fax Number)

Released November 30, 2005

## APPENDIX K: MEASUREMENT AND VERIFICATION GUIDELINES FOR DR

### **Measurement and Verification Protocol Development**<sup>3</sup>

The following materials were developed by ISO-NE and adapted from its Load Response Program Manual, with ISO-NE's permission.

The guidelines in this Appendix provide an opportunity for Applicants with customers without *facility*-wide interval metering to participate in the TDRP. Applicants must have the ability to cause their customers' electrical loads to be curtailed during a TDRP event and report back their customers' aggregated DR. Examples of potential DR strategies could include:

- Traditional direct load control, such as air-conditioner and electric hot water heater cycling and pool pump reductions
- Permission-based control of thermostat set-points
- Control of lighting circuits and dimmable ballasts
- Compressor controls on vending machines and refrigeration

Applicants have several options for measuring and submitting *energy* usage or load reduction data.

#### **Developing an Acceptable Measurement and Verification (M&V) Plan**

The objective of the Applicant's M&V Plan is to describe both the data acquisition procedure and the analysis methodology that will be used by the Applicant to determine their customers' aggregate DR. While unique issues may require attention on a case-by-case basis, all M&V Plans should address the following general issues.

#### **Description of the load reduction measures**

The M&V Plan should describe the nature of the load reduction measures, including the type of end-use equipment involved and the manner in which load will be controlled by the Applicant. It should also characterize the nature of the loads under control, with respect to factors such as whether the loads are constant, staged, or continuously variable; are weather or time-dependent; or have interactive effects on other loads. To verify the nature of load characteristics, some short-term monitoring may be necessary and the data included with the submittal of the M&V Plan.

- A constant load device is one that operates at the same demand (kW) whenever it is on, such as a bank of fluorescent lights controlled by a single switch or a single-speed compressor in a packaged air conditioner unit. Since demand is rarely perfectly constant, a load can be considered as constant if it varies by no more than 5-10% from its average value during operation.
- A staged load is one that can operate at several fixed demand levels, such as a two-speed compressor in a packaged air conditioning unit.
- A continuously variable load can operate at any demand within some range – for example, a fan or pump motor with flow controls or a variable speed drive.

The M&V Plan should identify the specifications for each piece of end-use equipment affected by the load reduction strategy at each customer site. Relevant information may include the equipment capacity (kW, tons, horsepower, full-load amps, power factor, etc.), operating schedule, and customer controls (manual operation, *energy* management system, etc.).

<sup>3</sup> © 2003, ISO-New England Inc. all rights reserved.

## Measurement and Monitoring Strategy

The measurement and monitoring activities proposed for calculating *energy* usage or load reduction are a central component of the M&V Plan, and the following set of issues should be addressed.

1. Monitored Parameter(s). At least three general options can be considered:
  - (a) *Facility-wide* metering of demand (kW). This is the traditional approach allowed in load response programs in which load reductions are estimated based on the whole-premise interval *meters*. This approach is preferred if whole-premise interval metering already exists at a *facility*. However, this approach may not be appropriate if the curtailed loads are small relative to the total *facility* load due to the small “signal-to-noise ratio” or if installing whole-premise interval metering is not economic relative to other monitoring methods.
  - (b) End-use interval metering of demand (kW). This approach may be more appropriate than Option (a) if curtailed loads are small relative to the building load, a *facility* does not currently have whole-premise interval metering or end-use demand (kW) data can be readily obtained from a building *energy* management or control’s system. However, consideration must be given to the possibility of interactive effects that may significantly alter loads on other end-use equipment. For example, control of dimmable ballasts may lead to higher use of task lighting. Therefore, M&V plans that propose end-use metering must describe why whole-premise interval metering is either not cost-effective or inappropriate.
  - (c) End-use interval metering of a proxy variable for demand. This method may include measuring something other than demand (kW) such as current (amperage) and voltage or equipment status (on/off, operating time). This approach is characterized by similar attributes as Option (b), but also requires that a correlation be established between the monitored proxy variable and demand (kW). These correlations may be established by conducting short-term monitoring or a series of spot measurements of both parameters, and correlating the data sets (e.g., by performing a regression analysis) to estimate the functional relationship between the two parameters. Alternatively, engineering estimates of this relationship or use of equipment manufacturer’s data may be appropriate in some circumstances. For example, current and voltage measurements together with a power factor estimate an end-use’s demand (kW). Similar to Option (b) above, M&V Plans that propose end-use metering of a proxy variable must describe why whole-premise interval metering is either not cost effective or inappropriate.
- (2) Monitoring Interval and Period. The M&V Plan should specify the period over which monitoring will be conducted and the interval over which monitored values will be averaged, recorded and reported to *IESO*.
- (3) Instrumentation. The M&V Plan should identify the type of monitoring and data logging equipment (i.e. manufacturer and model number) to be used, and its accuracy, as indicated by calibration or manufacturer’s data. All meters specified must be Measurement Canada approved.
 

If alternative methods of measuring demand are proposed (i.e. proxy variables, voltage, current, etc.) the calculated demand (kW) values from the monitoring data should achieve an accuracy of  $\pm 2\%$  on the calculated demand (kW).

If the proposed methods rely on the measured current (amps) and the nominal voltage, the power factor of the end-uses must be included in the demand (kW) calculations. Furthermore, demand measurements for three-phase devices should be conducted on all phases in order to account for any phase imbalance.

If a *facility’s energy* management system (EMS) will be used to record pulse output from a power transducer, the processing accuracy of the EMS must be verified.
- (4) Sampling. If sampling will be conducted, the M&V Plan should define each population to be sampled, the sample size, and the target level of precision and confidence. The M&V Plan should include all

calculations conducted for determining the sample size and describe how the sample points will be selected. For additional information on sampling, refer to the section below titled “Sampling.”

## Load Reduction Calculation Methodology

The M&V Plan must describe how the Applicant will calculate its DR from the monitored data of individual end-use devices or customers. The Applicant must use the customer baseline methodology described elsewhere in the TDRP rules.

### Calculating load reductions from a sample

If *energy* usage or load reductions will be measured for the entire population of controlled loads or customers, then the Applicant’s aggregated *energy* usage or load reduction in each measurement interval and zone will be calculated as the sum of all individual measured *energy* usage or load reductions. However, if sampling will be conducted, the Applicant’s aggregated *energy* usage or load reduction in each measurement interval and zone must be calculated from the monitoring data of the sample, and the M&V Plan should describe how this calculation will be performed.

The calculation methodology will take one of two general forms:

1. *Energy* usage or load reductions will be determined for each member of the sample and extrapolated to the population in terms of some average normalized value, such as the average kW reduction per unit, per ton of cooling capacity, per kW of connected load, or some other analogous unit.
2. A proxy variable for *energy* usage or load reduction (e.g., change in duty cycle) is determined for each member of the sample, and the *energy* usage or load reduction for the entire population is calculated based on the average measured value of the proxy variable and additional stipulated or measured input parameters for each member of the population (e.g., connected load).

A variety of other critical issues that relate to calculating *energy* usage or load reductions from a sample may also arise and should be addressed in the M&V Plan, including equipment failure and customer over-rides. For control technologies that allow the Applicant to determine over-ride rates and signal failures, better accuracy is possible using these known rates and applying them to the savings for those with successful signal and no over-ride. For example, some thermostat control technologies allow the Applicant to know the signal failure and override for all members of the population. In this case, by separating out all members of the sample with signal failures or overrides, the variation in measured load reduction for the remaining sample points will be generally smaller than it would if the load reduction were calculated for the entire sample. The average load reduction for this subset of the sample can then be extrapolated to the portion of the population that had no signal failure or customer override.

## Sampling

If sampling will be conducted, the M&V Plan must define each population to be sampled, the sample size, and the target level of precision and confidence. The M&V Plan must include all calculations conducted for determining the sample size and describe how the sample points will be selected.

Applicants using a Sampling Plan are likely to employ load reduction strategies that involve curtailing similar types of small loads dispersed across a large number of customer sites (e.g., cycling of residential air conditioners) or within a single customer *facility* (e.g., lighting circuits or vending machines). In some cases, it may not be feasible for the Applicant to individually monitor each piece of equipment, and it may be appropriate to monitor a representative sample. To do so, the Applicant must first identify the relevant populations and then determine the appropriate sample size for each population. After monitoring has been conducted, the Applicant must evaluate the distribution of its sample in order to recalculate their sample size for the following year.

## Identifying the Relevant Populations

To monitor a sample of end points, the Applicant must first identify populations whose members (e.g., end-use devices, customers, lighting circuits) would be expected to have similar values for the monitored parameter. If the populations are defined too broadly, the sample will be unlikely to provide statistically significant results. Populations should consist of members that are similar with respect to:

1. Type and size of equipment affected by the load reduction strategy.
2. Usage patterns (e.g., residential vs. commercial).
3. Load control strategy (e.g., duty cycle control vs. thermostat set point control).

## Determining the Appropriate Sample Size

The appropriate sample size depends on the target level of precision at some specified confidence interval. For all programs, the default statistical target is 90/10 (10% precision at a one-tailed 90% confidence level) in the load reduction (kW) amount.

A generally accepted methodology for calculating the appropriate sample size is to conduct simple random sampling for each population. To follow this approach, first calculate the sample size corresponding to an infinite population ( $n'$ ), according to Equation (1):

$$n' = \left( \frac{z \times c.v.}{p} \right)^2 \quad (1)$$

Where  $z$  is the  $z$ -factor for a given confidence interval ( $z = 1.282$  for a one-tailed 90% confidence interval);  $p$  is the precision ( $p = 0.1$  for 10% precision); and  $c.v.$  is the coefficient of variation, which is equal to the ratio of the standard deviation of the sampled variable to its average value. In general, the greater the expected variation in the variable from one device to the next – e.g., due to operational patterns or equipment size – the greater the value of  $c.v.$  that should be used to calculate the sample size. If monitoring has already been conducted, the  $c.v.$  should be based on the monitored data. Otherwise, a default initial value of  $c.v. = 0.5$  should be used. For load reductions that are likely to have significant variations from one device to the next, a larger  $c.v.$  may be necessary.

The sample size ( $n$ ) for the finite population ( $N$ ) can then be calculated according to Equation (2):

$$n = \frac{n'}{1 + n'/N} \quad (2)$$

Where  $n$  is rounded up to the nearest integer.

If an Applicant has multiple populations, as an alternative they may calculate sample sizes based on a stratified sampling approach, applied across all of the populations. This technique involves more complex sample size calculations, but will generally yield a smaller total number of sample points.

If the Applicant believes that the sample sizes corresponding to a 90/10 statistical target would result in onerous M&V costs relative to project benefits, they may propose a reduction in sample sizes. However, the *IESO* will then de-rate the Applicant's DR. To determine the level of de-rating, first calculate the precision at 90% confidence associated with the reduced sample size, according to Equation (3):

$$p = z \times c.v. \times \sqrt{\frac{N/n - 1}{N}} \quad (3)$$

The de-rating of load reductions is based on the difference between this precision and the target level of 10%. For example, if the precision associated with a reduced sample size is 15%, load reductions will be de-rated by  $15\% - 10\% = 5\%$ .

For any sample calculation methodology, it is advisable that the Applicants over-sample (e.g., by 10%) to compensate for potential data loss due to failures in monitoring equipment or other factors.

### Evaluating the Sample Distribution Based on Monitoring Data.

During the first year of participation a default value for the coefficient of variation (c.v.) will be set to 0.5. However, after some TDRP events, the Applicant can more accurately estimate the c.v. of the population, based on the monitoring data for these events. For simple random sampling, the procedure for evaluating the c.v. of each population is as follows:

1. For each hour of each load reduction event, calculate the mean value and standard deviation of the sampling variable (e.g., kW reduction per unit).
2. Based on the hourly standard deviation and mean values, calculate hourly values for the c.v., equal to the ratio of the standard deviation to the mean.
3. Calculate the average of the hourly c.v. values for all reduction events during the calendar year.

Based on these calculated c.v. values, the Applicant can re-calculate the appropriate sample size for the following program year, using Equations (1) and (2). If the calculated c.v. values are significantly larger than 0.5, this could indicate either that the population has a wide distribution with respect to the sampling variable, or that the population is composed of two or more distinct groups that should be disaggregated into separate populations. In the latter case, the Applicant should re-calculate the c.v. values for each separate population, based on the existing sample data from each of these groups.

### M&V Plan Checklist

Applicants may wish to consult the following checklist to ensure that their M&V Plan addresses the necessary issues and contains adequate detail.

1. The M&V Plan describes the load reduction strategy and related end-use devices, identifying:
  - The type, quantity, and location of end-use devices that will be controlled
  - The manner in which end-use devices will be controlled
  - The general characteristics of the end-use devices, with respect to factors such as load variability, time- or weather-dependence, and interactive effects on other end-use equipment
  - Detailed specifications, to the extent possible, for each end-use device to be controlled, including nameplate capacity, operating schedule, and customer controls
2. The M&V Plan describes the measurements that will be conducted to calculate DR during TDRP events, identifying:
  - The parameters that will be measured
  - The duration over which monitoring will be conducted
  - The interval over which monitoring data will be averaged and recorded
  - The type of monitoring and data logging equipment to be used and their accuracy (include calibration data and/or manufacturer's spec sheets to verify instrumentation accuracy)
  - If applicable, the populations to be sampled, the target level of precision and confidence, and the sample sizes (include all calculations used to determine sample size)
3. The M&V Plan describes the methodology by which aggregate DR for each hour will be calculated from the monitoring data, identifying:
  - How the actual load will be calculated, for M&V strategies that involves the measurement of proxy variables
  - How the baseline load will be calculated, including the period used to calculate baseline loads and adjustments that will be made to account for weather or time of day

- If sampling will be conducted, the calculation method by which monitored results from the sample will be applied to the entire population, including (if applicable) the effect of customer over-rides and signal or equipment failure

The following is a sample M&V Plan template for your consideration. Completion of a submission using the following (or similar) headings would provide the required information for a complete M&V Plan.

### **Template – TDRP Monitoring & Verification Plan**

#### **1.0 Measurement and Monitoring Strategy**

- 1.1 Monitoring Parameters and Variables
- 1.2 Monitoring Interval and Period
- 1.3 Measurement Equipment Specifications
- 1.4 Measurement Data Collection and Management Plan
  - 1.4.1 Measurement Data Validation, Editing and Estimating Plan

#### **2.0 Statistical Sampling Plan**

- 2.1 Description of Population(s)
- 2.2 Sample Size Calculations
- 2.3 Method of Sampling

#### **3.0 Demand Reduction Calculation Methodology**

– End of Section