



## **Transitional Demand Response Program**

### **Draft Eligibility Criteria – April, 16, 2004**

The objectives of the Transitional Demand Response Program (TDRP) are to help market participants overcome specific barriers to demand response (DR) in the short-term and increase the level of demand responsiveness in the Ontario market over the medium and long term.

Selection of participants for the program will be based on a two stage process. In the first stage, the IMO will identify those applications that satisfy the program eligibility criteria. In the second stage, the IMO will score the eligible applications according to evaluation factors reflective of the IMO's program objectives. Participants within a particular tranche (eg, industrial applicants in the first round) will then be selected from the highest scoring eligible applicants within the tranche. The IMO will seek to select participants representing total DR capacity up to nominal targets established for each tranche.

This process is described in more detail below.

## **Eligibility Criteria**

Applications must meet the following criteria in order to be eligible to participate in the program.

1. Participation in the program must overcome a barrier
2. The proposed demand response activities must be incremental to any current price response activities
3. The demand response provided must be measurable
4. Participants must provide assurance that the proposed demand response will be permanent

Details on these eligibility criteria are provided in the following sections.

### **1. Participation Must Overcome a Barrier to DR**

Participation in the TDRP must help participants to overcome one or more barriers to becoming more demand responsive. The primary barriers are expected to be:

- DR is not economic or the benefits are too uncertain
- Existing market rules or regulations impede provision of DR
- There is a lack of infrastructure to enable DR
- Lack of awareness of potential to provide DR

Each of these barriers and the specific information sought from applicants related to these barriers are discussed below.

***Proposed DR is not economic without the expected payments from the TDRP***

Applicants should provide evidence to support any claim that the proposed DR is not economic without participating in the TDRP. This evidence should include details of the applicant's economic analysis related to the proposed DR, which would likely consider:

- the capital investment (if any) required for provision of DR
- the internal costs (if any) incurred for the provision of DR (eg, one-time upfront costs or ongoing per-dispatch costs)
- the expected benefits accruing from the proposed DR under current market conditions and rules (including avoidance of high energy costs). These benefits should also reflect the applicant's assumptions regarding the number and duration of high energy cost events and the number of these events that could be captured through the proposed DR.
- the applicant's required financial criteria (eg, target payback, hurdle rate, etc.) that must be satisfied.

***Existing market rules or regulations are an impediment to the provision of DR***

Applicants should provide evidence to support any claim that market rules or regulations represent a barrier that participation in the TDRP would help overcome. This evidence should include the following at a minimum:

- reference to specific market rules and / or clauses in a code or regulatory instrument.
- a discussion as to how these rules and / or clauses are an impediment to the provision of DR.
- how participation in the TDRP helps to overcome this impediment.

***Applicant does not currently have the necessary infrastructure to provide the proposed DR***

Applicants should provide evidence to support any claim that lack of infrastructure is a barrier that participation in the TDRP would help overcome. This evidence would likely include the following at a minimum:

- identification of the required infrastructure needed to allow provision of the proposed DR (this could include control equipment, storage capacity to allow certain processes to be temporarily shut down, integration of automation / control equipment with market price information, etc.).
- inventory of any existing infrastructure available to support the provision of the proposed DR.
- how the required infrastructure would complement and augment the existing infrastructure.

***Customers are not aware of opportunities to provide DR or do not understand how to do so***

Applicants should provide evidence to support any claim that lack of awareness is a barrier that participation in the TDRP would help overcome.

Applicants proposing to aggregate DR from a group of customers should comment on the current level of awareness among the target customer group and discuss how they will overcome any lack of awareness among these customers. This evidence should include the following at a minimum:

- description of the specific customers being targeted.
- the specific DR these customers could provide.
- steps the applicant will take to increase DR awareness among this customer group.

### **Other Barriers**

Applicants may face other barriers to becoming more demand responsive, such as insufficient advance notice of high-priced periods. If so, applicants should provide details on these other barriers and how participation in the TDRP will help to overcome them in their application.

## **2. Demand Response Activities Must Be Incremental To Any Current Price Response Activities**

Applicants should provide evidence that the proposed DR will be incremental to any current price response activities. For applicants with interval metering, this evidence should include the following at a minimum:

- Derivation of a baseline for each of five days in which HOEP exceeded \$120 / MWh during on-peak periods in the one year period prior to April 16, 2004. This baseline should be developed consistent with the methodology described elsewhere in this document.
- Estimation of current price response activities for each of the five days (derived by subtracting the actual load from the baseline).

*NB – the IMO will identify the specific days for which this analysis should be undertaken.*

Applicants representing customers without interval meters should discuss the target customer's current behaviour and current price response activities, if any.

## **3. Demand Response Provided Must be Measurable**

Participant's DR will be determined based on the baseline less the actual load during a DR event. The baseline would be based on the high ten (based on total consumption during peak periods) of past eleven business days, excluding any days in which the three hour-ahead pre-dispatch price was equal to or greater than \$120 / MWh during peak periods.

*NB: Propose to base details on the baseline methodology on Section 4.2 of ISO NE Load Response Program Manual (with acknowledgement of the original source), but change it to high ten of past eleven instead of average of past ten. Also, IMO baseline methodology will not have any adjustment for load in hours immediately preceding curtailment event.*

The IMO will allow applicants to propose the use of a weather correction adjustment to their baseline calculation methodology in situations where the inclusion of such an adjustment would materially improve the accuracy of the baseline. Applicants wishing to include a weather correction adjustment in the baseline calculation methodology should compare and contrast 1) the estimated baseline (without weather correction) versus actual load against 2) the estimated baseline (with weather correction adjustment) versus actual load. Allowance for a weather correction adjustment and selection of the adjustment mechanism will be at the IMO's sole discretion.

### **Measurement and Verification Protocol for Non-Interval Metered Load**

Applicants proposing to include DR from non-interval metered loads must provide a proposed measurement and verification (M&V) protocol with their application. Guidelines for development of the M&V protocol will follow.

## **4. Must Provide Assurance that Proposed DR Will be Permanent**

Applicants must provide assurance that 1) the supporting infrastructure and equipment will remain in place and 2) the proposed DR will extend beyond the duration of the TDRP. Applicants should:

- discuss whether or not the proposed DR capacity would continue following the expiration of the TDRP absent any other changes in market rules, regulatory codes or rates structures
- estimate the percentage reduction, if any, in DR capacity that would be available after the TDRP ends (and absent any changes in market rules, regulatory codes or rates structures) relative to that which would be provided under the TDRP.
- identify the specific changes in market rules, regulatory codes or rates structures under which the DR would be permanent.

## **Ranking of Eligible Applicants and Apportionment of Program Target**

The IMO will solicit applicants for the TDRP in two rounds. The first round will close four to six weeks after the initial release of the program details and the second round will close four months after the initial release of the program details. The IMO reserves the right at its sole discretion to modify and refine the program rules between rounds.

*NB - Timing should allow participants selected in the first round to be up and running during the summer.*

The IMO has established goals for overall participation in the TDRP and desires a mix of applicants in all customer classes and segments. The provisional goals for each of the industrial, commercial and residential sectors are as follows: Industrial - 40%; Commercial - 30%; Residential - 30%.

For each of the three target sectors in the first round, the IMO seeks to select the lesser of 50% of the provisional sectoral goal or the total DR capacity represented by eligible applicants in a given sector. For example, if the total capacity of eligible applicants from the commercial sector were only 35% of the provisional commercial goal, all of these applicants would be selected in the first round. If a particular sector is significantly under-represented in the first round applications, the IMO may choose to select relatively more DR from other sectors in that round (with a corresponding reduction in the provisional sectoral goal in the second round in order to achieve the overall target for the sector).

In the event that the total DR capacity represented by eligible applicants in a given sector and in a given round exceeds the provisional sectoral goal for that sector, the IMO will choose from among the eligible applicants according to their overall ranking based on the following evaluation factors. The selected participants will be chosen from the highest ranked eligible applicants to achieve total DR capacity roughly equal to the provisional sectoral goal. The ranking and selection of eligible applicants will be at the IMO's sole discretion.

**Evaluation Factors Used to Rank Eligible Applicants**

<b>Evaluation Factor</b>	<b>Weighting in Overall Ranking</b>
Significance of barriers to be overcome	25
Overall fit with IMO TDRP objectives (including permanence)	25
Expected ability to leverage to other customers and segments	20
Degree to which the proposed DR addresses an “underserved” market segment or opportunity	15
Innovative approach	15
<b>Total</b>	<b>100 points</b>