



## Market Rule Amendment Proposal

### PART 1 – MARKET RULE INFORMATION

|                                     |   |  |  |
|-------------------------------------|---|--|--|
| Identification No.:                 | MR-00425  |  |  |
| Subject:                            | Real-Time Generation Cost Guarantee                                     |  |  |
| Title:                              | Real-Time Generation Cost Guarantee – Cost Recovery Framework           |  |  |
| Nature of Proposal:                 | <input checked="" type="checkbox"/> Alteration                          | <input checked="" type="checkbox"/> Deletion | <input checked="" type="checkbox"/> Addition |
| Chapter:                            | 7, 9, 11  | Appendix:                                    |  |
| Sections:                           | Chapter 7, section 2.2B, Chapter 9 section 4.7B, Chapter 11 definitions |  |  |
| Sub-sections proposed for amending: |   |  |  |

### PART 2 – PROPOSAL HISTORY

| Version                              | Reason for Issuing  | Version Date  |
|--------------------------------------|---|---|
| 1.0                                  | Draft for Technical Panel Review                                  | April 19, 2016  |
| 2.0                                  | Draft for Technical Panel Review                                  | May 24, 2016  |
| 3.0                                  | Publish for Stakeholder Review and Comment                        | June 2, 2016  |
| 4.0                                  | Submitted for Technical Panel Vote                                | August 2, 2016  |
| 5.0                                  | Submitted for Technical Panel Vote                                | September 6, 2016   |
| 6.0                                  | Draft for Technical Panel Review                                  | February 7, 2017  |
| 7.0                                  | Publish for Stakeholder Review and Comment                        | February 16, 2017   |
| 8.0                                  | Submitted for Technical Panel Vote                                | March 14, 2017  |
| 9.0                                  | Recommended by Technical Panel; Submitted for IESO Board Approval | March 21, 2017  |
| 10.0                                 | Approved by IESO Board  | April 12, 2017  |
| Approved Amendment Publication Date: |   | April 13, 2017  |
| Approved Amendment Effective Date:   |   | As early as June 7, 2017, and will be specified in a notice to market participants. |

**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IESO-administered markets* if the amendment is not made.
- Alternative solutions considered.
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IESO-administered markets*.

**Summary**

The IESO proposes to amend the market rules to enable a new cost recovery framework for the real-time generation cost guarantee (RT-GCG) program. The changes are expected to increase the transparency of costs eligible to be submitted by market participants for recovery under the program, as well as reduce the scope and frequency of audits. The IESO proposes further amendments to clarify the planned maintenance costs that are eligible for recovery under the program.

This proposal is based on the [RT-GCG Program Cost Recovery Framework](#) stakeholder engagement.

**Background**

Please refer to MR-00425-Q00.

**Discussion**

The objective of this amendment is to establish a transparent cost recovery mechanism that reduces the scope and frequency of audits related to the RT-GCG program. Through stakeholder engagement and consulting with independent industry experts, the IESO has determined that the objective will be achieved by implementing either universal or facility-specific, pre-approved cost values and methodologies in order to calculate the incremental costs eligible for recovery under the RT-GCG program. The amendment will also clarify the planned maintenance costs that are eligible for recovery under the program. The corresponding market manual includes methodologies to calculate eligible planned maintenance costs.

The following market rule amendments are proposed:

**Chapter 7, Section 2.2B**

- **Data Requirements:** Section 2.2B.1.4 was revised to create new sub-sections:
  - Section 2.2B.1.4A reflects existing registered data;
  - Section 2.2B.1.4B identifies the submitted eligible costs (incremental fuel costs and incremental operating and maintenance costs) determined in accordance with sections 2.2B.4, 2.2B.5 and 2.2B.6;
  - Section 2.2B.1.4C requires participants to provide to the IESO any other data, as reasonably requested by the IESO that is relevant to determine eligible costs in accordance with section 2.2B.4, from the registered market participant, any affiliate, service provider or contractual counter-party. Access to relevant data regarding the generation facility helps to ensure that eligible costs are appropriately determined. Provision of such data is also consistent with the obligation on program participants to support costs submitted for recovery.
  - Section 2.2B.3 (new) specifies the data retention period.

**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

- **Audit:** Section 2.2B.2 has been revised to allow the IESO to audit the data required by section 2.2B.1.4 prior to making a guarantee payment where a payment is expected, and requires participants to provide supporting documentation. This audit provision does not allow the IESO to reduce GCG payments by retroactively revising or re-auditing pre-approved cost values, provided that the participant is compliant with Chapter 1, sections 10A.1 and 11.2.1 in relation to the data submitted in support of establishing the pre-approved cost values. The reference to Chapter 1, section 11.2.1 notifies participants that if a pre-approved cost value is discovered by the IESO to be based upon untrue, incorrect, incomplete, misleading or deceptive data provided by a participant, then the IESO may review and/or seek recovery of the associated GCG payment made to that participant. The reference to Chapter 1, section 10A.1 (General Conduct Rule or “GCR”) notifies participants that if a GCG payment is discovered by the IESO to be part of a scheme that breaches the GCR, then the IESO may review and/or seek recovery of all components of that participant’s associated GCG payment including any pre-approved cost values.
- **Submitted Eligible Costs:** Section 2.2B.4 (new) defines submitted eligible costs. This section specifies that eligible costs shall be limited to: (i) incremental fuel costs, incremental operating and maintenance costs resulting from ‘wear and tear’ (defined below) caused by the operation of a facility, and (ii) all other incremental operating and maintenance costs as set out in proposed section 4.7B.5.2 of Chapter 9, from the point of ignition or point of synchronization to the IESO-controlled grid, as applicable, until the facility reaches its minimum loading point, consistent with the new definition for “start volume” (see below). Section 2.2B.5 (new) outlines that the IESO will determine universal or facility-specific pre-approved cost values and methodologies. Section 2.2B.6 (new) specifies that the IESO, at its sole discretion, may allow for after-the-fact cost submissions in certain circumstances. The applicable market manual will further specify the scenarios where the after-the-fact methodology would be applicable.

Chapter 9, Section 4.7B

- **Combined Guaranteed Costs:** Section 4.7B.1.2 has been revised to reference the applicable new sections specifying the submitted eligible costs. Section 4.7B.1.2C (deleted) is no longer required because all eligible costs are now included in the definition of combined guaranteed costs.
- **Formulas:** Section 4.7B.5 (new) specifies the calculation of the submitted eligible costs described in section 2.2B.5 of Chapter 7.

Chapter 11

The definition of ‘combined guaranteed costs’ has been revised to refer to all eligible costs on a facility-specific basis, and to reflect the time period identified in Chapter 9, section 4.7B.1.2.

It is also proposed to add new defined terms for:

- “start volume” to specify the fuel quantity recoverable in the calculation of eligible fuel costs.
- “wear and tear” to more clearly identify eligible maintenance costs specified in section 2.2B.4.

*Italicize Defined Terms:*

**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

As a matter of clean-up, it is proposed to italicize the Chapter 11 defined terms ‘facility,’ ‘quick start facility,’ and ‘generation facility’ in sections 2.2B.1.1 and 2.2B.1.2.

**PART 4 – PROPOSED AMENDMENT****Chapter 7**  
-----**2.2B Generation Facility Eligibility for the Real-Time Generation Cost Guarantee**

- 2.2B.1 *A registered market participant for a generation facility shall be eligible for the guarantee of certain elements of its costs, calculated in accordance with section 4.7B of Chapter 9, provided the following criteria are met:*
- 2.2B.1.1 *the facility is not a quick start facility;*
  - 2.2B.1.2 *the facility is a dispatchable generation facility; and*
  - 2.2B.1.3 [Intentionally left blank – section deleted];
  - 2.2B.1.4 *the registered market participant has submitted to the IESO the following data for the generation facility, according to the timelines and in the form specified in accordance with the applicable market manual, ~~submitted to the IESO the following data for the generation facility~~: *fuel costs for start up and ramp to minimum loading point; the minimum run-time; the minimum loading point; the minimum generation block run-time; and any incremental operating and maintenance costs associated with the facility for start up and ramp to minimum loading point for that facility*, ~~and that the IESO accepts the data as reasonable~~:-
 
    - 2.2B.1.4A the minimum run-time, minimum loading point, and minimum generation block run-time;
    - 2.2B.1.4B the incremental fuel costs and incremental operating and maintenance costs determined in accordance with sections 2.2B.4, 2.2B.5 and 2.2B.6; and
    - 2.2B.1.4C any other data, as reasonably requested by the IESO that is relevant to determine eligible costs in accordance with section 2.2B.4, from the registered market*

participant, any affiliate, service provider or contractual counter-party.

2.2B.2 The *IESO* may, at any time, audit the data submitted in accordance with section 2.2B.1.4 ~~if the market participant receives a generation cost guarantee payment pursuant to section 4.7B.3 of Chapter 9 on the basis of that data, and the registered market participant shall provide the requested audit information in the time and manner specified by the *IESO*.~~ If, as a result of such an audit, the *IESO* determines that the ~~actual costs differed from the audit information provided does not support the submitted data, including, without limitation, that the *IESO* does not accept the data as reasonable,~~ the *IESO* shall recover any resulting over-payments made to the *market participant*. **Notwithstanding the foregoing sentence, where the registered market participant has submitted data in accordance with this section 2.2B and sections 10A.1 and 11.2.1 of Chapter 1, the *IESO* shall not retroactively revise pre-approved cost values determined in accordance with section 2.2B.5 when calculating any amount to be recovered from that registered market participant.**

2.2B.3 For purposes of sections 2.2B.1.4 and 2.2B.2, the registered market participant shall retain supporting documentation related to cost submissions, including data that may be required by the *IESO* to determine pre-approved cost values and methodologies, in accordance with the applicable market manual, for a period of 7 years from the date when a cost is paid.

### **Submitted Eligible Costs**

2.2B.4 Submitted eligible costs pursuant to section 2.2B.1 shall be limited to:

2.2B.4.1 incremental fuel costs, incremental operating and maintenance costs resulting from wear and tear caused by the operation of a facility; and

2.2B.4.2 all other incremental operating and maintenance costs as set out in section 4.7B.5.2 of Chapter 9;

from either the point of ignition or synchronization to the *IESO*-controlled grid as applicable, until the facility reaches its minimum loading point, where that facility has met the eligibility criteria specified in sections 2.2B.1, 5.7 and 6.3A, as specified and further detailed in the applicable market manual.

2.2B.5 Subject to section 2.2B.6, for each cost specified in section 2.2B.4, the *IESO* shall determine pre-approved cost values and methodologies that are either universal or facility-specific, and calculate the submitted eligible costs in accordance with section 4.7B.5 of Chapter 9. The pre-approved cost values and methodologies shall remain in effect until revised by the *IESO*. The *IESO* shall review the pre-approved cost values and methodologies at least once every 3 years. The first review shall be completed no later than 3 years from the effective date of this section.

2.2B.6 In circumstances where pre-approved cost values and methodologies are not established under section 2.2B.5, the *IESO* may at its sole discretion allow a *registered market participant* to submit the incremental fuel costs and incremental operating and maintenance costs for each *facility* under section 2.2B.1.4B, in accordance with the applicable *market manual*.

## Chapter 9

### 4.7B Real-Time Generation Cost Guarantee Payments

4.7B.1 The *IESO* shall determine on a *per-start* basis, for each *generation facility* that has met the eligibility criteria for the real-time generation cost guarantee specified in sections 2.2B, 5.7 and 6.3A of Chapter 7, the following:

4.7B.1.1 the sum of the following revenues earned in each *dispatch interval* during the period from synchronization until the end of the *minimum generation block run-time* or the end of the *minimum run-time*, whichever comes first:

- a. *energy market* prices multiplied by the sum of the applicable AQEI for *energy* injected up to and including the *minimum loading point*; and
- b. any congestion management *settlement* credit payments resulting from the *facility* being constrained on in order to meet its *minimum loading point*.

4.7B.1.2 the applicable *combined guaranteed costs* for the specified *generation facility for the start submission* to which the revenues determined in accordance with 4.7B.1.1 apply. Subject to section 4.7B.1.3, the *combined guaranteed costs* will be calculated by the *IESO* and will be the sum of the following costs:

4.7B.1.2A ~~fuel costs for start up and ramp to minimum loading point submitted by the market participant as outlined in section 2.2B.1.4 of Chapter 7, the submitted eligible costs, determined in accordance with section 4.7B.5 and section 2.2B.6 of Chapter 7, as applicable;~~ and

4.7B.1.2B the *offer price* associated with the real-time *dispatch* multiplied by the *energy* injected, to a maximum of the *minimum loading point*, during the period from the

beginning of the *minimum generation block run-time* until the earlier of:

- the end of the period representing *minimum generation block run-time*; or
- the end of the period representing *minimum run-time*.

4.7B.1.2.C ~~[Intentionally left blank – section deleted] the other costs that are to be considered in addition to those specified in the definition of *combined guaranteed cost* are:~~

~~incremental operating costs for start up and ramp to minimum loading point; and~~

~~incremental maintenance costs for start up and ramp to minimum loading point;~~

~~where both of these additional cost components are reported to the *IESO* in the manner specified in the applicable *market manual*.~~

4.7B.1.3 the elements of the *combined guaranteed costs* in sections 4.7B.1.2A and ~~4.7B.1.2C~~ shall be deemed to be zero where a *market participant* is also eligible for the start-up cost component of a day-ahead production cost guarantee attributable to the same start-up event.

4.7B.2 If for each eligible *generation facility* the sum of the revenues calculated pursuant to section 4.7B.1.1 is greater than or equal to the *combined guaranteed costs* referred to in section 4.7B.1.2, then no additional payments are made in respect of the eligible *generation facility* by the *IESO*.

4.7B.3 If for each eligible *generation facility* the sum of the revenues calculated pursuant to section 4.7B.1.1 is less than the *combined guaranteed costs* referred to in section 4.7B.1.2, then the *IESO* shall calculate that difference and shall include that amount in the form of additional payments made in respect of the eligible *generation facility*.

4.7B.4 A *real-time* generation cost guarantee shall not be paid for a *generation unit* with respect to costs incurred or revenues accrued by that *generation unit* for which a day-ahead production cost guarantee applies under section 4.7D.

### Calculating Eligible Costs:

4.7B.5 The *IESO* shall calculate the submitted eligible costs described in section 2.2B.5 of Chapter 7, as follows and as further specified in the applicable *market manual*:

4.7B.5.1 The incremental fuel cost is equal to the fuel price multiplied by the fuel quantity where:

Fuel price =

- pre-approved price, adjusted by the applicable foreign exchange rate, if any; plus
- pre-approved services price adder; plus
- pre-approved cap and trade price adder, if applicable.

Fuel quantity =

- submitted *start volume*; plus
- submitted *start volume* multiplied by the pre-approved compressor volume adder fuel percentage, except for purposes of calculating cap and trade costs.

4.7B.5.2 The incremental operating and maintenance cost is equal to:

- electricity consumption cost, equal to the pre-approved electricity consumption price multiplied by the pre-approved electricity consumption quantity; plus
- pre-approved operating consumables cost adder; plus
- pre-approved planned maintenance cost adder, adjusted by the applicable foreign exchange rate, if any.

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## Chapter 11 - Definitions

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*combined guaranteed costs* means all eligible costs incurred by a generation facility from either the point of ignition or synchronization to the IESO-controlled grid as applicable, until the earlier of the end of the minimum generation block run-time and the end of the minimum run-time for the generation facility all fuel costs incurred by a generation facility up to and including its minimum loading point, as defined in the applicable market manual, including costs incurred by that generation facility to achieve synchronization and once synchronized with the IESO-controlled grid to move to the generation facility's minimum loading point;

*start volume* means the incremental volume of fuel consumed by a generation facility, on a per registered resource basis, for an eligible real-time generation cost guarantee submission from either: (i) the point of ignition to the minimum loading point of the submitting eligible registered facility, on a per registered resource basis; or (ii) the point of synchronization to the minimum loading point of the submitting eligible registered facility, on a per registered resource basis, if operating in a full speed no-load state for more than five minutes in advance of synchronization to the IESO-controlled grid.

*wear and tear* means, for the purposes of the Real-Time Generation Cost Guarantee Program, the useful life consumption of certain parts or equipment of a generation facility



that would occur as a result of operation of the *generation facility* in accordance with prudent industry practices and original equipment manufacturer guidelines of the *generation facility*. The useful life consumption of certain parts or equipment of a *generation facility* manifests from applicable physical mechanisms (such as creep and fatigue) during different operating conditions (e.g. start-up, steady state operation, transients and shutdown).

#### **PART 5 – IESO BOARD DECISION RATIONALE**

The amendments enable a new cost recovery framework for the real-time generation cost guarantee program, which are expected to increase the transparency of costs eligible to be submitted by market participants for recovery under the program, as well as reduce the scope and frequency of audits.