Memorandum



To: Technical Panel

From: Jo Chung

Date: March 14, 2017

Re: MR-00425: Real-Time Generation Cost Guarantee – Cost Recovery Framework

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 proposed changes are based on the RT-GCG Program Cost Recovery Framework stakeholder engagement.

At its meeting on February 14th, the Technical Panel reviewed a previous draft of the amendment proposal. The amendment proposal was posted on the IESO website for stakeholder comments for a period of two weeks, ending March 2nd. The following four sets of written comments were received and are attached:

- Written Submission from TransCanada Energy Ltd. (TCE)
- Written Submission from the Association of Power Producers of Ontario (APPrO)
- Written Submission from Ontario Power Generation (OPG)
- Written Submission from Goreway Power Station (Goreway)

In addition, this memo includes market rule amendment proposal MR-00425-R00 for Technical Panel review and consideration. Changes made to the amendment proposal in response to stakeholder comments have been highlighted in yellow.

A summary of the written submissions and IESO responses for comments directly related to the proposed market rules language or Technical Panel process are provided below. Written comments related to the stakeholder engagement process have been included in the attached Appendix A:

TCE Comments and IESO Responses

1. The "Summary" section of the amendment proposal should clarify the IESO's intentions underlying the rule amendments by specifying that the new rules also "modify cost recovery from 'actual costs incurred' and limiting recovery to the 'wear and tear' during start-up and up to minimum loading point, thus reducing the eligible costs under the program."

IESO Response

The IESO agrees to add text to identify the additional amendments related to clarifying the eligible planned maintenance costs. The IESO has inserted the following language that more accurately reflects the intent of the additional changes:

"The IESO proposes further amendments to clarify the planned maintenance costs that are eligible for recovery under the program."

- 2. The "Discussion" section of the amendment proposal should:
 - (i) Similar to above, specify the RT-GCG program's change from allowing cost recovery based on 'actual costs incurred' to 'wear and tear' by adding the following text:
 - "and modify cost recovery from 'actual costs incurred' to recovery only for the portion associated with the 'wear and tear' during the start-up to minimum loading point."
 - (ii) Reference the two developed methodologies for determining the portion of the incremental costs eligible for recovery by adding the following text:

"In determining the facility-specific pre-approved cost values for the incremental operating and maintenance costs, the IESO has developed two methodologies in order to calculate the portion of the incremental costs eligible for recovery that results from the 'wear and tear' under the RT-GCG program."

IESO Response

The IESO agrees to add text to identify the additional amendments related to clarifying the eligible planned maintenance costs and to reference the methodologies for calculating planned maintenance costs. The IESO has inserted the following language that more accurately reflects the intent of the additional changes:

"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."

3. Chapter 7, section 2.2B.2 (Audit): In order to clarify what costs the IESO may or may not recover retroactively, TCE suggests adding the following text:

2.2B.2:

The *IESO* may, at any time, audit the data submitted in accordance with section 2.2B.1.4, 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 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 overpayments made to the *market participant*. Notwithstanding the foregoing, w\(\frac{\psi}{\psi}\) here 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*.

IESO Response

The IESO agrees to include the proposed language and would like to add a word so that it reads "Notwithstanding the foregoing sentence ..." to identify that it is the second sentence ("If, as a result of such an audit,...") to which the "notwithstanding the foregoing" is referring to.

As indicated at the May 26, 2016 stakeholder session and in the discussion section of the amendment proposal, the 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 (General Conduct Rule) and 11.2.1 (no untrue, incorrect, incomplete, misleading or deceptive data) in relation to the data submitted in support of establishing the pre-approved cost values.

4. Chapter 7, section 2.2B.5 (Submitted Eligible Costs): TCE believes that any pre-approved costs or methodologies should not be set arbitrarily by the IESO, and should be reasonable and technically sound, and suggests adding the following text:

2.2B.5:

Subject to section 2.2B.6, for each cost specified in section 2.2B.4, the *IESO* shall determine reasonable and technically sound 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.

IESO Response

The IESO will not incorporate the suggestion to include "reasonable and technically sound." The proposed definition of 'wear and tear' already includes the concept of "prudent industry practices and original equipment manufacturing guidelines." Further, the criterion of reasonableness is already reflected in the proposed rules language.

- 5. *Chapter 7, section 2.2B.6 (Submitted Eligible Costs):*
 - (i) TCE requests clarification on the circumstances where the IESO may at it sole discretion allow a market participant to submit incremental costs in accordance with the market manual, where pre-approved cost values and methodologies are not established.

IESO Response

This issue was raised by stakeholders during the engagement last year (2016). The IESO responded that this option has been included as a possible alternative in the event that a pre-approved value cannot be reasonably determined. An example might be a new fuel type for which there are no indices or historical costs to use for determining a pre-approved value.

(ii) If the IESO determines a circumstance that it will allow a particular market participant to submit a new cost item under this section, the IESO should have the obligation to

allow all other program participants to recover that same cost, whether it will be determined to be a universal or resource-specific value.

IESO Response

The particulars of the circumstance would impact applicability to program participants; however, the IESO has been clear in its commitment to treat participants in an unbiased manner, consistent with its statutory obligations.

(iii) TCE suggests the inclusion of the requirement for the IESO to use "reasonable efforts" within this section as follows:

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, being reasonable, 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.

IESO Response

The IESO does not believe the proposed edit is necessary, since the IESO is under existing legal obligations to market participants that require it to exercise its discretion appropriately.

- 6. Chapter 11 definition of "start volume":
 - (i) TCE requests clarification whether the intention of the new cost recovery framework is to limit the recovery of fuel associated with full speed-no-load (FSNL) to only the 5 minutes prior to synchronization. If so, TCE disagrees with this limitation.

IESO Response

If a unit is operating in a full speed-no-load state for more than five minutes prior to a RT-GCG eligible start, the IESO has proposed to allow recovery of fuel costs for the period from the point of synchronization to the minimum loading point.

(ii) TCE suggests the following revisions to the definition of "start volume":

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) if operating in a full speed-no-load state, the point after de-synchronization to 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.

IESO Response

The proposed revisions would allow recovery of fuel costs for operation outside of the eligible period. The IESO does not intend to allow recovery of fuel costs related to operation outside of the eligible period. Therefore the IESO will not incorporate the suggested change.

(iii) TCE suggest replacing the term "point of ignition" within the definition of "start volume" with "point of initiation", since some wear and tear is incurred prior to ignition (i.e. when gas is ignited). TCE proposes the following definitions for "point of initiation" in Chapter 11:

Point of Initiation for a Gas Turbine Resource occurs at the moment a start is initiated on the control system.

Point of Initiation for a Steam Turbine Resource occurs at first fire of the steam boiler to generate steam to drive the steam turbine.

IESO Response

The definition of "start volume" is only intended to apply to the volume of fuel consumed, not to the planned maintenance costs. Further, the IESO had originally used the term "point of initiation" in describing eligible fuel volumes but received feedback that the corresponding definitions were not sufficient for all types of facilities. Please see past stakeholder feedback and related changes that the IESO discussed with stakeholders at the July 13, 2016 stakeholder meeting and the August 9, 2016 Technical Panel meeting. Therefore, the IESO will not adopt the proposed change.

APPrO Comments and IESO Responses

1. APPrO is of the view that it is premature for a Technical Panel vote at the March 21st TP meeting/IESO Board consideration of the amendments on April 12th until one-on-one discussions relating to incremental operating and maintenance costs are finalized, in order to allow program participants to better understand the impacts of the proposed changes on each generator's operations and economics. Until one-on-one discussions have been concluded with each program participant, the comment period should remain open.

IESO Response

The IESO has provided as much information as reasonably possible to the RT-GCG participants, including during the stakeholder engagement process, the Technical Panel process and discussions with individual program participants while respecting confidentiality:

- 1. Draft market manuals were provided detailing all components of the program.
- 2. Cap and Trade costs were added to the eligible costs with details on how those would be recovered.
- 3. The IESO identified two options for handling any planned maintenance costs that were not submitted in past RT-GCG starts when we transition to the new framework.
- 4. The IESO is meeting the commitment to provide a complete assessment of submitted costs to all participants that provided a complete data submission and to have a one-on-one meeting with each of those participants.

With regards to the one-on-one meetings, the IESO first asked for the data submissions on June 7, 2016. Eight companies provided relatively complete responses and have received their draft assessment reports. Three companies have provided insufficient information for the IESO to complete an assessment. These submissions are substantially or completely lacking documentation to enable the IESO to verify the costs. The onus is on the participant to substantiate their cost claims with information that is credible and auditable. The remaining two companies submitted their data in the last week and the IESO has not been able to assess if they are complete. The IESO is working with those that have partial submissions in order to provide them with partial assessments until more information is provided.

For each completed cost submission the IESO prepared a report with a full assessment of the submitted costs. The IESO assessment includes a review of each submitted cost identifying whether the IESO considers the cost to be eligible under the program in principle, a reasonable amount for the item and sufficiently substantiated with third party documentation. The report also explains the IESO's rationale for every cost that was considered ineligible or unreasonable and identifies any outstanding or deficient documentation. Finally, the report provides draft 'pre-approved' values based on the submitted costs that were eligible, reasonable and sufficiently substantiated, along with the calculations used for allocation of the costs.

2. Given how the proposed market rules are structured, they do not, on its face, provide sufficient guidance. Instead, it effectively delegates decision making from the IESO Board to IESO staff in the preparation of market manuals, which is not authorized under the <u>Electricity Act, 1998</u>. IESO staff will have broad discretion to impose whatever cost recovery it considers reasonable, unconstrained by principles or facts.

IESO Response

The IESO reiterates its earlier response that the fundamental principles and obligations of the GCG program will continue to be prescribed in the market rules; the market manuals will augment the rules by providing necessary details with respect to procedure, cost values, and informational requirements that are more appropriate to include in market manuals and would be impractical to codify in the rules. The IESO is acting in full compliance with its legal obligations by addressing such information in market manuals.

The IESO adds that during the previous posting of the proposed amendments for broader stakeholder comment (June 2016), stakeholders requested further hardcoding of the concepts of "start volume" and the IESO's obligation to review pre-approved methodologies at least once every 3 years, each of which the IESO adopted based on specific recommendations to improve the rules language.

Moreover, at the September 13, 2016 Panel meeting, in order to alleviate concerns raised at the August 17th Stakeholder Advisory Committee meeting that too much information was contained in the manuals, the IESO made further edits to the rules language to reinforce the fundamental principles covered for cost recovery are defined and embedded within the market rules.

The IESO adds that it is under existing legal obligations to market participants that require it to exercise its discretion appropriately, and cannot impose whatever cost recovery it considers reasonable, unconstrained by principles or facts.

If stakeholders have concerns regarding the finalization of resource-specific values which are confidential, the IESO notes that these are confidential values which cannot be hardcoded in market rules, nor disclosed in the market manuals.

Goreway Comments and IESO Responses

1. The proposed three-year review schedule is unjustified and should be amended to allow for a review of pre-approved costs after one year, which would help mitigate against the risk of flawed cost calculations.

IESO Response

The proposed market rules language requires the IESO to review pre-approved costs at least once every three years, and can be reviewed sooner if necessary. Unless circumstances require a more frequent review within a three year period, a one year review process is impractical given the time and resources required for this kind of undertaking for both the IESO and stakeholders. The IESO maintains its position that the proposed full program review no less than every three years appropriately addresses the relevant risks while achieving other objectives of the new framework.

Panel Decision Required

The IESO recommends that the Panel vote to recommend MR-00425-R00 to the IESO Board for consideration at its meeting on April 12, 2017. The recommended effective date for these market rule amendments is as early as June 7, 2017, and will be specified in a notice to market participants.

Yours truly,		
Jo Chung		
Attach.		

APPrO Comments and IESO Responses

1. The IESO's stakeholder engagement principles require the IESO to "facilitate a process that provides relevant, accurate and timely information." APPrO is of the view that this principle has not been met, given that the most directly impacted stakeholders are not in a position to understand how they will be impacted. APPrO is concerned that the stakeholdering in this process falls well short of the IESO's legal obligations, which are binding and therefore legally vulnerable.

IESO Response

The IESO respectfully disagrees with APPrO's view. Participants that have provided sufficient information to complete an assessment have received a full draft report that details how all of their costs have been assessed and how the draft pre-approved values have been calculated, and they have had an opportunity to discuss the report with the IESO to answer any questions. This is the engagement framework that the IESO has committed to working through with all participants. The IESO's engagement principles state that we are to "facilitate a process that provides relevant, accurate and timely information needed for meaningful participation and that provides adequate time for review and consideration." It has been nearly nine months since the IESO requested information from participants in order to complete assessments; for those that have not yet provided sufficient information to complete an assessment, the IESO has identified what additional information is required. It is not reasonable, practical nor fair to require that the market rule process continue to wait for all participants to complete their cost submissions. The IESO is confident that in this instance it has fully met its stakeholder engagement principles by any objective standard.

OPG Comments and IESO Responses

1. While OPG has no comments on the rules language, OPG believes that due to the material impact of the proposed rules on RT-GCG market participants, complete implementation details including the conclusion of one-on-one meetings to determine pre-approved values are critical to a fair outcome for RT-GCG market participants.

IESO Response

Please refer to the IESO's response to APPrO comment #1 within the main body of the cover memo.

Goreway Comments and IESO Responses

1. Goreway continues to support a cost recovery program that allows the recovery of actual cost, consistent with the original RT-GCG program. If the proposed program changes are implemented, the changes may undermine market efficiency.

IESO Response

The proposed framework attempts to balance the need to ensure a reasonable cost recovery regime – consistent with the principles outlined in the engagement while also reducing administrative/audit burden and increasing the transparency of the program. Under both the existing and proposed new rules, costs must be accepted by the IESO as reasonable in order to be eligible for recovery under the program.

2. Goreway respectfully submits that the stakeholder engagement principle of transparency has been undermined by a concerning amount of opaqueness regarding the direction the IESO gave to its independent third-party consultant. Market participants have provided substantial amounts of OEM evidence supporting the fact that planned maintenance costs associated with cyclic operations are wholly or substantially related to starts – almost all of this evidence has been rejected by the IESO and done so without the expected and required transparency. Goreway believes it is incumbent upon the IESO to support its own governance principles.

IESO Response

Please see the IESO's response to feedback from the December 15, 2016 stakeholder meeting (posted January 6, 2017) in which the IESO identifies the rationale and evidence supporting why it is important to separate how a generator is billed for planned maintenance from what is reasonable for the IESO to allow to be recovered under the RT-GCG program.

3. Goreway is of the view that where actual costs can be readily calculated, specifically for (i) natural gas compressor fuel and commodity charges and (ii) operating consumables, the IESO should rely on actual costs in its calculations of cost guarantees and not assigned a universal value.

IESO Response

The IESO reviewed and discussed principles and methodology through 2016 to ensure stakeholders understand the decision-making framework that will be used to establish pre-approved cost values. A 'true up' process is not envisioned as it would require an audit and administrative regime which would ultimately undermine one of the key objectives of the new framework.

4. Goreway believes that in order to correctly compensate generators, the RT-GCG cost calculation methodology must properly consider the OEM technical documentation when assessing the cause of wear and tear. Pre-approved values for eligible costs should be based on the OEM's technical documentation, the terms of a generator's Contractual Services Agreement (CSA), and the generator's actual operations. Cost recovery eligibility that ignores these factors is inconsistent with the principles of the program.

IESO Response

For clarification, 'eligible costs' are first and foremost determined by the IESO market rules in particular, the eligible period described in the RT-GCG Program. Within that eligible period, the IESO has clearly defined what portion of planned maintenance costs

are applicable which includes the costs related to wear and tear that occurs during the eligible period.

The IESO adds that when determining pre-approved values, the IESO does consider OEM, CSA, and operational documentation.

5. The proposed changes are sub-optimal solutions for market efficiency and for reducing administrative complexity. Instead, the RT-GCG program should evolve to facilitate three-part offers to the market and ex-ante competitive evaluation.

IESO Response

The IESO has previously outlined its intention to develop an intra-day unit commitment program that utilizes 3-part offers and multi-hour optimization. This is being pursued as part of the Market Renewal Stakeholder Engagement.