



NOVEMBER 27, 2020

Market Power Mitigation Reference Levels and Reference Quantities Thermal Resources

Agenda

1. Objectives
2. Update on Stakeholder Engagement Process
3. Refresher: Reference Levels and Reference Quantities
4. Feedback Received
5. Next Steps

1. Objectives

- Engage with Thermal resources on the reference level and reference quantity methodologies
- Support Thermal resources in their review of the draft written guide and workbooks
- Answer technical questions on the written guide with the *IESO's* engineering services provider (Hatch)

2. Update on Stakeholder Engagement Process

- Reference level and reference quantity stakeholder engagement kick-off meeting was conducted on August 27, 2020.
- October 30, 2020 – Technology-specific meetings held with Dispatchable Loads, Wind and Solar resources
- November, 2020 – Technology-specific meetings with Storage, Hydroelectric, Nuclear and Thermal resources
- Next steps in the reference level engagement:
 - Beginning in 2021: 1-on-1 consultations with *market participants* to establish resource-specific reference levels and quantities

3. Refresher: Reference Levels and Reference Quantities

- Reference levels and reference quantities play an important role in the Market Power Mitigation framework
- The Market Power Mitigation detailed design document introduced processes necessary to set, maintain and update reference levels
- Establishing appropriate reference levels is a high priority for both stakeholders and the *IESO*

3. Refresher: Reference Levels and Reference Quantities

Reference levels are *IESO*-approved values for a resource for what would have been offered by a *market participant* in the *energy* and *operating reserve markets* had they been subject to unrestricted competition. The *IESO* will approve reference levels for financial and non-financial *dispatch data* parameters of each resource

- An example of a financial *dispatch data* parameter is *energy offers* (\$/MWh)
- An example of a non-financial *dispatch data* parameter is *energy ramp rates* (MW/min)

3. Refresher: Reference Levels and Reference Quantities

Reference quantities are *IESO*-approved values for the quantity of *energy* and *operating reserve* a *market participant* would be expected to offer had they been subject to unrestricted competition

These reference quantities can be modified by active *outages*, de-ratings, external factors such as ambient temperature, humidity, water flow conditions and other resource specific considerations

4. Feedback Received

Reference Level Review: MPs require enhanced governance, decision-making, and recourse within IAM (especially applicable to the market power mitigation framework within MRP)

IESO response: The *IESO* will be engaging with *market participants* on the independent review process for reference levels and reference quantities in the future

4. Feedback Received

List Expansion: The list of accepted documentation in supporting costs and list of eligible maintenance costs provided by the *IESO* should be expanded

IESO Response: Eligibility of documentation developed by the relevant *market participant* will be evaluated on a case-by-case basis and the costs list included in the guideline are not exhaustive lists. *Market participants* may submit eligible costs and supporting documentation for review. In determining the eligibility of specific documentation, the *IESO* will consider the reasonableness of the content of the documentation. Section 2.3 of the written guide will be updated to reflect this approach for documentation developed by the relevant *market participant*

4. Feedback Received

Offer Obligation: The *IESO* should clarify expectations and obligations regarding the differences between the derived Reference Price levels and actual Market Participant offer behaviour in the markets. It is not explicitly clear if the *IESO* expects MPs to offer at the price levels specified in the workbooks

IESO Response: Market Power Mitigation does not introduce an obligation to offer at prices consistent with reference levels. The *IESO* will include clarifying language to the written guide to that effect

4. Feedback Received

Use of Generator Costs: This implies that the *IESO* will use a generator's costs and we would reiterate it has to be their actual costs, not those determined by the *IESO*

IESO response: Reference levels for each resource will be based on the short-run marginal costs (SRMC) of that resource. For each cost category, the written guide describes the approach that will be taken to determine the appropriate reference level for each resource

4. Feedback Received

Eligible Short-Run Marginal Costs: What types of costs are included in SRMC? Does the *IESO* plan on being prescriptive or open to interpretation?

IESO response: The written guide states the criteria for what constitutes an eligible cost and provides specific line item costs that are eligible or not eligible where they have been identified to date

Additional line item costs that are not explicitly addressed in the written guide are eligible where they meet the eligibility criteria in the written guide. These costs will be submitted by the *market participant* with the workbooks and relevant supporting material. Where the *IESO* finds them to be eligible, they can be accounted for in the relevant reference level

4. Feedback Received

Fuel Index: Determining fuel costs for facilities that do not have firm gas contracts is challenging in both the day-ahead and real-time. In the absence of a firm contract, gas transport costs can vary substantially due to factors like weather, demand, and scarcity

IESO response: *Market participants* will be able to request use of either a different fuel index, or a modification to using just the Dawn hub price to account for distance from the Dawn hub. These modifications will be evaluated on a case-by-case basis. Where a methodology is supported by relevant documentation and appropriately reflects the relationship between the Dawn (or other) trading hub and the resource it will be eligible for use

4. Feedback Received

Lack of obligation to offer at reference levels: The *IESO* should clarify expectations and obligations regarding the differences between the derived reference price levels and actual *market participant* offer behaviour in the markets

IESO response: Market Power Mitigation does not introduce an obligation to offer at prices consistent with reference levels

4. Feedback Received

What costs must be included in reference levels: ...seeks clarity that *market participants* are not obligated to provide costs for inclusion into the workbooks which do not actually reflect those costs included in offers, but subject to clarification of the above comment, may have the option to do so

IESO response: *Market participants* are not obligated to provide reference levels that are greater than \$0/MWh. Where *market participants* request reference levels greater than \$0/MWh, they are required to provide workbooks and supporting materials that illustrate the values of eligible costs. Where a *market participant* does not request or substantiate an eligible reference level cost, it will not be included in the reference level

4. Feedback Received

RT-GCG Framework: Will *IESO* leverage the previous work completed in the RT-GCG framework?

IESO response: While there are some apparent similarities between the underlying costs that both the RT-GCG pre-approved values and the reference levels identify, there are fundamental differences between the RT-GCG program and market power mitigation. When reviewing and approving reference level submissions for resources, the *IESO* intends to take advantage of synergies from the work that has been done to date on the RT-GCG pre-approved values. However, given that the pre-approved values for the RT-GCG were intended to address a different quantum of costs than reference levels, the occurrence of any such synergies may be limited

4. Feedback Received

Emissions Costs: Suggestion to update written guide to reflect the change in emissions cost regulation provide the fuel emission factor that will be used

IESO response: Emissions policy reference level methodology in the written guide has been updated to reflect the Ontario's Emissions Performance Standards program that is currently in effect in Ontario

5. Next Steps

- **Feedback:** Stakeholders should submit written feedback on the presented materials to engagement@ieso.ca by **Friday, December 11**
- **Example Workbook:** *IESO* will post an example workbook for a thermal resource, completed for illustrative purposes
- **December 2020:** *IESO* will post final written guide and workbooks based on stakeholder feedback received during technology-specific sessions
- **Q1 2021 onwards:** *IESO* will start 1-on-1 consultations with market participants to establish resource-specific reference levels and quantities



Questions?

Thank You

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