

Stakeholder Feedback and IESO Response

Market Renewal Program: Updated Market Power Mitigation Market Rules and Market Manuals March 16, 2023

The IESO posted an updated version of the Market Power Mitigation batch of draft market rules and market manuals on March 16th, 2023 and received written feedback from:

Hydro Quebec Energy Marketing

Ontario Power Generation

Related presentation materials and recorded sessions have been posted on the IESO [stakeholder engagement webpage](#). If interested, please visit the webpage to reference the feedback submissions directly as the below uses excerpts and/or a summary of the stakeholder feedback for the purposes of providing an IESO response.

The IESO will post updated market rules and market manuals based on this feedback for review as part of its on-going updates to the MPM market rules and manuals in Q3 of 2023.

Please contact IESO Engagement at engagement@ieso.ca if you have any questions.

Hydro Quebec Energy Marketing (HQEM)

Table 1 | Hydro Quebec Energy Marketing Feedback and IESO Responses

Feedback	IESO Response
<p>1. <u>Intertie Reference Levels</u></p> <p>HQEM is of the view that the determination of reference levels for border entities at intertie designated as uncompetitive is unnecessarily cumbersome for both the border entities and for the IESO, without any added value.</p>	<p>1.</p> <p>The determination of intertie reference levels is consistent with the approach to determine historical reference prices for the current “Local Market Power” process that can result</p>

Under the approved interim rules and procedures, at each intertie designated as uncompetitive, the IESO intends to calculate one reference level per resource, per period of the day (peak and off-peak), for each of the Day-Ahead and the Real Time markets, for both energy and operating reserves, in both directions. HQEM alone, at the PQAT intertie, counts 20 resources in each direction. **This means that the IESO will potentially calculate, at the PQAT intertie, around 240 reference levels, for HQEM only.** Knowing that Ontario and Québec share 6 other interties, the total number of reference levels will reach several hundreds for HQEM only. One would add to that total the number of reference levels for all other market participants which also transact at PQAT or other interties with Québec.

In turn, since these reference levels will likely not be available directly from the IESO's website, this will also mean that HQEM and other market participants will have to approximate all these reference levels to inform their respective trading personnel's marketing decisions in the Day-Ahead and Real Time markets so to avoid triggering unwanted or unwarranted mitigation, given the steep clawback charge that might be imposed (which we address later in these comments).

This is an unreasonable and unnecessary administrative burden for both market participants and the IESO, way out of proportion with the overall share of imports at the Québec interties in the global Ontario energy market. Furthermore, the informational value of such a mountain of data is dubious at best to incentivize acceptable market behaviour from market participants. More likely, all these data will cause confusion for market participants (which reference level is the right one for this resource or that one?) and increase the perceived risk of offering energy into the Ontario market.

in Congestion Management Settlement Credit (CMSC) adjustments in the current market.

Given that this is an existing practice, there is no additional administrative burden on market participants or the IESO.

Intertie reference levels are determined for a specific boundary entity resource, the same way that reference levels are determined for domestic resources. Submitted dispatch data for a boundary entity resource is compared against the intertie reference level for that boundary entity resource the same way that ex-ante mitigation and settlement mitigation is assessed for domestic resources.

Intertie reference levels inform the initial analysis that the IESO does when assessing potential intertie economic withholding. Market participants are notified of any potential exposure to an intertie withholding settlement charge and afforded an opportunity to provide relevant information regarding their short-run marginal costs or short-run marginal benefits before the charge is issued.

Market participants can mitigate their risk of incurring a settlement charge for intertie economic withholding by having information regarding their short-run marginal costs or short-run marginal benefits available.

Monitoring and tracking intertie reference levels is not required to mitigate a market participant's risk of incurring a settlement charge for intertie withholding.

Moreover, one likely outcome of the IESO's proposed MPM construct for interties designated as uncompetitive would be for two distinct resources at PQAT (belonging either to HQEM or to two distinct market participants) offering energy at the same price would be calculated distinct reference levels, simply because they would have distinct rolling 90-day historical transactional activities. **This, in turn, would mean that one resource might fail the conduct and impact tests while the other would not. In other words, two resources, offering energy at the same price, would not be treated alike in the MPM.**

On its face, such a differential treatment is of concern to HQEM. Its theoretical underpinnings are not clear to HQEM but at a high level, such an outcome certainly raises questions as to a perceived unfairness built into the proposed construct.

As a starting point for future discussions on the matter, HQEM proposes to significantly streamline the determination of reference levels by basing them on the Intertie Border Price ("IBP") only, without any relation to the number of cleared energy offers in the last 90 days. Doing so would greatly reduce the number of reference levels: one per intertie, in both the Day-Ahead and Real Time markets, for both energy and operating reserves. This would be much more manageable for everyone involved and be much more transparent, with no loss of consumer protection.

2. **The Clawback Settlement Charge**

For a market participant that was found to have exercised market power at an intertie designated as uncompetitive, the IESO will impose a clawback settlement charge of 100% of the revenue received by the market participant. In other words, the market participant will in the end have

2.

The difference of value approach suggested is implemented for assessments of intertie economic withholding regarding make-whole payment adjustments, similar to the after-the-fact CMSC adjustments from the current Local Market Power process.

sold the energy to the IESO for \$0. We understand that such a steep clawback charge is intended to incentivize good behaviour from market participants.

In HQEM's view, this clawback charge is unreasonable and excessive, and it has not been demonstrated that such a high level of clawback was necessary to incentivize good behaviour. As it stands, it amounts more to a punishment than to a true desire to ensure that the wholesale price of energy reflects its proper economic value.

HQEM also notes that this 100% clawback charge is inconsistent with how it would be calculated in the case of make-whole payments. Finally, since the MPM package is largely intended to replace the current CMSC mitigation framework, a 100% clawback charge is also inconsistent with the current approach with respect to excess CMSC payments.

HQEM is of the view that the clawback approach should be limited to the difference in value. The level of the charge can be revised later if it can be shown that it does not provide a sufficient incentive to market participants.

The intertie economic withholding settlement charge regarding failures of a price impact test are similar in design to the physical withholding settlement adjustment charges. These charges are intended to disincentivize withholding. Intertie economic withholding settlement charges for price impacts are applied in circumstances when a market participant's submitted offer or bid prices are significantly above their short-run marginal cost or short-run marginal benefit and these resulted in significantly increased LMPs in Ontario. The impact thresholds that are used to assess intertie economic withholding when the IESO assesses price impacts are found in Chapter 7, sections 22.17.7 and 22.17.13.

A settlement charge that was designed to claw back the difference in prices would not provide any active incentive to avoid the behaviour at issue. It would mean that, at worst, the market participant would effectively be no worse off from attempting to withhold. This would not provide an effective incentive to avoid this behaviour and would prevent the mitigation framework from functioning effectively for intertie economic withholding.

3. Applicability of the Mitigation to Energy Exports

The interim rules provide that the MPM package will also apply to energy exports (also called energy bids) at interties designated as uncompetitive by the IESO as part of the economic withholding mitigation framework.

For starters, HQEM understands that the applicability of mitigation to energy bids is a carry-over from the current mitigation of CMSC payments for constrained-off exports. However, the move from the current market design based on the HOEP to the MRP market design based on

3.

The IESO agrees that exporters who cannot benefit from increasing Ontario prices should not be assessed for intertie economic withholding under section 22.17.

The IESO will update the market rules to remove the IESO's ability to assess an exporter for intertie economic withholding under section 22.17 if that exporter does not have a *market control entity* that has been designated as the *market control entity for physical withholding* for a dispatchable Ontario resource supplying energy or operating reserve. Exporters that

locational marginal pricing should in principle remove the need for energy bid mitigation altogether.¹ As such, HQEM fails to understand what problem the mitigation of energy bids is intended to resolve going forward. In fact, with the Global Adjustment still in place after MRP deployment, it is hard to understand how Ontario consumers might be harmed if a market participant is willing to *pay more* to export energy out of Ontario.

As it happens, HQEM understands that, for a market participant deemed to have exercised market power by entering into economic withholding behaviour through exports, the clawback charge would be such that the market participant would have to pay *twice* for the energy that it bought. The message to that market participant seems to be that it did not pay enough in the first place, which is very much inconsistent with the entire thinking behind the application of MPM to exports, which is that the exporter paid *too much*.

HQEM believes the entire logic behind the applicability of the MPM to exports needs to be revisited. In fact, in our view, the MPM package should be further streamlined by not applying the MPM to exports at all.

have disclosed a *market control entity* that has been designated as the *market control entity for physical withholding* for a dispatchable Ontario resource supplying energy or operating reserve will continue to be assessed for intertie economic withholding, as these market participants may benefit from increasing Ontario prices.

¹ In this regard, HQEM would note that for exports to become a rational market strategy for profitable economic withholding in an LMP-based market design, other conditions would need to be fulfilled. HQEM would argue that this falls more within the realm of compliance than administrative settlement charges.

Ontario Power Generation

Table 2 | Ontario Power Generation Feedback and IESO Responses

Feedback	IESO Response
<p>1. Chapter 7, Section 22.4.5</p> <p>There is reference to the defined term energy storage resources, however, the term that has been in use is electricity storage resources. Energy storage resources is not a defined term in Chapter 11 from the Consolidated Batch.</p> <p>The energy storage resource terminology is used in two other instances in "Part 3 - Explanation for Proposed Amendment" in the red-lined statement for Section 22.4.5.</p>	<p>1.</p> <p>The IESO will replace the term "energy storage resource" with "electricity storage resource" in this section.</p>
<p>2. Chapter 7, Sections 22.5.1.2 and 22.5.1.4</p> <p>These two sections referred to other sections with no additional requirement, which indicates that:</p> <ul style="list-style-type: none">a. Sections 22.5.1.2 and 22.5.2, andb. Sections 22.5.1.4 and 22.5.3 <p>have the same content. Is there a need for Sections 22.5.1.2 and 22.5.1.4?</p>	<p>2.</p> <p>These sections are necessary because section 22.5.1 contains a general prohibition on the IESO changing a reference level that has been registered for a resource. Sections 22.5.1.2 and 22.5.1.4 permit the IESO to change a reference level when certain conditions are met (i.e., the IESO identifies a need pursuant to section 22.5.2 or the IESO is required to do so pursuant to section 22.5.3).</p>
<p>3. Chapter 7, Section 22.5.1.3</p> <p>The referenced Sections 22.1.1 and 22.3.3 are both part of the reference level registration process. Do these steps need to be repeated here?</p>	<p>3.</p> <p>The reference to section 22.1.1 will be removed, but the reference to section 22.3.3 must remain. Section 22.3.3 permits the IESO to register the enumerated reference levels for non-financial dispatch data parameters if a market participant does not provide the information or supporting documentation required by the IESO. Since no similar provision exists for reference levels for financial dispatch data</p>

parameters, the reference to section 22.1.1 will be removed.

4. Chapter 7, Section 22.5.2

1. Under what condition would Section 22.5.2 be triggered? If the reference levels have been agreed upon between the IESO and the Market Participant (MP), why would there be an additional review of supporting documentations after the registration? The supporting documentation would have been reviewed and verified by the IESO prior to the approval and registration of the reference levels, based on requirements set out in Sections 22.2 to 22.4.
2. If there is disagreement between the IESO and the MP regarding the updated reference levels calculated from Section 22.5.2, what options are available to the MP to dispute the outcome of the disagreement?

4.

1. This condition could be triggered if the IESO becomes aware of the fact that supporting documentation is not consistent with the registered reference level.
2. The process to determine reference levels as a result of triggering section 22.5.2 would follow the same steps as any other process to determine reference levels and the same procedure would apply. Market participants will be provided a preliminary view report prior to registration of the reference levels in question and have the opportunity to use the independent review process if desired. The notice of dispute process will also be available. Note that use of the notice of dispute process does not require that the market participant make use of the independent review process and that use of the independent review process does not preclude a market participant from subsequently filing a notice of dispute.

5. Chapter 7, Section 22.7.1.2

1. The section reference has been updated from 22.8 to 22.7.2. Based on this update, Sections 22.7.1.2 and 22.7.2 have the same content.
2. The rationale given in the *Summary of Market Rule Changes* is to correct the section reference. Does this correction remove the option to revise the Reference Quantity as a result of the Independent Review Process?

5.

1. Section 22.7.2 refers to reasons that permit the IESO to change a reference quantity once registered. This is a different topic than the topic addressed in section 22.7.2, which is concerned with registration of reference quantities. As a result, there is no repetition between the aforementioned sections.
 2. No. The independent review process is available any time the IESO provides a market participant with a preliminary view
-

report. Market participants will be provided a preliminary view report prior to registration of reference levels and have the opportunity to use the independent review process if desired. The notice of dispute process will also be available. Note that use of the notice of dispute process does not require that the market participant make use of the independent review process and that its use does not preclude a market participant from subsequently filing a notice of dispute.

6. Chapter 7, Section 22.7.2

1. Similar to the comment for Section 22.5.2, under what condition would Section 22.7.2 be triggered? If a reference quantity has been agreed to between the IESO and the MP, why would there be a need for additional review of supporting documentation? The supporting documentation would have been reviewed and verified by the IESO prior to the approval of the reference quantity, based on Section 22.6.
2. If there is disagreement between the IESO and the MP regarding the updated reference quantity calculated from Section 22.7.2, what options are available to the MP to dispute the outcome of the disagreement?

6.

See the response to the questions on Chapter 7, Section 22.5.2 above.

7. Chapter 7, Section 22.8

1. Please list the conditions that can trigger the Independent Review Process, such as during initial registration of reference levels and reference quantities, re-registration of reference levels and reference quantities as per Section 22.7.1.4, etc.

7.

1. Prior to registering a reference level or reference quantity for a resource, the IESO will communicate a preliminary view. A market participant may request an independent review after receiving the preliminary view. Initial registration and re-registration would both trigger the issuance

- | | |
|---|--|
| <p>2. Who can be the initiator of the Independent Review Process?</p> <p>3. The term “consultant” has been replaced by “expert”.</p> <ol style="list-style-type: none"> a. Please provide the definition of an “expert”. b. How does the IESO distinguish between a “consultant” and an “expert”? c. OPG proposes that “expert” be categorized as a defined term in the Market Rules. d. What is the rationale for the revision in terminology? <p>4. The term “review” has been replaced with “determination”; “determination” implies a binding process, as opposed to a “review”, which does not. There is a conflict, as based on verbiage in Section 22.8, the result of the determination is not binding and can be rejected by the IESO.</p> <ol style="list-style-type: none"> a. How does this change in terminology impact the intent of the Independent Review Process? <p>5. Why do MPs not have the ability to reject an expert’s findings, similar to that provided to the IESO in Section 22.8.11?</p> <p>6. What is the path forward if the IESO and the MP cannot come to agreement after all options provided in Section 22.8 have been exhausted?</p> | <p>of a preliminary view and entitle a market participant to request independent review. Note that the requirement to communicate a preliminary view does not apply to a reference level registered pursuant to section 22.5.1.4 or 22.5.1.6</p> <p>2. A market participant’s Market Power Mitigation Contact (designated as part of the registration process) may initiate an independent review following receipt of a preliminary view. For more information on how to assign a Market Power Mitigation Contact, please see section 2 and Appendix A of the Interim Alignment amendments to Market Manual 1.5.</p> <p>3. The term “expert” is being used to align the independent review process rules with a commonly used form of alternative dispute resolution called “expert determination”. Expert determination is commonly used when parties need to resolve a technical issue.</p> <p>While the IESO will not be defining “expert” within the market rules, it has publicly posted the criteria that will be used to procure experts for stakeholder review and comment. The criteria are available in the presentation materials for the MRP agenda item at the IESO’s June Engagement Days.</p> <p>4. The expert’s determination is binding on the IESO as the IESO is required to register a reference level or reference quantity consistent with the expert’s determination. The IESO may only reject the expert’s determination in circumstances where the expert made a manifest error or where implementing the determination would require the IESO to breach the market rules. A rejection triggers the procurement of a</p> |
|---|--|

new expert, whose determination is also binding.

5. Market participants have recourse to the Notice of Dispute process and the IESO, in this circumstance, does not.
6. There is no possibility for the concept of “agreement” as once a market participant has triggered an independent review, as the expert’s determination (or the determination of a subsequently procured expert, if section 22.8.10 is triggered) is binding. The outcome of an independent review is that the IESO registers reference levels/quantities consistent with the expert’s determination or re-procures another expert. The notice of dispute process will also be available to market participants. Note that use of the notice of dispute process does not require that the market participant make use of the independent review process and that use of the independent review process does not preclude a market participant from subsequently filing a notice of dispute.

8. Chapter 7, Section 22.8.10

This section provides the IESO 15 business days, or 10 business days pursuant to Section 22.8.8, to reject the expert’s determination.

1. There is no requirement in the Market Rules for the IESO to notify the MP of the rejection. This requirement is instead outlined in Market Manual 14.2 Section 3.5.4.2. OPG believes that the time requirement for the IESO to notify the MP of such a rejection should reside in the Market Rules instead of the

8.

1. This content will be moved from the market manual to the market rules.
 2. The 15 and 10 business day time periods set out in the rules and manuals are the longest periods of time the IESO may take to reject the determination and notify the market participant. The IESO is not required to take the full time period permitted by the rules before rejecting a determination and notifying the market participant. The IESO appreciates the importance that stakeholders place on prompt resolution of
-

Feedback**IESO Response**

<p>Market Manual, as this is a governance requirement.</p> <p>2. Considering the potential financial impact of the rejection, which can be significant, OPG strongly recommends the IESO shorten the decision and notification periods (outlined in Section 22.8.10 and Market Manual 14.2 Section 3.5.4.2), so that the MP is promptly notified.</p> <p>3. Please see additional feedback regarding the decision and notification periods for rejection in the feedback for Market Manual 14.2 Section 3.5.4.2.</p>	<p>these matters and shares their concerns, but that weight must be balanced against the IESO's ability to meet the standards in the market rules. In considering these factors, the IESO has established what it believes are reasonable time limits and will not be making this change.</p>
<p>9. Chapter 7, Section 22.8.10.1</p> <p>1. What is the process for the IESO to decide if "the expert's determination of that value contains a manifest error"?</p> <p>2. Would there be a process for the MP to dispute the above decision?</p>	<p>9.</p> <p>1. "Manifest error" is a legally recognized standard of error. The IESO has not yet created a process for reviewing expert determinations following a request for an independent review.</p> <p>2. Yes. Market participants always have access to the notice of dispute process if they believe the IESO has misapplied a market rule.</p>
<p>10. Chapter 7, Section 22.8.11</p> <p>"If the IESO rejects any values pursuant to section 22.8.10, the IESO shall, within 10 business days of its rejection, take steps pursuant to sections 22.8.3 to 22.8.5 to procure a new expert to determine the rejected values."</p> <p>OPG suggests replacing "determine" with "review" or "evaluate" as "determine" does not align with the presumed intent of the statement (i.e., determine implies binding, and Section 22.8 as written does not imply a binding process).</p>	<p>10. Thank you for your feedback. The IESO will not be implementing this change. Please see the response to OPG comment 7, sub-question 4, for further explanation.</p>

11. Chapter 7, Section 22.8.14

This section indicates that “The IESO may apply a *settlement* charge to the *market participant* equal to the amount charged to the IESO by the expert.”

1. There can be numerous outcomes as a result of the *initial* Independent Review Process, e.g., finding in favour of the IESO, finding in favour of the MP, the process is discontinued as per Section 22.8.12. Would a settlement charge be applied to the MP regardless of the actual outcome of the *initial* Independent Review Process?
2. In the instance where the expert finds in favour of the MP in the *initial* determination, but the IESO rejects the determination, would the MP be applied a settlement charge?

11.

1. Yes, the settlement charge is always applied to the market participant for an initial independent review. The expert does not find in favour of the IESO or a market participant. The expert reviews the materials submitted by the market participant and makes a determination with respect to a particular question. It is not a matter of the expert finding in favour of a market participant or the IESO as neither party will be submitting arguments or evidence to support their position.

2. The expert does not find in favour of the IESO or the market participant. The settlement charge is always applied to the market participant. Where the IESO rejects a determination and is required to re-procure another expert, the market participant is not issued a settlement charge for the cost of the re-procured expert’s review.

12. Chapter 7, Section 22.9.1

1. OPG would like clarification on the rationale provided for the addition of this section, in addition to that given in the *Summary of Market Rule Changes*.
2. Please provide additional details on how Market Control Entity (MCE) for physical withholding would apply to energy traders and virtual traders, as this has not been clearly outlined in the subsequent sections of Section 22.9.
3. In the current batch of Market Renewal Market Rules, there is no physical withholding mitigation process for intertie activities or for virtual transactions. The application of MCE

12.

1. As section 22.9.1 was previously written, the obligation to disclose market control entities applied to all market participants:

“A market participant shall disclose to the IESO the name, address, relationship to the market participant, and, if applicable, jurisdiction of formation, of each person or entity that meets any of the following criteria [...].”
[Emphasis added]

This obligation applied to a broader set of market participants than what was specified in the detailed design. The amendments to section 22.9.1 align the set of market participants that the obligations in section

physical withholding mitigation for energy traders and virtual traders is not mentioned in *Market Power Mitigation Detailed Design Document Version 2.0*. These are new and impactful changes to the market design. Would these changes to Section 22.9.1 be stakeholdered separately?

4. Section 22.9.3 stipulates that the following classes of market participants must register an MCE for physical withholding: dispatchable generator resources, dispatchable electricity storage resource and dispatchable load resource. How would this requirement be applied to energy traders and virtual traders with regards to the MCE for physical withholding?

22.9 apply to with those set out in the detailed design.

2. Energy traders and virtual traders are required to disclose market control entities to the IESO for general market monitoring purposes, but are not required to set market control entities for physical withholding. Market control entities for physical withholding must only be set for resources that may be assessed for physical withholding (i.e., dispatchable generation resources, dispatchable electricity storage resources, and dispatchable load resources), as stated in the detailed design.

3. Energy traders and virtual traders are not required to set market control entities for physical withholding. Section 22.15.2 will be amended to clarify that the assessment of physical withholding, which is where a resource's market control entity for physical withholding becomes relevant, only applies to dispatchable resources.

4. Please see the response to question (2) above. Dispatchable generation resources, dispatchable electricity storage resources, and dispatchable load resources are categories of resources, not participation types.

13. Chapter 7, Section 22.10

This section lists the market rules outlining the Potentially Constrained Area, Narrow Constrained Area and Dynamic Constrained Area. These designations correspond with the content in Market Manual 14.1, except for Broad Constrain Area, which is mentioned in the Market Manual but not in the Market Rules.

13.

The IESO has removed reference to the Broad Constrained Area (and the acronym "BCA") Market Manual 14.2 to better align the market rules and Market Manual 14.2.

The IESO designates dynamic constrained areas and narrow constrained areas are prior to their use in the assessment of mitigation. Whereas the broad constrained

Market Power Mitigation Detailed Design Document Version 2.0 Section 3.12 identifies Narrow Constrained Areas, Dynamic Constrained Areas and Broad Constrained Areas.

Why is there the discrepancy in constrained area designation and terminology between Market Rule Chapter 7 Section 22.10, Market Manual 14.1 and *Market Power Mitigation Detailed Design Document Version 2.0* Section 3.12?

Although there is no mention of the Broad Constrained Area in Market Rules Chapter 7 Section 22, it is noted the physical mitigation condition associated with the Broad Constrained Area is mentioned in Section 22.15.4.5.

area is a set of resources that changes according to contemporaneous conditions. This set of resources is determined by the day-ahead calculation engine and pre-dispatch scheduling engine based on the optimization process each time they run. There is no parallel designation process in regards to the broad constrained area. As a result, there are no market rules in Chapter 7 related to designation of broad constrained areas. The broad constrained area concept is used in the day-ahead market and pre-dispatch calculation engines.

14. Chapter 7, Section 22.13.1

OPG appreciates the revision to the wording of non-financial reference level thresholds for ex-ante testing. However, there could be more direct language in how the thresholds are communicated in the market rules. For example:

"minimum generation block run-time is greater than the lesser of 100% or three hours above the reference level value"

could be revised to:

22.13.1.1 *minimum generation block run-time is greater than the minimum of:*

22.13.1.1.1 100% of the *reference level value*; or
22.13.1.1.2 three hours above the *reference level value*;

The suggested revisions would provide unambiguous interpretation of the thresholds in the Market Rules.

For clarity, can the IESO confirm that none of the thresholds have an "equal" component in the

14.

This section will be changed in response to your feedback. Similar organizational changes will be made to sections 22.13.1.2., 22.13.1.9, and 22.13.1.10.

The proposed market rules state the thresholds that will be used in the renewed market.

evaluation process, i.e., all thresholds are either “greater than” or “less than”.

15. Chapter 7, Section 22.14.1

There is reference to Appendices 7.5 and 7.5A. Appendices 7.5 and 7.5A in the Consolidated Batch is Version 81.0 from the current Market Rules. When will the revised appendices with Market Renewal content be available for stakeholder review?

15.

Appendices 7.5 and 7.5A were published for stakeholder feedback as part of the Calculation Engine batch of draft market rule amendments. Appendix 7.5 is for the [Day-Ahead Calculation Engine](#) and Appendix 7.5A is for the [Pre-Dispatch Calculation Engine](#).

Numbering of the appendices was updated since they were originally posted for stakeholder feedback in February 2022. Appendices 7.5 and 7.5A were initially numbered as Appendices 7.1A and 7.2A, respectively. The numbering was updated when the revised batch was posted in July 2022.

The Consolidated Draft, published in September 2022, does not reflect the Calculation Engine amendments. These amendments will be reflected in the updated Consolidated Draft, to be published in June 2023.

16. Chapter 7, Section 22.15.12

OPG requests the rationale for the removal of this section. The removal of this section is not in alignment with the condition for operating reserve physical withholding testing under the maximum area constraint, provided in *Market Power Mitigation Detailed Design Document Version 2.0* Section 3.6.2.1:

“If there is a binding MAX constraint on a reserve area, resources in that reserve area will be unable to provide additional operating reserve in that reserve area. These resources will be unable

16.

This section would have exempted market participants from testing when they could have been able to exercise market power via physical withholding.

In the process of testing the new DSO, the IESO discovered that the previous approach would limit the effectiveness of the physical withholding framework. When a binding MAX constraint is present, it is possible for a market participant to increase the clearing price for operating reserve within that

Feedback**IESO Response**

to exercise market power due to their inability to provide incremental operating reserve. Therefore, such resources will not be tested for local market power mitigation for operating reserve.”

operating reserve area by withholding supply of operating reserve.

In order to assess physical withholding, the IESO will carry out the price impact test to assess if withheld supply is increasing the price of the relevant product. Only when the withheld supply of operating reserve significantly impacted operating reserve prices would the IESO issue a first notice of physical withholding. In the event that such behaviour had no impact on operating reserve prices, no physical withholding settlement amount could be issued.

Given that such price impacts are feasible, it is important that the IESO have the ability to remedy events of physical withholding where they would otherwise impact consumers.

17. Defined Terms – General

There is format inconsistency in referencing the different classes of operating reserve, e.g., “10-minute” vs “ten-minute” and “5-minute” vs “five-minute”. OPG recommends aligning to one formatting. OPG further recommends the numerical format for “10-minute” and “30-minute” as it is the format that is more prevalent

17.

Thank you for your feedback. The IESO will be aligning styling and ensuring consistency between terms and batches as part of the Final Alignment batch of market rule amendments.

18. Market Manual 14.1, General

There is inconsistency with the Market Rules Chapter and section reference format used, e.g., “ss.x” vs “s.x”, “Ch.x” vs “Ch. x” and “App.x” vs “App x”. OPG recommends alignment to one reference format consistent with other Market Renewal Market Manuals.

18.

Thank you for your feedback. The IESO will be aligning styling and ensuring consistency between terms and batches as part of the Final Alignment batch of market rule amendments.

19. Market Manual 14.1, Section 2.2.2**19.**

Feedback**IESO Response**

1. The revision of two business days to two calendar days for ad-hoc updates to come into effect decreases the time period where MP can integrate the updated information. There is different personnel availability between a business day and a calendar day that is a non-business day. OPG recommends the IESO to reverse this revision.
2. OPG recommends revising "thirty" to "30" in the following sentence: "*NCA* designations in the *IESO's* report on *NCA* designations will come into effect no sooner than thirty *business days* following the *publication* of the *IESO's* report on *NCA* designations."

1. Ad-hoc updates can only be used to remove a resource from an existing narrow constrained area or update the name of any system element. Neither of these actions increase the risk of mitigation application for a market participant.
2. Thank you for your feedback. The IESO will be aligning styling and ensuring consistency between terms and batches as part of the Final Alignment batch of market rule amendments.

20. Market Manual 14.1, Section 5**20.**

"The *IESO* may assess *physical withholding* by a *resource* in both or either of the *day-ahead market* and the *real-time market* for a *dispatch day*. If the *IESO* selects a single market, the *IESO* will deem the MWs withheld in the other market to be 0 for all relevant *dispatch hours* when calculating the ex-post mitigation for *physical withholding settlement amount*."

1. What is the impact of the ex-post testing on the single market if the MW withheld in the other market is not set to zero?
2. With reference to the above statement, under what condition would the IESO select a single market for ex-post mitigation testing?
3. It is understood that the Day-Ahead Market (DAM) and Real-Time Market (RTM) are separate markets and mitigation testing will be performed separately within each market. Under what condition(s) would the ex-post mitigation testing result of one market be

1. The impact is seen in the physical withholding settlement amount, where the component of that charge from the other market will always equal \$0 for each dispatch hour.

2. The IESO may select a single market for ex-post mitigation testing at its discretion. When determining whether to select a single market, the IESO may balance the incremental cost of selecting a single market against the potential ratepayer value, among other factors.

3. The physical withholding settlement amount for energy or operating reserve incorporates inputs from both the day-ahead market and the real-time market, as found in [Chapter 9](#), Section 5.4.

The selection of a single market impacts the calculation of a potential settlement charge. When calculating the physical withholding settlement amount for energy or operating

Feedback**IESO Response**

<p>taken into account in the ex-post mitigation testing of the other market (as indicated by explicit requirement of setting MW withheld to 0 in the single market testing situation)?</p> <p>4. Would the IESO perform ex-post mitigation testing on the other market after the testing on the initial market? For example, the IESO performs an ex-post mitigation testing on the DAM MW offers while holding the MW withheld in the RTM as zero. Regardless of the outcome of the ex-post mitigation testing for the DAM MW offers, would the IESO then perform the same test for the RTM, but holding the MW withheld value in the DAM as zero?</p> <p>5. What is the treatment for the MW withheld in each market if the IESO performs ex-post mitigation testing on the DAM and RTM at the same time?</p>	<p>reserve (a daily charge), the maximum hourly settlement amount from either the day-ahead market or the real-time market is an input. In the event that a single market is selected, the hourly settlement amount from the market that was not selected will be \$0.</p> <p>4. If the IESO selects a single market for assessing physical withholding, then the non-selected market will not be assessed.</p> <p>5. When the IESO does <u>not</u> select a single market, the analysis is conducted for both the real-time market and day-ahead market. The physical withholding settlement amount for energy or operating reserve is then determined based on the maximum hourly settlement amount from both markets as discussed in response to prior comments in this section.</p>
<p>21. Market Manual 14.1, Section 5.4</p> <p>The BCA acronym is not defined in its first mention in the Market Manual.</p>	<p>21.</p> <p>See response to comment 13, above.</p>
<p>22. Market Manual 14.1, Section 5.6.3.(1).b</p> <p>OPG recommends the addition of "ii" bullet point for the Local Market Power condition under the offers for operating reserve.</p>	<p>22.</p> <p>Market Manual 14.1 will be updated in response to your feedback.</p>
<p>23. Market Manual 14.1, Section 5.7.1</p> <p>"Calculation of the persistence multiplier excludes instances when an ex-post mitigation for <i>physical withholding settlement amount</i> is reversed as a result of a <i>notice of disagreement</i>."</p> <p>If this reversal is made after the persistence multiplier has been applied in the calculation of</p>	<p>23.</p> <p>If a market participant submits a settlement notice of disagreement that results in removing a physical withholding settlement amount, the IESO will not automatically recalculate previously issued physical withholding settlement amounts outside the</p>

Feedback**IESO Response**

the physical withholding settlement amount, and the MP has been paid this settlement amount, would the IESO re-assess the paid settlement amount as a result of the Notice of Disagreement reversal, i.e., would the reversal of the persistence multiplier be retroactive for previously paid physical withholding settlement amount?

ambit of the submitted notice of disagreement.

The IESO will continue to respond to further notices of disagreement as required, such as in the case that the market participant identifies that previously issued physical withholding settlement amounts have become incorrect after-the-fact.

24. Market Manual 14.1, Section 6

24.

Please refer to the feedback for Section 5 above, but with regards to intertie economic withholding.

The IESO assumes that this question relates to the comments in OPG 20.

The IESO's responses to OPG 20 in regards to selection of a single market can be extended to treatment of assessment of a settlement charge for economic withholding on uncompetitive interties.

25. Market Manual 14.1, List of Acronyms

25.

Editorial suggestions:

Market Manual 14.1 will be updated in response to your feedback.

1. SF is not used in the Market Manual, suggest removal from the list;
2. Suggest adding BCA, DAM, OR and RTM in the list.

26. Market Manual 14.2, General

26.

There is inconsistency with the section reference format used, i.e., "ss.x" vs "s.x" for the Market Rules chapters. OPG recommends alignment to one reference format consistent with other Market Renewal Market Manuals.

Thank you for your feedback. The IESO will be aligning styling and ensuring consistency between terms and batches as part of the Final Alignment batch of market rule amendments.

27. Market Manual 14.2, General

27.

The terms "10-minute operating reserve" and "30-minute operating reserve" have been revised to "ten-minute operating reserve" and "thirty-minute

Please see the response to OPG 18.

operating reserve” in Sections 3.2.1, 8.1.2, 9.1.5 and 9.7.1.

OPG suggests adhering to the numerical format when referring to the different classes of operating reserve.

<p>28. Market Manual 14.2, Section 2.1.2, Table 2-1</p> <p>The MLP acronym is not defined in its first mention in the Market Manual. The acronym is defined in Section 3.2.1.</p>	<p>28.</p> <p>The definition of the MLP acronym will be moved to appear at the first use of the term, as suggested.</p>
<p>29. Market Manual 14.2, Section 3.1</p> <p>The CPI acronym is not defined in its first mention in the Market Manual. The acronym is defined in Section 3.2.</p>	<p>29.</p> <p>The definition of the CPI acronym will be moved to appear at the first use of the term, as suggested.</p>
<p>30. Market Manual 14.2, Section 3.2</p> <ol style="list-style-type: none"> 1. The inflation adjustment equation using CPI appears to be missing from the fifth bullet point in this section. 2. OPG suggests aligning the indentation for the sub-bullet points under the fifth bullet point. 	<p>30.</p> <ol style="list-style-type: none"> 1. The inflation adjustment equation will be inserted into the fifth bullet of this section as suggested. 2. The indentation for the sub-bullet points under the fifth bullet point will be updated as suggested.
<p>31. Market Manual 14.2, Section 3.5.1</p> <p>The first sentence refers to “an expert review”. The corresponding Market Rules Chapter 7 Section 22.8 has replaced the term “review” with “determination”. OPG recommends aligning the terminology used for the Independent Review Process between the Market Rules and the Market Manual.</p>	<p>31.</p> <p>Please see the response to OPG 18.</p>
<p>32. Market Manual 14.2, Section 3.5.2</p> <p>OPG notes that a comment regarding the availability of IESO FORM [*] for stakeholder</p>	<p>32.</p> <p>The IESO anticipates that IESO FORM [*] will be a Word document that market</p>

review was submitted in respond to the July 21, 2022 posting of Market Power Mitigation Market Rules update. Would the IESO provide a timeline for the availability of the IESO FORM [*]?

participants submit to the IESO via Online IESO. It will be available when market participants are able to trigger the independent review process.

33. Market Manual 14.2, Section 3.5.4.2

This section indicates that the IESO will notify the MP of a rejection within 15 business days of receiving the determination.

Market Rules Chapter 7 Section 22.8.10 provides the IESO 15 business days, or 10 business days pursuant to conditions in Section 22.8.8, to reject the expert's determination.

Are the two notification periods concurrent or consecutive to each other? If the two notification periods are consecutive, it is possible that the MP would not be notified of a rejection until 30 business days has passed. This would have significant negative impact on an MP's position with regards to the Independent Review Process and subsequent financial implications in market operations.

33.

The periods run concurrently. Both periods are triggered by the same action: the IESO receiving the expert's determination. Section 22.8.10 requires the IESO to reject the expert's determination within 15 business days of receiving the determination if the criteria in section 22.8.10.1 or 22.8.10.2 are met. Market Manual 14.2, section 3.5.4.2, requires the IESO to notify the relevant market participant of a rejection within 15 business days of receiving the determination.

34. Market Manual 14.2, Section 3.5.4.3

Considering the potential (and significant) financial impact as a result of a change to the reference level and/or reference quantity, the time allowance of 20 business days for the IESO to register this change after an expert's initial determination is too long.

1. OPG recommends the IESO to revise this time period to 10 business days, to align with the original time period requirement.
2. Similar to the notification time period to the MP for Independent Review Process rejection, the registration time requirement falls under governance and should be outlined in Market

34.

1. Please see the response to the second question in OPG 8. Note that this time period is a maximum and the IESO may register reference levels and reference quantities sooner than 20 business days.

2. This content will be moved from Market Manual 14.2 to the market rules.

Feedback**IESO Response**

Rules Chapter 7 Section 22, rather than in the Market Manual.	
---	--

35. Market Manual 14.2, Section 4.1	35.
Similar to the comment for Chapter 7 Section 22.14.1, Appendices 7.5 and 7.5A in the Consolidated Batch is Version 81.0 from the current Market Rules. When will the revised appendices with Market Renewal content be available for stakeholder review?	Please see the response to OPG 15.

36. Market Manual 14.2, Section 6.3	36.
The O&M acronym is already defined in Section 3.2.	The definition of this acronym in section 6.3 will be removed, consistent with this comment.

37. Market Manual 14.2, Section 6.4.4.2	37.
The ICE acronym is not defined in its first mention in the Market Manual. The acronym is defined in Section 6.4.4.3.	The definition of the ICE acronym will be moved to appear at the first use of the term, as suggested.

38. Market Manual 14.2, Section 7.1.7.1 - Combined Cycle Steam Resources and Fossil or Biomass Steam Resources	38.
OPG suggests using full form for the bullet point "PA/ID/FD Fan repairs".	These terms will be expanded as suggested.

39. Market Manual 14.2, Section 7.2.2.1	39.
OPG suggests removing the HPU acronym as it is only used once in the Market Manual.	This term will be expanded as suggested.

40. Market Manual 14.2, Section 7.2.5.2	40.
Following-up on the feedback from August 5, 2022, when would the values for the energy offer reference level adders (\$X and \$Y) for the	The IESO intends to update Market Manual 14.2 to provide additional content regarding the cascade adders in Q3 of 2023.

Feedback**IESO Response**

hydroelectric cascade systems be available for stakeholder review?

41. Market Manual 14.2, Section 7.9

41.

The MGBRT acronym is already defined in Section 3.2.1.

The definition of this acronym in section 3.2.1 will be removed in response to this comment.

42. Market Manual 14.2, Section 7.10.3

42.

1. What is the expected volatility of reference level prices day-over-day after Market Renewal?
2. Has the IESO analyzed the financial impact of the use of the alternate reference level value data on market operation and its impact on MPs?

1. The IESO has no expectations regarding volatility of reference level prices day-over-day after Market Renewal.
 2. The IESO has no ability to simulate future market outcomes. As a result, the analysis discussed in this comment is not possible and has not been conducted. Market participants will have information showing their reference level values available to them when they are determining the dispatch data that they intend to submit to the IESO. Information about the relevant conduct thresholds is also public information. As a result, market participants will have all the information that is needed to manage their mitigation risk for each dispatch day.
-

43. Market Manual 14.2, List of Acronyms

43.

Editorial suggestions:

1. GOG is only used once in the Market Manual, suggest deleting from the list.
 2. Suggest adding CPI, GRC, NFRL, NRCan, RL, SNL and WACOF to the list.
-

The market manual will be updated in response to your feedback.