

Market Renewal Program Feedback Form

Market Renewal – Energy Project Implementation Market Power Mitigation – December 15, 2023

Feedback Provided by:

Name: Kristine Liao

Title: Operational Effectiveness Supervisor

Organization: Ontario Power Generation

Email:

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To promote transparency, feedback submitted will be posted on the Implementation Engagement webpage unless otherwise requested by the sender.

The Independent Electricity System Operator (IESO) is seeking feedback from stakeholders on the Market Power Mitigation changes made to the Market Rules and Market Manuals that were presented in the December 15, 2023 webinar. The materials for the December 15, 2023 webinar where the IESO provided an overview of these changes have been posted to the [engagement web page](#).

Please submit feedback to engagement@ieso.ca by January 24, 2024. If you wish to provide confidential feedback, please mark the document "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

Market Rules, Chapter 7

What feedback do you have Chapter 7 of the draft Market Rules?

Section / Topic	Feedback
Sections 22.5.9, 22.5.10.2 and 22.5.11	OPG recommends that the IESO include references to the applicable Market Rules Chapter 9 section(s) that outlines the settlement charge assessment for ease of reference.
Section 22.8	<ol style="list-style-type: none"> 1. When would be the first instance where market participants (MPs) are able to trigger the independent review process? Would this process be available to MPs prior to the Market Renewal Go-Live? 2. OPG recommends the IESO to include the time requirement for MPs to trigger an independent review after receiving the preliminary view report, and that this time requirement is in alignment with the Market Renewal registration requirement.
Sections 22.8.1.1	<p>From the Summary of Change document, this change was due to the content move from Market Manual 14.2, however, there are new and additional content that was added that was not previously in Market Manual 14.2, such as the requirement to register the reference levels and reference quantities contained in the preliminary view on the 11th business day after the issuance of the preliminary view.</p> <p>Please clarify which entity will be responsible to ensure the reference levels and reference quantities are registered by the 11th business day after preliminary view issues and which entity will bear the penalty for non-compliance to this requirement. Note that MPs may have the ability to submit data for registration, but ultimately the IESO has the oversight and control on the progression and approval of the registration process.</p> <p>For point iii), how early can an MP request the IESO to register the preliminary view reference levels and reference quantities?</p>
Section 22.8.1.2	Do MPs lose the ability to trigger the independent review process once the reference levels and reference quantities are registered? If so, if there is a need to change the reference levels and/or reference quantities, should MPs follow the process outlined in Section 22.7?
Section 22.8.2	Please outlines the exceptions to registration indicated in the following: "The IESO shall not register a reference level or reference quantity that is the subject of an expert determination except in accordance with this section 22.8."

Section / Topic	Feedback
Section 22.8.10	The last "s" in "15 <i>business days</i> " in this section is not italicized.
Section 22.16.1.2	<p>The period of time between a dispatch day and when IESO determines the intertie reference level for that dispatch day has been revised to 14 business days. Previously this was six business days.</p> <p>Please clarify, should there be a financial settlement resultant from this ex-post mitigation process, where will the settlement charges appear: in the Final Settlement Statement, the Recalculated Settlement Statement or in a separate invoice?</p>

Market Rules, Chapter 11

What feedback do you have Chapter 11 of the draft Market Rules?

Section / Topic	Feedback
Maximum number of starts per day reference level; minimum generation block down-time reference level; minimum generation block run-time reference level; minimum loading point	The definition sentences for these defined terms are italicized in their entirety.
Real-time generation offer guarantee	<ol style="list-style-type: none"> 1. The term used in Market Rules Chapter 9 is "real-time generator offer guarantee". 2. Propose to include the relevant Market Rules Chapter 9 (Section 4.5) in this definition for ease of reference.

Market Manual 14.1

What feedback do you have on the draft Market Manual 14.1?

Section / Topic	Feedback
Section 2.1.1	The "s" in "...identified <i>potential constrained areas</i> ;" from the fourth bullet point should be italicized.

Section / Topic	Feedback
Section 2.2.3	<p>Changes made to the Narrow Constrained Area pursuant to Market Rules Chapter 7 Section 22.10.2.3 will come into effect no sooner than two days following the update.</p> <ol style="list-style-type: none"> 1. Please specify if the two days are calendar days or business days. MPs may have difficulties in addressing the changes if the changes go into effect during weekends and long weekends. 2. The two-day period (regardless of calendar or business days) does not provide sufficient time for MPs to assess the change in constraint designated area on resource operations. Please consider a longer timeframe for implementation for this revision to the NCA designation.
Section 5.2	<p>Suggest revising "...used to assess <i>physical withholding</i> in by that <i>resource</i> the <i>day-ahead market</i>..." to "...used to assess <i>physical withholding</i> by that <i>resource</i> in the <i>day-ahead market</i>..."</p>
Sections 5.4 and 5.6.3	<p>The constrained area conditions, such as NCA, DCA, BCA and GMP, have been replaced by market rule references. It was helpful to have the constrained area conditions outlined in Market Manual 14.1, which providing straightforward tie-in with the Market Power Mitigation Detailed Design V2.0 document. OPG proposes to retain both designations (constrained area designations and market rule sections) in these sections to provide ease of reference and understanding for market participants.</p>
Section 5.6.3	<p>For Step (2), please clarify which highest LMP dispatch hour(s) is being referenced: the resource's highest LMP dispatch hour(s) or highest LMP dispatch hour(s) for all resources within the Day-Ahead (DA) Market?</p>
Section 5.7.1	<p>Would the IESO revisit the persistence multiplier if an ex-post mitigation for physical withholding settlement amount is reversed as the result of a notice of disagreement <i>after</i> the incremental persistence multiplier has been applied in subsequent physical withholding notices?</p> <p>For example, Resource A has a persistence multiplier of 2 applied, however, a prior instance in Second Notice was reversed, meaning that only one Instance in Second Notice remains within the 18 months period, would the multiplier be reduced from 2 to 1?</p>
List of Acronyms	<p>There is a blank row in the List of Acronyms table.</p>

Section / Topic	Feedback
References	<ol style="list-style-type: none"> 1. There are blank rows in the References table. 2. There is an extra "-" before "- End of Document -".

Market Manual 14.2

What feedback do you have on the draft Market Manual 14.2?

Section / Topic	Feedback
General	There are instances where defined term acronyms are italicized and other instances they are not, e.g. MGBRT vs <i>MLP</i> , and MLP vs <i>MLP</i> . Suggest adhering to one format to ensure consistency.
Sections 1.2 and 3.2	The references to Market Rules Chapter 7 Section 22.15.21.1 and 22.15.24.2 requires update as these sections do not appear in the current revision of Chapter 7.
Section 1.2.3	<ol style="list-style-type: none"> 1. The references to Market Rules Chapter 7 App.7.1.A and App.7.2A requires update as these sections do not appear in the current revision of Chapter 7 Appendices from the Consolidated Batch and the Market and Systems Operations Batch. 2. Propose to update the title for Market Manual 5.5 to align with the current market manual title.
Section 3	There are instances where references to market manuals are in different format than the Market Manual Conventions format, such as "Market Manual 1, Part 1.5: Market Registration Procedures". Suggest revising to align to the Market Manual Conventions format.
Section 3.5.2	Market Rules Chapter 7 Section 22.8.1.2 indicates that market participant cannot initiate an independent review process once the reference levels and reference quantities have been registered by the IESO. Suggest revising this section to include this new restriction on the initiation of an independent review process.
Section 3.5.3.1	Suggest revising "...it wishes withdraw all or a proportion of its review request." to "...it wishes <i>to</i> withdraw all or a proportion of its review request."

Section / Topic	Feedback
Section 4.0	<p>This section makes references to:</p> <ul style="list-style-type: none"> • Reference Level Values for Financial Dispatch Data Parameters Day-Ahead Market Report; • Reference Level Values for Financial Dispatch Data Parameters Real-Time Market Report; • Reference Quantity Values Day-Ahead Market Report; • Reference Quantity Values Real-Time Market Report; <p>which OPG interprets as being the same as the respective following reports listed in the <i>List of external reports impacted by MRP</i>, released by the IESO on Jun 22, 2023:</p> <ul style="list-style-type: none"> • Day-Ahead Financial Reference Level Report; • Real-time Financial Reference Level Report; • Day-Ahead Reference Quantity Report; • Real-time Reference Quantity Report. <p>Please confirm if this interpretation is correct.</p> <p>OPG strongly recommends consistency in the use of report names across all Market Renewal Program documentation to avoid potential confusion, as there are no reference IDs used for the market reports and some market reports can have similar report names but contain different content.</p>
Section 4.2	<p>The timing of the reference quantity value report has been updated such that version 2 of the Day-Ahead report and version 1 of Real-Time report are published on the 14th calendar days following dispatch day. Previously the publication timing was the day following the dispatch day.</p> <p>Please clarify, should there be a financial settlement resultant from this ex-post mitigation process, where will the settlement charges appear: in the Final Settlement Statement, the Recalculated Settlement Statement or in a separate invoice?</p>
Section 6.4.3.1	<p>"A <i>maximum daily energy limit</i> submitted for <i>forebays</i> that is less than the summation of all <i>dispatchable</i> hydroelectric <i>resources</i> capacity across the <i>dispatch day</i> meet the criterion to use the intraday opportunity cost."</p> <p>Does "the summation of all the dispatchable hydroelectric resources capacity" above refer to all the resources under the forebays referenced earlier in the sentence, or is it in reference to the summation of <i>all offered</i> dispatchable hydroelectric resources capacity by a market participant across the dispatch day?</p>

Section / Topic	Feedback
Section 6.4.4.3	<ol style="list-style-type: none"> <li data-bbox="552 168 1461 283">1. Should the following sentences be one sentence: "<i>The IESO will adjust the Approach 1 forecast LMPs by an efficiency factor. When determining the Approach 1 selected value.</i>"? <li data-bbox="552 325 1494 399">2. There are extra spaces in "The greater of \$0/MWh and the value which is...". <li data-bbox="552 441 1453 514">3. The passage "= Day of Week of day <i>d</i> in <i>SP</i>" is in a different font from the main text. <li data-bbox="552 556 1477 682">4. What is the significance of "two days" in the newly added sentence "For clarity, the 28-day reference period ends on the day before the <i>dispatch day</i> or two days before the day-ahead <i>dispatch day</i>."?

Section / Topic	Feedback
6.4.5	<p>There should be additional considerations in the calculation of the Forebay Refill Opportunity Cost (FROC) Trigger Condition for an individual resource, resources within a forebay and resources within a cascade:</p> <ol style="list-style-type: none"> 1. Which timeframe does the FROC Cost Trigger condition apply to: DA or Pre-Dispatch (PD)? In PD, the Maximum Daily Energy Limit (Max DEL) is expected to remain constant throughout the dispatch day, but if the resource has a dispatch schedule that results in generation, the remaining water in the forebay will decrease. If this formula is used, the FROC condition can never be triggered in PD. For example: At PD HE1, Max DEL = 600 MWh, Min DEL = 0, Best Efficiency = 100 MW. Then the resource generates for four hours from HE7 to HE10. Starting from HE11 there is only 200 MWh remaining (i.e. two hours of fuel remains). However Max DEL remains at 600 MWh, therefore the FROC Trigger Condition is not satisfied from HE11 onward based on the calculation, even though there is less than three hours of water left in the forebay. 2. Based on the proposed equations for the FROC trigger condition, FROC can also never be triggered in the DA (as it is not a physical market) unless the resource is already limited by its registered storage horizon value. This could result in DA commitment schedules that a resource may not be able to meet in the Real-Time due to the resource being dispatched beyond the three-hour fuel limit, as this constraint is not physically realized in the DA timeframe. See the example provided above for bullet #1. <p>Considering the above, OPG proposes that the FROC Trigger Condition be modified to the following:</p> <p>FROC Trigger Condition = Max DEL – Energy Generated from Max DEL Tracking Report – Minimum DEL ≤ Sum of Best Efficiency Rating of ...</p> <p>This modification will recognize the impact of fuel consumption on the fuel availability for a hydroelectric resource throughout the dispatch day (whether in DA or in RT), by incorporating this impact in the assessment of FROC eligibility.</p>
Section 6.4.5.2	Should the term "Resource" in "Assume that all six Resources have registered the forebay refill opportunity cost." be in lower case?

Section / Topic	Feedback
Section 6.6	OPG suggest expanding the define term for "GOG-eligible resources" to "Generator Offer Guarantee eligible resources" as the GOG acronym has been removed from the List of Acronyms and GOG is only used once in the market manual.
Sections 7.1.3.1, 7.1.3.2, 7.1.9, 7.1.9.2	The format of "Speed No-Load" used in the equations are not consistent with those of the main text, i.e. "Speed No Load" vs "Speed-No-Load" vs "Speed No-Load".
Sections 7.1.3.2 and 7.1.9.2	Should the "No Load Heat Consumption" term in the equations within these sections be "Speed No-Load Heat Consumption"?
Section 7.1.10.1	Suggest inserting a space between the section numbering and the section title in the section heading.
Section 7.2.1.2	<ol style="list-style-type: none"> 1. Please clarify the rationale for replacing 168 by 2016 in the sigma symbol for both the numerator and denominator. 2. The first paragraph on page 90 (clean version) indicates that pumping power cost will include a fixed \$/MWh adder and this adder will be included in the total fuel related costs. However, the Pumping Power Cost equation on page 98 does not include this adder. Please clarify where this adder will be included in the calculation of the Pumping Power Cost.
Section 7.2.4	The section numberings of this section are different between the clean and red-lined versions of Market Manual 14.2.
Section 7.2.4.1	Suggest making the "h" in "Scheduled MWh is the schedule synchronized <i>ten-minute operating</i> reserve MWs..." to be in the normal font size instead of a subscript.

Section / Topic	Feedback
Section 7.2.4.4	<ol style="list-style-type: none"> 1. Is the first sentence in this section intended to be a section heading? 2. Step 1, point ii, should the “plus” in this sentence be italicized? 3. OPG interprets that the Point X in the HORFEC calculation is selected by MPs and it is a fixed value in determining the input for the HORFEC reference level. <ol style="list-style-type: none"> a. Please outline the requirements and/or restrictions in how MPs should proceed in determining Point X. Within the current revision of Market Manual 14.2, there is no guidance on how to select a suitable Point X for calculating the H-ORFEC. For example, Point X should not fall within a forbidden region of a hydro resource. b. Point X is held to be a constant in the H-ORFEC calculation, however, Point X can be dynamic in dispatch calculations. For example, it is possible that during a dispatch calculation, the hydro resource can be dispatched to a different MW output than the efficiency point and from Point X, which could potentially lead to discrepancy between the H-ORFC value and actual operation condition of the hydro resource.
Section 7.2.5.2	OPG suggests revising “...repeat step 3 for <i>resources</i> at each subsequent <i>forebay</i> ...” to “...repeat step 2 for <i>resources</i> at each subsequent <i>forebay</i> ...”
Section 9.2.1	Please confirm if there is an extra spacing in “Eff (%)” in the last line of the section.
Section 9.6.2	OPG suggest to not underline the term “electricity storage”.
List of Acronyms	<ol style="list-style-type: none"> 1. There is an extra space in front of “GRC”. 2. Suggest to not italicize “MLP”. 3. Suggest adding the acronyms “H-ORFEC” and “T-ORFEC” to the List of Acronyms.
References	<ol style="list-style-type: none"> 1. There is a blank row in the References table. 2. There is an extra “-” before “– End of Document –”.

General Comments/Feedback

Under the Market Power Mitigation (Update December 2023) posting from the Market Renewal Implementation Phase Documents webpage (<https://www.ieso.ca/en/Market-Renewal/Energy-Stream-Designs/Implementation-phase-documents>), Market Manuals 1.3 and 1.5 are both posted under the Conforming Changes section. The linked versions for these two market manuals are dated August 12, 2021 and December 17, 2021, respectively. These versions are not aligned with the latest available versions of the market manuals (September 15, 2021 for Market Manual 1.3 and April 21, 2023 for Market Manual 1.5). OPG recommends the IESO to update the linked PDF files for these two market manuals under the Market Power Mitigation (Update December 2023) posting, as market participants may inadvertently reference the older versions of the market manuals when reviewing the latest Market Power Mitigation Batch.

The following feedback relates to the settlement and reports portion of the December 15, 2023 engagement webinar.

Market Settlement

1. The step-through examples of the DA Market and Real-Time Intertie failure charges were helpful for MPs to understand on how the new charge codes will work.
2. Regarding the changes to Non-Dispatchable Generator resource equation, in addition to the update of Market Manual 5.5, OPG would like to know if this change will impact other processes such as for resource registration and related market rule changes?

Updates on Market Facing Reports

1. Would the list of revised reports presented on presentation slides 4 and 5 be published in one of the upcoming report batches so that MPs can see and access the updated formats?

OPG thanks the IESO for the opportunity to provide feedback for the Market Power Mitigation Batch update, as well as the providing feedback to the December 15th stakeholder engagement webinar.