

Feedback Form

Market Renewal Batch 2: Market Power Mitigation

Feedback Provided by:

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Chapter 3 Changes

Draft Market Rule / Section	Feedback
	OPG has no comments on the proposed changes to Chapter 3 at this time.

Chapter 7 Changes

Draft Market Rule / Section	Feedback
<p>22.1.5 The IESO shall not register an energy offer reference level or an operating reserve offer reference level that does not monotonically increase in quantity, regardless of a resource's short-run marginal costs.</p>	<p>22.1.5 identifies that reference levels must be monotonically increasing. In the event that only a subset of a resource's PQ pairs fails the conduct and impact test, how does the calculation engine ensure that the resulting mitigated offer curve is monotonically increasing? In other words, can mitigated offers violate the monotonically increasing requirement when combined with the unmitigated portion of an offer?</p>
<p>22.2.1 "The IESO shall determine the following reference levels for financial dispatch data parameters, by month or season if applicable: 22.2.1.1 <i>energy offer reference level</i>; 22.2.1.2 <i>one speed no-load offer reference level per thermal state</i>;"</p>	<p>Under what circumstances would a reference level change monthly? Please provide examples.</p> <p>Additionally, OPG notes that 22.2.1.2 requires the IESO to determine speed no-load offer reference levels for each thermal state of a resource. While OPG notes this is consistent with table 4-1 in the MPM DES 26.0, OPG is unsure how the concept of thermal state-dependent speed no-load reference levels would be practically implemented. Further, neither the thermal resource "Workbooks" nor MM 14.2 refer to "one speed no-load offer reference level per thermal state." Please clarify and provide rationale as to how thermal state-dependent speed no-load reference levels will be used going forward.</p>
<p>22.2.3 "If a market participant fails to provide the information or supporting documentation required by the IESO pursuant to section 22.1.3, the IESO may register a value of \$0 for a reference level determined pursuant to section 22.2.1, other than an operating reserve offer reference level, for which the IESO may register a value of \$0.10/MW."</p>	<p>If the IESO finds the documentation submitted by a participant to be deficient, what is the process for the participant to provide documentation and remedy the deficiency?</p> <p>The section states that the IESO "may" register a value of \$0.10/MW. Under what circumstances will the IESO, having found the documentation insufficient, register a value other than \$0.10/MW?</p>

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<p>22.3.1 “The IESO shall determine the following reference levels for non-financial dispatch data parameters, by month or season if applicable, for each resource that meets the requirements...”</p>	<p>The section lists parameters that are not applicable to all resource types. OPG proposes a modification to “for each qualified resource that meets the requirements...”</p>
<p>22.4.2 “For a resource that has registered a primary fuel type of gas, oil, steam, or biomass, and which is not eligible to submit start-up offers and speed-no-load offers as hourly dispatch data into the day-ahead market and real-time market, the IESO shall determine two energy offer reference levels for that resource in accordance with the applicable market manual.”</p>	<p>Under what conditions would a non-quick start resource be ineligible to submit start up and SNL offers into DA and RT markets?</p> <p>Please clarify what the “two energy offer reference levels” refer to, and identify which market manual section details this process.</p>
<p>22.4.3 “...the IESO shall determine a set of reference levels for the lower-cost profile and the higher-cost profile...”</p>	<p>Changes to fuel prices could cause the “lower-cost” profile to be more expensive than the “higher-cost” profile. OPG proposes renaming these categories in more neutral terms.</p> <p>Does each set of higher/lower-cost reference levels consist of distinct start-up, speed no-load, and energy offer reference levels?</p> <p>Does 22.4.3 apply to all resource types, including hydroelectric? As an example, does the higher cost profile produced by including the “Forebay Refill Opportunity Cost” as outlined in MM 14.2 section 6.4.5 fall under the procedures described in 22.4.4 and 22.5.5?</p>
<p>22.5.1 “Once the IESO has registered a reference level for a resource, the IESO shall not change that reference level unless: ... 22.5.1.7 more than two years have passed since the reference level was established or last updated, whichever is later.”</p>	<p>Does the IESO intend to review reference levels every two years? Preparing for a regular review of reference levels would require substantial effort and the establishment of internal processes by market participants. OPG would appreciate as much detail as possible on the IESO’s planned review timelines and processes.</p>

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22.5.2 "The IESO may, at any time, review the supporting documentation submitted pursuant to section 22.1.3 to verify that the reference level determined is consistent with the supporting documentation..."	Will the IESO notify the participant that a review is underway? Does the IESO have the responsibility to review any additional defenses of the documentation made by the participant prior to the IESO amending the reference level?
22.5.4 "A market participant may request that the IESO review one of its resources' reference levels if the market participant believes the reference level does not accurately describe the short-run marginal costs or operational characteristics of that resource."	As this process is governed by MM 14.2 section 3.3, OPG proposes adding "in accordance with the applicable market manual" to 22.5.4.
22.5.8 "The IESO shall temporarily revise the reference level for the dispatch hours that were the subject of a request made pursuant to section 22.5.5 or 22.5.6 if the request met the applicable deadline specified in section 22.5.7."	While section 22.5.8 states that the IESO shall temporarily revise the reference level if the request met the applicable deadline, section 22.5.10 then gives the IESO discretion to decline the request if the IESO "...is not satisfied..." These two clauses seem at odds with one another. Since no definition of "temporarily" as used in 22.5.8 is given, the IESO could conceivably replace the reference level as per 22.5.8, then immediately return to the reference in force at the time of the request as per 22.5.10. Without a definition of "temporarily", 22.5.7 and 22.5.8 have no real authority.
22.5.10.3 "reject subsequent requests for the resource made outside of 8:00 to 16:00 EDT for 30 days following the dispatch day..."	OPG proposes amending this section to "...up to 30 days...".

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<p>22.5.11</p> <p>"...within two business days after the dispatch day for which use of the higher-cost profile reference levels was requested."</p> <p>"If the market participant fails to provide the documentation within the specified time or if the IESO..."</p>	<p>These sections refer to a settlement charge. What is the basis of the settlement charges?</p> <p>While OPG acknowledges that the participant and the IESO are to have agreed on the form and content of the documentation in advance, participants should have a minimum of four business days to provide such documentation. Especially in the event that a participant has made requests for multiple facilities, the proposed timeline of two business days could be insufficient to gather accurate and defensible documents. Depending on the form of documentation agreed upon by the MP and IESO (e.g., invoice, financial or plant reporting), such a submission may take up to a month. OPG also notes that other timelines in the Market Rules, such as the Notice of Disagreement process, allow participants up to four business days to submit documentation (see Chapter 9 section 6.3.10).</p> <p>In addition, OPG suggests revising the section for clarity as follows: "If the market participant fails to provide the documentation within four business days the specified time or if the IESO..."</p>
<p>22.5.12 "The requirement in section 22.8.1 to communicate a preliminary view to the relevant market participant prior to registering a reference level shall not apply to a reference level registered pursuant to sections 22.5.1.4 or 22.5.1.6."</p>	<p>OPG suggests that there should be some statement in this section that clearly stipulates that changes are "preliminary views". A similar statement exists in the "change reference quantity section" in 22.7.2. With respect to 22.7.2, OPG suggests separating this statement out into its own section.</p>
<p>22.8.4 "The IESO shall provide a consultant engaged pursuant to section 22.8.1 or 22.8.2 with: 22.8.4.1 a statement of issues to be reviewed;"</p>	<p>The MP should have equal input to the statement of issues to be reviewed, as the IESO's framing of the issue may not be aligned with the MP's.</p>

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22.8.5 "The IESO shall provide the market participant with a copy of the consultant's findings following receipt thereof."	<p>OPG suggests that the Market Rules/Manuals should establish standards of quality, transparency, and completeness for the consultant's presentation of findings.</p> <p>Similarly, 22.8.6.5 identifies that the IESO can reject a finding if the consultant "failed to provide reasons for the finding". The rules/manuals should identify expectations of sufficient reasoning on the consultant's part.</p>
22.8.9 "The IESO and a market participant may, at any time, agree to discontinue a review and register the reference levels or reference quantities that the market participant originally requested."	Please clarify which set of reference levels or quantities are referred to as those "originally requested" by the MP.
22.8.10 "The IESO may not apply a settlement charge for subsequent reviews conducted as a result of the IESO rejecting a finding..."	OPG suggests amending to "The IESO shall not apply a settlement charge..." The rule as written gives the IESO unnecessary flexibility to apply a settlement charge.
22.9.1.5 "a person or entity that is an affiliate of the market participant, excluding affiliates of the market participant that are controlled by the market participant;"	Please clarify what is meant by "are controlled by the market participant". OPG suggests expanding 22.9.1.5 to include a definition of the term "controlled".
22.9.2 & 22.9.3	<p>OPG notes that both 22.9.2 and 22.9.3 include requirements to designate the market control entity for physical withholding (MCEPW) for a resource. These sections should be harmonized to eliminate any overlap.</p> <p>Additionally, while the definition of market control entity (MCE) references entities disclosed pursuant to 22.9.1, OPG feels it is unclear that this is the case when reading 22.9.3. A helpful addition to 22.9.3 might be:</p> <p>"a market participant shall designate any entities disclosed pursuant to 22.9.1 as market control entities ... in accordance with the applicable market manual."</p>

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<p>22.10.1.1 "The IESO may designate an area as a potential constrained area following or in advance of relevant configuration changes on the IESO-controlled grid, in accordance with the applicable market manual."</p>	<p>The section identifies that the IESO may designate constrained areas "in advance of" configuration changes. While OPG acknowledges the value of anticipating constraints, for the purposes of market power mitigation, an area should not be designated as constrained until such configuration changes have actually occurred.</p>
<p>22.10.2.1 "22.10.2.1 The IESO shall designate a potential constrained area as a narrow constrained area if the potential constrained area was import constrained in more than 4% of the hours in the previous 365 days in either the day-ahead market or the real-time market, as further specified in the applicable market manual."</p>	<p>MM 14.1 section 2.2 identifies that in the RTM, if a single interval is import constrained, the entire hour will be considered constrained. OPG feels this would lead to NCA's being too broadly applied. As an example, a region in which one interval (i.e., 8% of the hour) was import constrained for 4% of the hours in the previous 365 days would be deemed an NCA, despite the fact that this means the region was constrained only 0.3% of the time. OPG proposes that the IESO only consider an hour in RTM constrained if the majority of intervals were import constrained.</p> <p>OPG notes that the implications of 22.10.2.1 are not readily apparent without a complete reading of MM 14.1 section 2.2. OPG feels that this rule (and others) would benefit from Technical Panel review of the Market Manuals, rather than just the Rules.</p>
<p>22.10.2.4 "Designations made pursuant to section 22.10.2.1 and changes published under section 22.10.2.3 shall come into effect no sooner than 30 days following the date of publication."</p>	<p>Section 22.12.2 identifies when the IESO may remove the designation of an intertie zone as uncompetitive. For consistency, similar provisions should be included for all constrained area designations.</p> <p>Further, MM 14.1 outlines the process for removing such a designation for dynamically constrained areas, but OPG is unclear how the same assessment is performed for narrowly constrained areas.</p>
<p>22.11.1.2 "the intertie zone is able to provide effective competitive discipline for market participant behaviour."</p>	<p>Assuming MM 14.1 defines the process for assessing whether an intertie zone is able to provide effective competitive discipline, 22.11.1.2 should be amended to reference "the applicable market manual".</p>

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22.11.3 "A change to an intertie zone's designation status shall take effect no earlier than five business days following <i>publication</i> ."	"Publication" is italicized, but is not a defined term ("publish" is). OPG suggests removing the italics.
22.12.1.1 "a single market participant received at least ninety percent of the day-ahead market scheduled energy withdrawals or injections over boundary entity resources connected to that intertie zone in the day-ahead market in the previous calendar quarter"	<p>Please explain how this assessment is performed directionally. That is, can an MP trigger the condition if they have 90% of the scheduled injections and 5% of the scheduled withdrawals?</p> <p>Please confirm the meaning of "over boundary entity resources connected to that intertie zone".</p> <p>The term "day-ahead market" may be repeated unnecessarily in this section.</p>
22.12.1.2 "the IESO reasonably determines that effective competition in that intertie zone is or is expected to be restricted."	<p>Similar to the above comment on 22.11.1.2, if the criteria for determining whether competition is expected to be restricted is outlined in the MM, this section should reference it.</p> <p>With respect to the forward-looking statement "is expected to be restricted", does the IESO contemplate a specific time horizon for the assessment (e.g., competition is expected to be restricted in the next two days)?</p>
22.12.2 "The IESO may remove the designation of an intertie zone as uncompetitive if the intertie zone no longer meets any of the criteria specified in section 22.12.1."	The section gives the IESO discretion (i.e., "may", rather than "shall"). OPG understands this wording choice may be intended to avoid requiring a change of designation when the change to the intertie is expected to be short-lived. This is reasonable, but OPG suggests adding language to clarify this intention.
22.12.5 "The IESO may review the intertie zones designated as uncompetitive when a material change in market trade, structure, or regulation of external markets has occurred in the neighbouring control area."	<p>OPG suggests the term "material change in market trade" should be defined.</p> <p>Both 22.12.4 and 22.12.5 refer to IESO review of intertie zones already designated as uncompetitive. Please identify when a zone not currently designated as uncompetitive would be reviewed.</p>

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<p>22.13.1.5 "minimum loading point is greater than 100% above the reference level value;"</p>	<p>In general, OPG proposes that all MPM thresholds are defined more consistently as "[greater/less] than [X] % of", unless not applicable. As an example, 22.13.1.5 could be re-written as:</p> <p>"minimum loading point greater than 200% of the reference level;"</p> <p>OPG feels this would improve readability and clarity of the rules.</p>
<p>22.14.1 "The IESO shall, for dispatchable resources, apply a conduct test and impact test for economic withholding..."</p>	<p>Section 22.15.1 specifies that the IESO shall assess "physical withholding of energy and operating reserve", whereas 22.14.1 specifies more generally "economic withholding". The sections should be aligned for consistency.</p>

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22.15 General	<p>The eligibility and conduct tests in 22.15 refer to an “energy offer” and “operating reserve offer”. Given that offers contain multiple fields, only one of which is appropriate for comparison with the reference quantity value, the language should be updated to “the highest MW value in the energy offer” and “the highest MW value in the operating reserve offer”. OPG’s understanding is that only the highest price quantity pair in a given offer will be eligible for assessment of physical withholding.</p> <p>Additionally, section 5.3 of MM 14.1 states:</p> <p>“In addition, to assess physical withholding that can impact a commitment decision for a GOG-eligible resource, the IESO considers the conditions in the pre-dispatch run that was the last opportunity to operationally commit at that GOG-eligible resource for a given dispatch hour. In these cases, a GOG-eligible resource must meet conditions for a given dispatch hour in both of these pre-dispatch runs.”</p> <p>Please explain which constrained area a resource would be grouped within under the following scenario:</p> <p>An NQS resource is committed for HE15-HE17, with a lead-time of 6 hours. The “last opportunity to operationally commit” is before the HE9 PD run. The final PD run before reaching MLP is during HE14. Based on section 5.3 of MM 14.1, this NQS resource must meet the testing eligibility conditions for a given dispatch hour (e.g. HE15) in both the HE8 and HE14 PD runs.</p> <p>If the resource is in a BCA during the HE8 PD run and a DCA during the HE14 PD run, which constrained area thresholds will be applied to this resource for the purposes of the conduct and impact tests? How would this resource be grouped in the Market Control Entity conduct test?</p>
22.15.2 “The IESO may cease an assessment of physical withholding at any time.”	Please provide an example of a situation in which the IESO would cease an assessment of physical withholding.

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<p>22.15.3.2 “had a day-ahead market or a real-time market locational marginal price for energy greater than \$25/MWh and the market control entity for physical withholding for that resource was associated with resources that can supply at least 10 MW of energy in aggregate,”</p>	<p>In the real-time market, does the entire hour need to have a locational marginal price greater than \$25/MWh, or will a resource trigger the condition if a single interval meets 22.15.3.2?</p> <p>The requirement that resources “can supply at least 10 MW” is unclear. How will the IESO assess how much energy a resource can supply? Will resources on outage be considered able to supply energy? If this assessment is based on the aggregate reference quantity of the resources, this should be specified. Note that this comment applies to 22.15.3.1, 22.15.10.1, and 22.15.10.2.</p> <p>The phrase “market control entity for physical withholding was associated with resources...” is unclear, as the term “associated” is unspecific. A reference to section 22.9 may help improve clarity.</p>
<p>22.15.3.3 & 22.15.3.4 “...one of the transmission constraints that defines that narrowly constrained area was binding;” “...one of the transmission constraints that defines that dynamic constrained area was binding;”</p>	<p>Please explain how the IESO will assess whether a transmission constraint is “binding”.</p>

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<p>22.15.4.1.2 “the registered market participant for that resource and every other resource with which that resource shares a market control entity for physical withholding that met the same condition in section 22.15.3.3 or 22.15.3.4 submitted energy offers that were, in the aggregate, lower than 5 MW below those resources’ aggregate reference quantity values; or”</p>	<p>The August 2021 drafting of MM 14.1 stated that only resources located in the same dynamically or narrowly constrained area would be assessed as an “aggregate” according to 22.15.4.1.2. Updates to 14.1 in this second draft significantly broaden the scope of eligibility to any resource under the same MCEPW that is located within <i>any</i> constrained area of the same type.</p> <p>Given the fact that constrained areas represent distinct regions in which transmission limitations could give local generators increased ability to exercise market power, OPG fails to see how resources located in entirely different constrained areas should be assessed together under the more restrictive MCE conduct test. OPG proposes that the wording originally proposed by the IESO in MM 14.1 section 5.4 is restored and Chapter 7 section 22.15 aligned.</p>
<p>22.15.5 “A registered market participant for a resource that did not submit an energy offer for a dispatch hour in the day-ahead market or real-time market shall be deemed to have submitted an energy offer of 0 MW in that market for the purposes of the conduct test set out in this section.”</p>	<p>In the event that a resource generated energy without having submitted offers, how would the conduct and impact tests for physical withholding be applied?</p>
<p>22.15.6 “If a resource met more than one of the conditions in sections 22.15.3.3 to 22.15.3.6, the IESO shall apply the conduct test for physical withholding with the most restrictive of the conduct thresholds set out in section 22.15.4.”</p>	<p>Please explain what is meant by “the most restrictive of the conduct thresholds”. How would the MCE conduct tests be applied to a single resource?</p>

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<p>22.15.8 “The IESO shall calculate a resource’s simulated as-offered energy locational marginal price using the same inputs as those used by the relevant calculation engine to calculate that resource’s energy locational marginal price.”</p>	<p>Given the financial implications of the simulated locational marginal prices, MPs will need assurance that the calculation is performed according to an open, transparent and accurate methodology. Will the IESO store all calculation engine inputs for every hour-1 for each trade date?</p> <p>Additionally, calculation engine inputs are only a part of a complex optimization process. How will the IESO ensure controlled simulations that account for any external variables?</p>

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<p>22.15.9 “The IESO shall calculate a resource’s simulated reference quantity energy locational marginal price by using the same inputs as those used by the relevant calculation engine to calculate the resource’s simulated as-offered energy locational marginal price and replacing each energy offer that failed the conduct test applied pursuant to section 22.15.4 with the applicable reference quantities and reference levels.”</p>	<p>How will the IESO treat non-quick start and other multi-resource commitment dispatch that may have changed as a result of a simulated quantity? In other words, how are the impacts of one simulated outcome that with multi-resource dispatch impacts treated for the assessment of a subsequent hour?</p> <p>Please explain why the reference quantity energy locational marginal price uses not only the reference quantities for the resource but its reference levels. Could this approach flag a resource as having had a price impact over and above the actual impact of it having physically withheld? As an example, if a resource’s offer price was above its reference level, but within the appropriate threshold, this would not trigger the economic withholding conduct test, but could contribute to the assessment of price impact for physical withholding. The implications of using both reference quantities and levels in the simulated engine runs are complex, and OPG requests examples detailing the calculation.</p> <p>Please clarify whether the simulated reference quantity energy locational marginal price uses the reference quantities of:</p> <ul style="list-style-type: none"> a) any resource that failed any of the conduct tests in 22.15.4; b) any resource that failed the same conduct test as the resource being tested; c) any resource that failed any of the conduct tests and had the same MCEPW as the resource being tested; d) any resource that failed the same conduct test and had the same MCEPW as the resource being tested; or e) only the resource being tested.

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<p>22.15.10 “The IESO may test an offer for operating reserve of a registered market participant for a resource for physical withholding of operating reserve if the resource...”</p>	<p>Are the conduct tests applied to each of the three operating reserve markets?</p> <p>Section 3.6.2 of the MPM Detailed Design states that “When a particular class of operating reserve is tested for market power mitigation, it includes testing all offers that can satisfy that specific requirement”. This requirement is not specified in the rules.</p> <p>Additionally, the ability of higher quality classes of OR to satisfy requirements of lower quality classes should be included. As an example, if a resource has a 10N OR reference quantity value of 30 MW, and a 10S OR reference quantity value of 15 MW, offers of 45 MW (10S) and 0 MW (10N) should not fail the conduct test for 10N.</p>
<p>22.15.10.3 “the offer for operating reserve was below the resource’s reference quantity value and the operating reserve locational marginal price for the resource exceeded \$15/MW...”</p>	<p>This section should be revised to specify that the class of operating reserve is considered in the assessment. A possible clarification: “the offer quantity for a given operating reserve class was below the resource’s reference quantity value and the operating reserve class’s locational marginal price...”</p>
<p>22.15.18.1 “Notices issued pursuant to this section shall be issued no later than 180 days following the dispatch day in which the offer was submitted that failed the impact test for physical withholding.”</p>	<p>Offers submitted in the RTM on a given day could be related to two different dispatch days. As an example, offers submitted on January 1st could be for either January 1st or January 2nd. Given that 22.15.18.1 states the notice will be issued 180 days following the day the offer was submitted, please confirm that notices relating to offers submitted for different dispatch days could be issued on the same day.</p> <p>Additionally, will two hours within the same day be treated as separate instances of physical withholding for the purposes of the persistence multiplier?</p>

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<p>22.15.20 “Up to 45 days after issuance of the notice specified in section 22.15.18, the market participant may submit to the IESO a request that the IESO determine an alternative reference quantity value for the relevant resource during...”</p>	<p>As written the rules place no obligation on the IESO to review the documents provided by the participant. Participants should also have the opportunity to represent their opinion of the reference quantity, rather than simply presenting documentation. A potential revision to the section might be “...the market participant may submit to the IESO a proposal for an alternate reference quantity value, which the IESO shall review within five business days...”</p> <p>Will a proposal received pursuant to 22.15.20 be considered differently if the reference quantity in question had previously been subject to the independent review process?</p>
<p>22.15.21 “If the IESO determines that the supporting documentation demonstrates that a resource was able to supply a quantity of energy or operating reserve different than the quantity that the resource was calculated to have been able to supply using the reference quantities in use during the instance of physical withholding, the IESO shall determine an alternative reference quantity value for the resource and repeat the conduct test applied pursuant to section 22.15.4 or 22.15.12 and impact test applied pursuant to section 22.15.7 or 22.15.15, as applicable, using the alternative reference quantity value in the place of the applicable reference quantity.”</p>	<p>Please explain the significance of the phrase “the quantity that the resource was calculated to have been able to supply using the reference quantities”. Does this have a different meaning than “the reference quantity value”? If not, OPG suggests replacing with the latter phrasing.</p> <p>OPG notes that it is possible that the new assessment of a resource’s capability may cause it to no longer meet the eligibility conditions in 22.15.3.1 and 22.15.10.1, which state that the conduct test is applied to resources that “can supply at least 10 MW” of energy or operating reserve. To cover the case of a resource that, following the review, is determined to be able to supply less than 10 MW, 22.15.21 should be amended to require reassessment according to 22.15.3.1 and 22.15.10.1.</p> <p>The section indicates that the conduct test will be repeated, and the impact test will be repeated “as applicable”. OPG’s interpretation is that the impact test will only be performed if the conduct test has been failed. Is this correct?</p>

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<p>22.15.24 "If a market participant does not request that the IESO determine an alternative reference quantity value in accordance with section 22.15.20.1 or notifies the IESO that it will not make such a request, the IESO shall issue a second notice of physical withholding within 90 days of the time period in section 22.15.20 elapsing or receipt of such notice, as the case may be."</p>	<p>The section cites 22.15.20.1, but the "request" referred to is outlined in 22.15.20. OPG suggests revising.</p>
<p>22.15.25 "If the registered market participant for a resource has submitted an energy offer or offer for operating reserve that fails an impact test repeated pursuant to section 22.15.21, the IESO shall issue a second notice of physical withholding to the market participant for the resource within 90 days of the time period in section 22.15.20 elapsing."</p>	<p>Sections 22.15.24 and 22.15.25 appear to be redundant to one another. If OPG's view is incorrect, could the IESO please explain the differences in application of each section?</p>

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<p>22.15.26 "A second notice of physical withholding shall set out the settlement charge relating to the instance of physical withholding specified in the notice and, if applicable, additional information regarding the conduct test and impact test. The settlement charge applied shall be determined in accordance with the applicable market manual."</p>	<p>The section states that additional information regarding the conduct and impact tests will be presented "if applicable". OPG suggests that information regarding the tests shall always be applicable and should always be provided to the participant.</p> <p>Given that the charge will relate to a dispatch day approximately 315 days previously, on which settlement statement will the charge be issued?</p> <p>The notice of physical withholding is issued to the market participant, but the persistence multiplier is applied broadly based on previous second notices issued to any resources under the same Market Control Entity for Physical Withholding. Without communicating with other market participants under the same control entity, participants are unable to verify that a persistence multiplier was correctly applied. As an example, if Gen A and Gen B are both under the same MCEPW, and Gen B receives a second notice of physical withholding that applies a persistence multiplier of 2, Gen B would need to verify that Gen A was previously issued a second notice in order to verify the accuracy of the persistence multiplier.</p> <p>Finally, the section references the applicable market manual. A reference to Chapter 9: Settlements may also be appropriate in this situation.</p>
<p>22.16.3 "When determining day-ahead market energy offer intertie reference levels for a market participant for a boundary entity resource, the IESO shall consider all the dispatch hours in the 90 days prior to the dispatch day..."</p>	<p>The previous section, 22.16.2 states that hours will be assessed in two groups (roughly on-peak and off-peak), whereas 22.16.3 says "the IESO shall consider all the dispatch hours..." OPG suggests revising this section to "...all the dispatch hours determined pursuant to 22.16.2..."</p>

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<p>22.16.5 "...its day-ahead market energy offer intertie reference level for a boundary entity resource for a particular dispatch hour on a particular dispatch day shall be the unweighted average of the price contained in all energy offers submitted by that market participant for that boundary entity resource that met the conditions in section 22.16.3."</p>	<p>Does section 22.16.5 include all offer laminations submitted in a given hour, or only the highest? Lower laminations may be priced far below \$0/MWh, leading to unreasonably low "unweighted averages" of offers.</p> <p>OPG would appreciate an example outlining this calculation and its application to tests for economic withholding. Ideally, the example would highlight an instance in which energy prices (and therefore intertie bids) in the 90 days previous were lower than the energy prices on the day being assessed (approx. \$15/MWh for the 90 days prior, followed by a high demand day with \$90/MWh energy prices).</p>
<p>22.16.15</p>	<p>In general, 22.16.15 does not distinguish between the two types of operating reserve eligible for intertie bids (30R and 10N).</p>
<p>22.17.2 "The IESO may cease the assessment of intertie economic withholding at any time."</p>	<p>Under what circumstances would the IESO cease to assess intertie economic withholding? Does this apply to the overall assessment framework, or only to a specific instance?</p>
<p>22.17.7 "An energy offer or energy bid submitted by a registered market participant for a boundary entity resource shall fail the impact test if the boundary entity resource's simulated as-offered energy locational marginal price..."</p>	<p>The section implies that there is only one simulated as-offered energy locational marginal price, covering both the day-ahead and real-time markets. OPG suggests including the phrase "as applicable" to improve clarity.</p>
<p>22.18.3.1</p>	<p>This section should end with the word "or" to specify that meeting any of 22.18.3.1-3 is sufficient to trigger 22.18.3.</p>

Chapter 11 Definitions

Draft Market Rule / Section	Feedback
<p>“<i>minimum generation block down-time</i> means, for each thermal state, the minimum time, in hours, between the time a generation resource was last at its minimum loading point before de-synchronization and the time the generation resource reaches its minimum loading point again after synchronization;”</p>	<p>How does the pre-dispatch calculation engine infer the thermal state of these resources? OPG notes that Table 3-6 of the Pre-Dispatch Calculation Engine design document identifies that Minimum Generation Block Down Time is used by the PD engine to infer a resource’s thermal state. This role of MGBDT should be recognizes in the term’s definition.</p> <p>Additionally, some resources could have a MGBDT greater than 24 hours for the warm or cold thermal states. How would the PD engine infer the thermal state of these resources?</p>
<p>“<i>ramp hours to minimum loading point</i> means a <i>reference level</i> for a <i>resource’s ramp hours to minimum loading point</i>;”</p>	<p>OPG suggests expanding the definition of ramp hours to minimum loading point to reflect its role as dispatch data as per section 3.4.2.3 of the Offers, Bids, and Data Inputs Detailed Design Document DES-21 (i.e, the time between synchronizing and reaching MLP in hours).</p>
<p>“<i>reference level</i> means an <i>IESO</i>-determined formula to calculate a <i>reference level value</i>;”</p> <p>“<i>reference level value</i> means an <i>IESO</i>-determined estimate of a <i>dispatch data</i> parameter that a <i>resource</i> would have submitted if it were subject to <i>unrestricted competition</i>;”</p>	<p>The definition of reference level, reference level value, reference quantity, and reference quantity value should include “as per the applicable market manual”. OPG feels that referring to these parameters as “IESO-determined” undermines the bilateral, fair consultation process outlined in MM 14.2.</p>
<p>“short-run marginal cost means a financial cost incurred by a market participant with respect to its resource that is only incurred if that resource provides energy or operating reserve and is not incurred otherwise;”</p>	<p>Please confirm that Opportunity Costs are included in the scope of “short-run marginal cost”.</p>