

Stakeholder Feedback and IESO Response

Market Renewal Program: Market & System Operations and Calculation Engine market rule amendment proposals – Technical Panel July 16, 2024

| ID | MP | Section | Feedback | IESO Response |
|----|-------------|--------------------|--|---|
| 1. | Vlad Urukov | MR Ch.7 s.3.2.5 | In IESO’s response to OPG comment on 3.2.5, the IESO indicated that the language should not only reflect IESO’s inability to “receive dispatch data”, but also a participant’s ability to “send information”. The current language does not reflect this dual mode of failure and should be updated. | Section 3.2.5 accurately reflects the IESO inability to receive dispatch data, but the cause of that failure encompasses a failure or planned outage of the systems required for the “submission of dispatch data.” This includes both the systems that support a market participant’s submission and the systems that support the IESO’s receipt of dispatch data. |

| ID | MP | Section | Feedback | IESO Response |
|----|-------------|--------------------------------------|--|---|
| 2. | Vlad Urukov | MR Ch.7 s.3.3.3.7 | Explain rationale for not changing offers for hours when a resource has NOT received a commitment? | <p>At 20:00 EST, the first pre-dispatch run that includes the next dispatch day commences, with the first advisory pre-dispatch schedule that includes the next dispatch day being published at approximately 20:30 EST. While actual pre-dispatch commitments will be based on the associated binding pre-dispatch advisory schedule, which will be issued based on a resource's lead time, this first pre-dispatch advisory schedule will indicate potential future pre-dispatch commitments based on the commitment cost parameters in effect for the 20:00 pre-dispatch run (start-up offer, speed-no-load offer, and energy offer up to minimum loading point). The restrictions in the proposed market rules in Chapter 7 section 3.3.3.5 and 3.3.3.7 prevent offer price increases associated with these future potential commitments. These restrictions are necessary to ensure the integrity of the hourly pre-dispatch advisory schedules. Allowing an increase in these commitment cost parameters after the first pre-dispatch advisory schedule, but before the binding pre-dispatch advisory schedule is issued, could have the following impacts:</p> <ul style="list-style-type: none"> a) A higher commitment cost to the market for the resource; or b) The resource's potential commitment being replaced with a potential commitment from another NQS resource <p>Note that these restrictions do not prevent offer price increases for quantities above MLP nor for operating reserve offer prices.</p> |
| 3. | Vlad Urukov | MR Ch.7 ss.3.3.3.7 and 3.3.3.8 | Why is the term "latest offer" used in 3.3.3.7 and "its energy offer prices" in 3.3.3.8? | <p>Sections 3.3.3.7 and 3.3.3.8 are distinct revision restrictions for the real-time market unrestricted window.</p> <p>Section 3.3.3.8 is a restriction to offer price increases linked to specific quantities, necessitating the use of "its energy offer prices" to ensure that both the price and quantity are considered. That specificity is not required in section 3.3.3.7 as a start-up offer is a singular dollar value submission per thermal state.</p> |
| 4. | Vlad Urukov | MR Ch.7 ss.3.3.3.8 a. and b. | Explain what does "b" require? An example would be useful. | <p>Section 3.3.3.8 is an energy offer price restriction for GOG-eligible resources, where if a resource that did not have a day-ahead operational schedule receives a binding pre-dispatch advisory schedule, the resource is restricted from increasing its specific</p> |


| ID | MP | Section | Feedback | IESO Response |
|----|-------------|-------------------------------------|---|---|
| | | | | <p>energy offer prices above the respective prices that were in place for the PD run that established the binding schedule.</p> <p>Section 'b' is specifying the quantities associated with the energy offer prices that may not be increased.</p> <p>For an example of a pre-dispatch commitment, please refer to slide 61 of the GOG-Eligible NQS Generators Q&A Session Presentation. To clarify what 'b' requires in this example refer to the following details for sample hour 11:</p> <ul style="list-style-type: none"> - a PD Commitment for a GOG-Eligible resource from the 04:00 PD Run; - the GOG-eligible resource has an MLP of 100 MW; and - the PD schedule for the resource is 120 MW in hour 11. <p>In this example, section 'b' would restrict hour 11 energy offer price increases above the prices in place for the 04:00 PD Run specific to the quantities above 100 MW and up to and including the resource's binding PD schedule of 120 MW.</p> |
| 5. | Vlad Urukov | MR Ch.7 ss.3.3.3.10 a. and b. | <p>a) relates to time and b) to a quantity</p> <p>explain how a and b are applied with an example</p> | <p>Like section 3.3.3.8, section 3.3.3.10 is an energy offer price restriction for GOG-eligible resources, where if a resource that did not have a day-ahead operational schedule receives a binding pre-dispatch advisory schedule the resource is restricted from increasing its energy offer price above the price in place for the PD run that established the binding schedule.</p> <p>'a' and 'b' would be applied in a same manner as is explained in the IESO response to ID #4. The difference is that the quantity restriction in section 3.3.3.10 is for those quantities that exceed the quantities scheduled by the binding pre-dispatch advisory schedule.</p> |

| ID | MP | Section | Feedback | IESO Response |
|----|-------------|----------------------|---|--|
| 6. | Vlad Urukov | MR Ch.7 s.3.3.4 | Assuming these are “and” conditions, apply same nomenclature as elsewhere using “; and” | The IESO has updated section 3.3.4 as suggested. |
| 7. | Vlad Urukov | MR Ch.7 s.3.3.4.1 | Can the resources be a part of a different facility? If so, what is the definition of “without delay”. Does this relate to a shared forebay definition? | <p>The related generation resource must be associated with the same hydroelectric generation facility.</p> <p>Without delay means immediately, utilizing the same water at the same location that experienced the forced outage.</p> <p>The introduction of linked forebays has not changed the intent of the replacement energy offer program specified in section 3.3.4. Please note that the term used in the market rules is “linked forebay” rather than “shared forebay”</p> |
| 8. | Vlad Urukov | MR Ch.7 s.3.3.6 | What “quantity” is being referenced in relation to “poses risk”? | <p>The quantity referred to in section 3.3.6 that may pose a risk to reliability is the quantity portion of a price-quantity pair that may be submitted as a revision to hourly dispatch data in accordance with section 3.3.5.</p> <p>In the circumstances described in section 3.3.6.1, the IESO may only reject the change if the change to the quantity portion of the price-quantity pair would pose a risk to the reliability or the security of the electricity system.</p> |
| 9. | Vlad Urukov | MR Ch.7 s.3.3.6 | Explain the last sentence in regards to referring changes to the MSP. What criteria will the IESO use? Is this applicable only to section 3.3.5? | <p>The reference to the market surveillance panel (MSP) under section 3.3.6 has been maintained from the existing market rules. It is intended to address the potential for gaming and the adverse impact to the market that could result from allowing price changes during the mandatory window. The reference to the MSP was introduced in 2007 as part of MR-00327-R00, when the IESO removed the restriction that limited changes during the mandatory window to quantity only.</p> <p>The specific reference to the MSP in section 3.3.6 is intended to apply to section 3.3.6 and not section 3.3.5. However, section 3.3.8 is specified under section 3.3.5.2 as a circumstance under which the IESO would approve a revision of</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|--------------------------------------|---|---|
| | | | | dispatch data during the mandatory window. Therefore, by extension, revisions to dispatch data under section 3.3.5.2 are subject to the authorities available to the IESO under section 3.3.8. |
| 10. | Vlad Urukov | MR Ch.7 s.3.3.7.3 | Change “;” with “.” For c) | The semi-colon has been maintained intentionally. Section 3.3.7.3 continues beyond c) with an exception for pseudo-units that experience a forced outage of the steam turbine. |
| 11. | Vlad Urukov | MR Ch.7 s.3.3.7.4 | What is “certain daily dispatch data” referring to and what is the applicable market manual? | <p>Section 3.3.7.4 is referring to the dispatch data parameters specified in Market Manual 4.3 section 2.5.1. The applicable market manual identifies daily dispatch data parameters that may be revised during the real-time market restricted window and describes the reasons why those parameters may be revised.</p> <p>The daily dispatch data parameters included are as follows:</p> <ul style="list-style-type: none"> - Maximum number of starts per day; - Maximum daily energy limit; - Minimum daily energy limit; - Linked forebay, time lag and MWh ratio; - Minimum generation block down time; - Ramp hours to minimum loading point. <p>Please note that the discussion section of MR-00454-R00 identifies the applicable market manuals.</p> |
| 12. | Vlad Urukov | MR Ch.7 ss.3.3.8.1 and 3.3.8.2 | <p>Is this applicable to (iv) or to 3.3.8</p> <p>Consider rewriting as a separate section</p> <p>Clarify what is “change in quantity” and under what circumstances.</p> | <p>Sub-sections 3.3.8.1 and 3.3.8.2 are applicable to section 3.3.8 (iv) – both 3.3.8 and (iv) should be read and interpreted jointly.</p> <p>The change in quantity referred to in section 3.3.8.1, is the change in quantity that the registered market participant is obligated to revise in accordance with, and under the circumstances described in section 3.3.8.</p> <p>The MSP flag in section 3.3.8.2 has been maintained from the existing market rules and is intended to address the potential for gaming and the adverse impact to the</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|----------------------|---|---|
| | | | Why is the MSP flagged here given that this section is titled "obligation to Revise Dispatch Data"? | market that could result from consistent revisions to dispatch data pursuant to section 3.3.8. |
| 13. | Vlad Urukov | MR Ch.7 s.3.4.1.1 | What is referred to here as "the appropriate"? | <p>This language was maintained from the existing market rules. However, the IESO does not believe the existing intent, which is to identify that an offer in the real-time market could be for either the energy or operating reserve markets, continues to be necessary.</p> <p>The IESO has removed "appropriate" from sections 3.4.1.1 and 3.4.1.1 a. See below:</p> <p>3.4.1.1 for a <i>dispatchable generation resource</i>, or a <i>dispatchable electricity storage resource</i> proposing to inject <i>energy</i>, an <i>offer</i> to provide a physical service to the appropriate <i>day ahead-market</i> or <i>real-time market</i>;</p> <p>a. for a <i>dispatchable variable generation resource</i>, an <i>offer</i> to provide a <i>physical service</i> to the appropriate <i>day ahead-market</i> or <i>real-time market</i> reflecting the <i>resource's</i> full capacity available for production, determined in accordance with the applicable <i>market manual</i>.</p> |
| 14. | Vlad Urukov | MR Ch.7 s.3.5.6.2 | What is referred to by "dispose of excess energy"? | In the context of section 3.5.6.2, which describes what a negative price is intended to indicate as part of an energy bid, "dispose of excess energy" is describing the load's willingness to consume energy when being paid to do so, "willing to take or dispose of excess energy." |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|---|--|--|
| 15. | Vlad Urukov | MR Ch.7 s.3.5.15.3 | Clarify that it is not the sum of the submissions, but rather the sum of all MHOs for each hour in a given day. | Confirmed it is the sum of all the minimum hourly output submissions for the dispatch day. The sum of each minimum hourly output submitted within a dispatch day must not exceed the maximum daily energy limit for a dispatchable hydroelectric generation resource. |
| 16. | Vlad Urukov | MR Ch.7 s.3.5.16 | Reword "expects to be necessary" in terms of what is expected to be necessary. | The section has been updated to specify that it is "the submission of hourly must run" that is expected to be necessary to prevent the resource from operating in a manner that would endanger the safety of any person, damage equipment, or violate any applicable law. The IESO has updated section 3.5.16 as follows: 3.5.16 A <i>registered market participant</i> for a <i>dispatchable</i> hydroelectric <i>generation resource</i> may submit an <i>hourly must run</i> if it has submitted the required information in accordance with section 2.2.6A.3, and that <i>registered market participant</i> reasonably expects <u>the submission of hourly must run</u> to be necessary to prevent the <i>resource</i> from operating in a manner that would |
| 17. | Vlad Urukov | MR Ch.7 ss.3.5.22.6 and 3.5.22.7 | Are there any defined terms in 3.5.22.6? Replace ";" with "." In 3.5.22.7 | There are not any defined terms in section 3.5.22.6. The IESO has updated section 3.5.22.7. |
| 18. | Vlad Urukov | MR Ch.7 ss.3.5.22.7 and 3.5.35 | There is no further explanation as to what is expected from a thermal state submission in 3.5.35. Are both of these needed? | While no further submission requirements are specified in section 3.5.35, the section does specify which resource type is required to submit a thermal state. Both proposed sections will be maintained. |

| ID | MP | Section | Feedback | IESO Response | | | | | | |
|--------------------------|---|--------------------|--|--|----------------------------|-----------|---|--------------------------|--|---|
| 19. | Vlad Urukov | MR Ch.7 s.3.6.2 | Why was “for each class of OR” deleted? There are 2-5 PQ pairs for each class – see 3.6.1. | The phrase “for each class of operating reserve” was deleted because it was redundant with the information provided in section 3.6.1. | | | | | | |
| 20. | Vlad Urukov | MR Ch.7 s.3.6.3 | Clarify “by a corresponding”. There can be up to 20 energy offers and 5 OR offers. Consider rewording for clarity. | <p>To clarify, each price-quantity pair does not constitute an individual offer. Within each offer to provide energy, there can be up to 20 price-quantity pairs (see section 3.5.5). Similarly, within each offer to provide operating reserve, there can be up to 5 price-quantity pairs (see section 3.6.2).</p> <p>Therefore, “by a corresponding” means that a resource that has an offer to provide operating reserve (which may contain up to 5 price-quantity pairs) must also have an offer to provide energy (which may contain up to 20 price-quantity pairs) with a quantity equal to at least the same quantity that is offered as operating reserve.</p> | | | | | | |
| 21. | Vlad Urukov | MR Ch.7 s.3.6.5 | <p>Proposes to inject “energy” ?</p> <p>Where are the extra requirments re 10N and 30R as per below flagged?</p> <div><p>5. If required, enter your Reserve Load Point for the applicable hour(s).</p><p>The Reserve Loading Point specifies the minimum generation level in megawatts at which the generator can provide its maximum operating reserve of the class of OR it is offering. This information allows the IESO to simultaneously schedule energy and operating reserve for the generator.</p><table><tr><th>Market Participant</th><th>Reserve Load Point Options</th></tr><tr><td>Generator</td><td><ul style="list-style-type: none">This field must be greater than 0 when offering 10-minute spinning OR.This field must be set to 0.0 when offering 10-minute non-spinning OR.This field can be left empty or set to 0.0 when offering 30-minute spinning OR.</td></tr><tr><td>Load, Importer, Exporter</td><td>This field can be left empty or set to 0.0</td></tr></table></div> | Market Participant | Reserve Load Point Options | Generator | <ul style="list-style-type: none">This field must be greater than 0 when offering 10-minute spinning OR.This field must be set to 0.0 when offering 10-minute non-spinning OR.This field can be left empty or set to 0.0 when offering 30-minute spinning OR. | Load, Importer, Exporter | This field can be left empty or set to 0.0 | <p>The IESO has updated section 3.6.5 as follows:</p> <p>3.6.5 Each <i>offer</i> to provide <i>operating reserve</i> associated with a <i>dispatchable generation resource</i> or <i>dispatchable electricity storage resource</i> that proposes to inject <i>energy</i> shall contain a <i>reserve loading point</i> for each applicable class of <i>operating reserve offered</i>.</p> <p>The submission requirements for reserve loading point can be found in MM 4.1 section 3.1.4. Please note that the image from the Energy Market Interface document included in the comment will be updated in advance of Market Trials but the applicable requirements are now in MM 4.1.</p> |
| Market Participant | Reserve Load Point Options | | | | | | | | | |
| Generator | <ul style="list-style-type: none">This field must be greater than 0 when offering 10-minute spinning OR.This field must be set to 0.0 when offering 10-minute non-spinning OR.This field can be left empty or set to 0.0 when offering 30-minute spinning OR. | | | | | | | | | |
| Load, Importer, Exporter | This field can be left empty or set to 0.0 | | | | | | | | | |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|--------------------|---|--|
| 22. | Vlad Urukov | MR Ch.7 s.3.6.6 | Isn't the submission of the RLP in itself sufficient to govern the DSO. It may be hard for participants to track this. In other words, why submit an RLP if the participant then is expected only to offer if RLP is not an issue? | <p>Section 3.6.6 is intended to address a resource's physical capability of injecting a quantity of energy at least equal to its reserve loading point. If a resource is unable to do so or is unable to provide a pro-rated level of reserve as described in MM 4.1 s.3.1.4, the rule obligates the resource to not offer operating reserve.</p> <p>This is comparable to the obligation in MR Ch.7 s.2.1.2.3 for market participants to not submit dispatch data unless the dispatch data is consistent with the participant's reasonable expectations of the current actual capabilities of the resource.</p> |
| 23. | Vlad Urukov | MR Ch.7 s.3.6.7 | Is it practicale for participants to remove OR offers based on a PD energy run, as subsequent runs the energy schedule may be above RLP. In essence same point as above, isn't the RLP there to help participant not needing to micromanage offers? | To clarify, section 3.6.7 does not require withdrawal of operating reserve offers in all cases where a resource's pre-dispatch energy schedule is less than its reserve loading point. This is only required if the resource cannot provide the scheduled operating reserve, and subject to any applicable submission restrictions does not preclude the market participant from subsequently submitting operating reserve offers which the resource would be capable of providing. |
| 24. | Vlad Urukov | MR Ch.7 s.3.12.2 | Is the use of EST/EPT particulary for 2.2 and 2.3 deliberate? | The use of EST and EPT is deliberate. Sections 3.1.2.3 and 3.1.2.4 use EPT as the timeline is linked to the day-ahead market submission window. The day-ahead market calculation engine occurs in EPT. |
| 25. | Vlad Urukov | MR Ch.7 s.3A.1.4.1 | I don't see "intertie meter" as a defined term, only "intertie metering point". Connected is not a defined term, "connect" is. | <p>"intertie meter" italicized is the case of two defined terms used together - the defined term "intertie" and the defined term "meter."</p> <p>The term "connected" is intended to have the meaning of the defined term "connect" in accordance with MR Ch.1 s.7.1.1.3 which allows different grammatical forms of a word to have the same meaning as the defined term.</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|------------------------------|---|---|
| 26. | Vlad Urukov | MR Ch.7 s.3A.1.4.2 | "may" vs "will". In what circumstances will the IESO use this, particularly given the recent issue in this regard? | <p>"may" is aligned with MR-00478: Corrections to Intertie Flow Limit Amendments which is explained further in the initial market rule amendment MR-00468: Adjustments to Intertie Flow Limits.</p> <p>"May" is a permissive authority for the IESO as established under MR Ch.1 s7.3.1 and allows the IESO to utilize the provisions when required as determined by the IESO.</p> |
| 27. | Vlad Urukov | MR Ch.7 s.3A.1.4.3 | Propose "that represents" instead of "to represent". | The IESO is maintaining existing market rules content in section 3A.1.4.3. This rule can be found in MR Ch7 s.4.4.4.3 of the existing market rules. |
| 28. | Vlad Urukov | MR Ch.7 s.3A.1.5 | <p>"reliable" is not a defined term.</p> <p>Should it be "contingency event" (not "events" plural) which is defined as a failure of single or <u>multiple</u> components?</p> <p>What practice is referred to by the statement "IESO's commitment to neighbouring transmission systems for regulation"?</p> | <p>Reliable is typically italicized throughout the market rules in order to have the meaning of the defined term of reliability in accordance with MR Ch.1 s.7.1.1.3 which allows different grammatical forms of a word to have the same meaning as the defined term.</p> <p>Use of the plural or singular form of "contingency event" may be utilized in the market rules as is permitted under MR Ch.1 s.7.1.1.1.</p> <p>The constraint in section 3A.1.5.4 is maintained from existing market rule MR Ch.7 s.4.4.5.4. The IESO will continue to apply constraints as necessary to maintain commitments to neighbouring transmission systems for OR and regulation.</p> |
| 29. | Vlad Urukov | MR Ch.7 ss.3A.1.6 and 3A.1.7 | Why is "demand forecast" not included in "forecast data" in 3A.1.7? | Demand forecast is a calculation engine data parameter utilized distinctly in each calculation engine appendix and section 3A.1.7 obligates the IESO to determine this value. Section 3A.1.6 is an existing market rule (existing MR Ch.7 s.6.2.1) obligating the IESO to determine the most recent forecast data and other information. |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|----------------------------------|---|---|
| 30. | Vlad Urukov | MR Ch.7 ss.4.3.1 and 4.4.1 | <p>"DAM calculation engine" is not a defined term, although day-ahead market and DAM are both defined. Would be less confusing only one is used.</p> <p>IESO's feedback stated that notification will take the form of "DAM notification" on IESO's website as per MM4.1. S7.2. Suggest language reflects means of notification or at a minimum states "in accordance with the MM".</p> | <p>"Day-ahead market calculation engine" is a defined term. The IESO has replaced instances of "DAM calculation engine" with "day-ahead market calculation engine" to minimize potential confusion associated with the use of an acronym as part of a defined term.</p> <p>The IESO has updated section 4.3.1 to specify that that the IESO shall notify market participants in accordance with the applicable market manual. See below:</p> <p>4.3.1 If the <i>IESO</i> fails to produce valid results, the <i>IESO</i> may rerun the <i>DAM calculation engine</i> before <i>day-ahead market expiration</i>. Where the <i>IESO</i> reruns the <i>day-ahead market calculation engine</i>, the <i>IESO</i> shall notify <i>market participants</i> of the rerun and of any revised inputs <u>in accordance with the applicable market manual</u>.</p> |
| 31. | Vlad Urukov | MR Ch.7 s.4.7.2.2 | What is the "forecast period" in this context? Is it a longer period than the "for the next dispatch day"? If not, consider removing or clarifying. | <p>The forecast period referenced in section 4.7.2.2 is the next dispatch day. The IESO has removed "for the forecast period" from the section as suggested:</p> <p>4.7.2.2 the forecast of expected total system load, total system losses, available <i>energy</i>, and <i>operating reserve</i> requirements <u>for the forecast period</u>;</p> |
| 32. | Vlad Urukov | MR Ch.7 s.4.7.5 | Can you provide an example of how these prices will be published. | <p>An example of the prices referenced in section 4.7.5 is available on the Technical Reference Materials webpage.</p> <p>Please see a link to the applicable report below:</p> <p>Day-Ahead Constraints Shadow Prices Report</p> |
| 33. | Vlad Urukov | MR Ch.7 s.4.7.6 | Can you provide an example of how the "summary of hours related to global market power" will be published. | <p>An example is available on the Technical Reference Materials webpage.</p> <p>Please see a link to the applicable report below:</p> <p>Day-Ahead Global Market Power Conditions for Energy Summary</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|-------------------|--|---|
| 34. | Vlad Urukov | MR Ch.7 s.4.8.1 | "Publish" is a defined term but "issue" is not. I assume the distinction relates to publishing broadly vs. providing specifically on a participant basis. Consider defining "issue" for consistency. | That is a correct characterization of the distinction between "publish and "issue". The IESO has determined that a broad definition of "issue" is not appropriate since there are many different types of documents and information issued by the IESO via multiple different forms of communication. Furthermore, there is certain issuances with defined criteria such as the issuance of compliance criteria that may not align with a broad definition of "issue". |
| 35. | Vlad Urukov | MR Ch.7 s.4.8.1.8 | Could you provide an example of the information that will be provided? | <p>An example is available on the Technical Reference Materials webpage. The notice that there has been a failure of the conduct test and price impact test is included in the Day-Ahead Schedule report.</p> <p>Please see a link to the applicable report below:</p> <p>Day-Ahead Schedule Report</p> |
| 36. | Vlad Urukov | MR Ch.7 s.5.1.2 | What is the definition of "materially incorrect"? This is confusing as PD will be issued every hour. Clarify what is meant here in reference to "the previous PD schedule"? | <p>MRP has maintained the language from the existing market rules (MR Ch.7 s.5.1.3 in existing market rules). While the market rule obligates the IESO to re-run pre-dispatch when circumstances have made the previous pre-dispatch schedule materially incorrect, the IESO fulfills this obligation by running the pre-dispatch on an hourly basis. The IESO is not proposing to revise this rule as part of MRP.</p> <p>Materially incorrect means important, relevant or significant changes have occurred since the determination of the previous pre-dispatch schedule, as determined by the IESO.</p> <p>The previous pre-dispatch schedule is the pre-dispatch schedule that was determined to be materially incorrect.</p> |
| 37. | Vlad Urukov | MR Ch.7 s.5.1.3 | Consider adding specificity related to these being locational prices, and/or Ontario zonal price etc... | The specificity related to prices produced for each determination of the pre-dispatch schedule is included in Appendix 7.5A: The Pre-Dispatch Calculation Engine Process. |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|--------------------------------|--|---|
| 38. | Vlad Urukov | MR Ch.7 s.5.8.2.13 | What is the difference between “actual” and “forecast” in the context of PD? | The actual number of starts refers to the cumulative number of starts for the resource for the dispatch day. The forecasted number of starts is the anticipated number of starts for the remaining hours of the pre-dispatch schedule. |
| 39. | Vlad Urukov | MR Ch.7 s.5.8.3 | Consider adding “as per ...” in order to point to the part of the MR where this expansion request. | <p>The IESO has added reference to section MR Ch.7 s.3.1.14.</p> <p>5.8.3 The <i>IESO</i> shall issue to any appropriate <i>market participants</i> as soon as practicable, the approval or rejection of an <i>availability declaration envelope</i> expansion request <u>pursuant to section 3.1.14.</u></p> |
| 40. | Vlad Urukov | MR Ch.7 s.6.1.2 | “two minutes before” seems very precise. Consider making a more flexible statement. | The “two minutes before the dispatch interval” standard has been maintained from the existing market rules and remains applicable as part of MRP. |
| 41. | Vlad Urukov | MR Ch.7 ss.6.2.1.2 and 6.2.1.3 | 6.2.1.3 is missing the “action” i.e., shall be set etc... as it is a distinct entry from 6.2.1.2. | <p>The IESO has updated section 6.2.1.3 by inserting “shall be set” as suggested.</p> <p>6.2.1.3 <i>intertie</i> flows at the end of each <i>dispatch interval</i> <u>shall be set</u> at the value ascribed to such flows in the relevant <i>interchange schedule</i>.</p> |
| 42. | Vlad Urukov | MR Ch.7 s.6.6.1.5 | What is meant by “the total energy and operating reserve in real time schedules”? | <p>This is referring to the Realtime Totals Report which contains forecasts and schedules of system-wide information and is presented with five-minute granularity.</p> <p>Please see a link to the applicable report below: https://www.ieso.ca/-/media/Files/IESO/Document-Library/market-renewal/sample-reports/Realtime-Totals.zip</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|----------------------|---|--|
| 43. | Vlad Urukov | MR Ch.7 s.6.6.2 | Clarify with an example. This indicates a single set for 12 intervals rather than 12 runs. What is the exact application? | <p>On an hourly basis the IESO will publish the information specified in section 6.6.2.1 – 6.6.2.4 for the previous dispatch hour with a granularity of 5 minutes. The publication will include the information for each of the 12 intervals from the prior dispatch hour.</p> <p>As these reports are not changing materially as part of MRP, examples have not been included on the Technical Reference Materials webpage. Please refer to existing reports for applicable examples.</p> |
| 44. | Vlad Urukov | MR Ch.7 s.6.6.2.4 | What is meant by “total energy from such operating reserve”? | This is referring to the Dispatch Area Operating Reserve: Total Schedule and Total Energy Called Report. The report contains total quantities of operating reserve included in real-time schedules and quantities of operating reserve that have been activated/utilized, by operating reserve area. |
| 45. | Vlad Urukov | MR Ch.7 s.6.6.4 | I don’t think “trading date” is a defined term, “trading day” is. | <p>The IESO has updated section 6.6.4 with the appropriate defined term, “trading day.”</p> <p>6.6.4 The <i>IESO</i> shall <i>publish</i> the shadow prices for the binding constraints that are used to generate <i>locational marginal prices</i> by the <i>real-time calculation engine</i> no sooner than five days after the <i>trading day</i>.</p> |
| 46. | Vlad Urukov | MR Ch.7 s.6.6.5 | Can you elaborate on what this is. Will this be given on a participant resolution? What is the definition of “significant”. What is meant to “result of the real-time calculation”. Can you provide an example and discuss the frequency being at least once a month. What happens if there are no such instances in a given month? | <p>This is referring to the Dispatch Deviation Report. For transparency, the IESO is obligated to publish a monthly report identifying any instance that dispatch instructions have deviated significantly from the output of the real-time calculation engine. The report is published anytime the IESO issues a one-time dispatch or blocks the issuance of a dispatch to a resource. These events do not typically occur unless the need for them is significant to the point where it is required under the reasons listed in the Dispatch Deviation Report. Please refer to the report for the rationale provided for when such actions are taken:</p> <p>Dispatch Deviation Report - (ieso.ca)</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|--------------------------------------|--|---|
| | | | | The IESO does not issue a report if there have been no occurrences during a month. |
| 47. | Vlad Urukov | MR Ch.7 ss.6.7.1.1 and 6.7.1.2 | <p>What is meant by “for each dispatch interval”? Clarify that each 5 minutes will issue data for one interval at a time, rather than balance of intervals for the entire hour.</p> <p>How often will “the schedule to provide contracted ancillary services” be issued?</p> | <p>The phrase “for each dispatch interval” means that real-time schedules for energy and operating reserve will be issued for each 5-minute dispatch interval. Like today, the intent is for the schedules to be sent out prior to each dispatch interval. The information provided will be for one interval.</p> <p>The schedule to provide contracted ancillary services will be issued on a 5-minute basis for each dispatch interval when there is an applicable schedule to provide such ancillary services.</p> |
| 48. | Vlad Urukov | MR Ch.7 s.6.7.3 | What “ancillary services” are included in 6.7.3.2? | Contracted ancillary services, as referenced in section 6.7.3.2, include regulation, voltage control and black start capability. |
| 49. | Vlad Urukov | MR Ch.7 s.7.1.1B1 | Propose to add “issued a release notification for that resource” as at a participant level there may be multiple release notifications for other resources. | <p>The IESO has included “for the resource” as suggested.</p> <p>7.1.1B1 Section 7.1.1B shall apply until the <i>registered market participant</i> for a <i>variable generation resource</i> is issued a <i>release notification</i> <u>for that resource</u>.</p> |
| 50. | Vlad Urukov | MR Ch.7 s.7.1.6 | Why was “best effort” notionall lowered to “reasonable effort”? Does the IESO expect a different level of ability to provide these advisories? If not, best effort should remain as the goal. | Given the nature of the obligation in section 7.1.6 to provide dispatch advisories on a 5-minute basis for information purposes, the IESO believes that “reasonable effort” is the appropriate standard for the IESO to discharge the obligation. |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|-----------------------|---|--|
| 51. | Vlad Urukov | MR Ch.7 s.7.2.1 | Same as above, "best effort" should be the aspirational standard. Also is "cosistent with" well defined? "Closely approximate" is more clear. | See above with respect to the use of reasonable effort, ID #50. The IESO believes that the use of "consistent with" is a clear standard that can be applied when comparing dispatch instructions to the results of the engine. The use of "closely approximate" was determined to be a more ambiguous standard. |
| 52. | Vlad Urukov | MR Ch.7 s.7.2.1A.3 | "Failure of a resource to follow dispatch" is a very low bar to have the IESO not comply with 7.2.1. Propose language is added to qualify the subset of instances where not following dispatch by one resource would cause the IESO to not comply with 7.2.1. | Section 7.2.1A.3 only authorizes the IESO to depart from the obligations in section 7.2.1 where the resource's failure to follow dispatch instructions causes a material change in circumstances. This includes departure from those obligations specifically for the resource in question. |
| 53. | Vlad Urukov | MR Ch.7 s.7.2.5 | Same comment re "reasonable" vs "best effort". | See above with respect to the use of reasonable effort, ID #50. |
| 54. | Vlad Urukov | MR Ch.7 s.7.2.5A | The original language stated that the IESO may issue instructions that depart from the pre-dispatch schedule. The new language states that the IESO doesn't have to issue instructions altogether. | The intent of stating that the IESO is not required to issue a dispatch instruction is indicating that if circumstances have changed since the results of the applicable calculation engine, certain schedules may be cancelled and could result in the IESO not dispatching certain resources. This could occur under the circumstances described in section 7.2.5A and this distinct possibility exists the same in today's market. Section 7.2.5A.3 only authorizes the IESO to depart from the obligations in section 7.2.5 where the resource's failure to follow dispatch instructions causes a material change in circumstances. |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|--------------------|---|--|
| | | | <p>That is a material difference and I don't understand why the IESO wouldn't issue ANY instruction if, for example, a resource fails to follow dispatch instructions (7.2.5A.3).</p> <p>Consider reinstating original language.</p> <p>Also clarify that this section applies only to "a boundary resource".</p> | To clarify, section 7.2.5A applies only to boundary entity resources. |
| 55. | Vlad Urukov | MR Ch.7 s.7.2.5A.6 | Isn't NISL violation respected in the calc engine? A bit surprised that a schedule would violate it in the first place. | <p>This is an example of a provision that was previously codified in a market manual (existing MM 4.3: Real-Time Scheduling of the Physical Markets section 6.3 Boundary Entities) and has been appropriately placed in the market rules.</p> <p>The DSO may violate NISL in order to respect a constraint with a higher penalty price (see MM4.3 Appendix A). The IESO also requires the authority to relax the NISL constraint under certain conditions.</p> <p>To align references to NISL within the market rules, the IESO has updated the reference to NISL in MR Ch.7 s.4.2.1 from "net intertie schedule limit" to "net interchange schedule."</p> <p>4.2.1 When determining the <i>day-ahead schedule</i> applicable to the first hour of the next <i>dispatch day</i>, the IESO may disregard the net <u>interchange schedule</u>intertie scheduling limit.</p> |
| 56. | Vlad Urukov | MR Ch.7 s.7.3.1 | 7.1.1A captures dispatchable loads and as such section 7.3.1.2 is not accurate in terms of its reference to "additional energy production". See 7.4.2. | <p>The IESO has updated section 7.3.1.2 to account for dispatchable loads by adding, "or reductions of energy withdrawals."</p> <p>7.3.1.2 the amount of each class of <i>operating reserve</i> that is to be in a condition to respond to a <i>dispatch instruction</i> issued pursuant to section 7.4.3 calling for additional <i>energy</i> production <u>or reductions of energy withdrawals</u>; and</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|------------------------------------|--|---|
| | | | Also consider rewording 7.3.1.3 replacing “same” with a more descriptive language. | The IESO has amended section 7.3.1.3 to specify “reactive support and regulation” 7.3.1.3 the amount of <i>reactive support</i> and <i>regulation</i> that is to be provided under <i>contracted ancillary service</i> contracts or <i>reliability must-run contracts</i> or as a consequence of any requirement to provide <u>reactive support and regulations</u> same which derives from the application of these <i>market rules</i> . |
| 57. | Vlad Urukov | MR Ch.7 s.7.3.4.2 | Confirm boundary entities receive a ramp rate indication as described here. | The IESO has not proposed a change to this market rule and the content of dispatch instructions for boundary entity resources has not changed as part of MRP. The IESO will evaluate the need to amend the market rule if it is determined that section 7.3.4.2 does not accurately reflect the information provided to boundary entity resources. |
| 58. | Vlad Urukov | MR Ch.7 ss.7.4.2.1 and 7.4.6 | Please comment on how 7.4.2.1 and 7.4.6 are related ensuring that there isn’t overall over-collection as both of these items are reductions to revenues under the same condition. | Sections 7.4.2.1 and 7.4.6 have been maintained in order to provide the IESO the authority to efficiently claw back operating reserve payments when adequate unused generation or load capacity has not been maintained, as was intended via MR -00467-R00: Improving Accessibility of Operating Reserve. The provisions have been updated to align with the nomenclature and settlement process of MRP, but the desired intent of MR-00467-R00 has been maintained. |
| 59. | Vlad Urukov | MR Ch.7 s.7.5.2 | Currently there are two documents that speak to compliance with dispatch – an Interpretation Bulletin and a Statement of Approach. It will be much better if the IESO issues one, clear document outlining expectations and means of assessment (data source, meter type etc). | The IESO is in the process of reviewing the Interpretation Bulletin: Compliance with Dispatch Instructions Issued to Dispatchable Facilities (IMO_MKRI_0001 Version 7.0) and the Statement of Approach in coordination with the Market Assessment & Compliance Division. This review is being conducted outside of the scope of MRP and the IESO will communicate with stakeholders based on the outcome of the review process. For reference: |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|---|--|---|
| | | | | Interpretation Bulletin: Compliance with Dispatch Instructions Issued to Dispatchable Facilities Statement of Approach |
| 60. | Vlad Urukov | MR Ch.7 s.7.5.3 | Applying language at the resource level, takes us further from the compliance aggregation model that allows for resources to meet dispatch at an aggregate level. Please comment on how compliance aggregation is contemplated here. | Compliance aggregation at a resource level is addressed under MM 4.3 s.5.8 - Compliance Aggregation. |
| 61. | Vlad Urukov | MR Ch.7 s.7.5.9 | Is the appropriate unit of application the resource or the facility? | Resource is the appropriate term to be used in section 7.5.9. Compliance with dispatch instructions has been modified throughout section 7 to be measured against the actions of the resource. |
| 62. | Vlad Urukov | Deleted Section: MR Ch.7 s.7.8 "Publication of Real-Time Dispatch Information " | Is publicaiton of data adressed in another section? | The publication of real-time dispatch information was deleted in its entirety as it was redundant to content within the market rules. The obligations to publish real-time information and issue market participant specific information can be found in sections 6.6. and 6.7 of Chapter 7. |
| 63. | Vlad Urukov | MR Ch.7 s.8.3.1 | Should state "determine and issue " if "issue" is a term covering instanses when IESO shares confidential information with a market participant (see prior note). | The economic operating point determined by the IESO within six calendar days in accordance with section 8.3.1 is done for the purposes of calculating day-ahead market and real-time market make-whole payments in accordance with Chapter 9. Hourly settlement amounts, including make-whole payments, are included in a market participant's preliminary settlement statement available to the market |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|--------------------------------------|--|---|
| | | | | participant on the 10 th business day after the trade date. The EOP determined in accordance with section 8.3.1 is not issued to the market participants within six calendar days. |
| 64. | Vlad Urukov | MR Ch.7 ss.8.4A.5.1 – 8.4A.5.5 | <p>It is unclear what priority would be used by the IESO to use one of more of these ways of Determining administered prices. It is also unclear why there are so many options.</p> <p>Will locational prices be consistent with the source as to how they were derived. Or different approaches can be applied to each location? How can participants validate the approach used?</p> | <p>Section 8.4A.4 specifies the principles the IESO will use to determine the appropriate market prices when it is determined that administrative prices are required. The principles outline that the best available data is to be used to determine market prices that would normally be produced through the day-ahead market or real-time market. When administratively feasible, the IESO will apply the recalculated market prices determined using software that replicates the applicable calculation engine.</p> <p>The market rules provide the IESO authority to use one or a combination of methods outlined in section 8.4A.5. The selected method of price administration will be applied consistent to all LMPs, except in the circumstance in which prices within an island are administered. In the later case, prices would only be administered to LMPs within the island and would not necessarily apply to other LMPs. Consistent with today's approach, the IESO will not notify market participants which method of price administration was applied. Market participants may contact the IESO's Customer Relations with any questions pertaining to the methodology applied to administer prices.</p> |
| 65. | Vlad Urukov | MR Ch.7 s.8.4A.7 | The IESO should add language in terms of determining and issuing Economic Operating Point and any other relevant information in accordance with a specified timeline (reference to 6 BD in 8.3.1). | <p>Where the IESO is required to establish an administrative price, section 8.4A.2 requires the IESO to establish the administrative price within four business days of the affected day. Section 8.4A.7 specifies that the administrative price will be the prices used to calculate make-whole payments.</p> <p>The market rules do not specify a timeline requirement for the IESO to issue a resource's economic operating point. Rather (EOP), is used in the calculation of make-whole payments. Economic operating points and any applicable make-whole payment will be included in a resource's preliminary settlement statement, issued ten business days after the applicable trade date.</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|-----------------|---|---|
| 66. | Vlad Urukov | MR Ch.7 s.9.2.1 | Is the IESO expecting contracted ancillary services to be provided at a resource level (rather than a facility)? | <p>There are certain contracted ancillary services that are provided at the facility level, such as black start capability. There are other ancillary services that are provided at the resource level, such as regulation. Further still, there are contracted ancillary services that are provided at the unit level, such as reactive support.</p> <p>The market rules in section 9.2 were drafted to provide flexibility, so as to apply to the different contracted ancillary services and the varying levels of facility, resource and/or unit that may be providing those services.</p> |
| 67. | Vlad Urukov | MR Ch.7 s.9.4.5 | <p>Why are DA MWP's included in the "not entitled" provision given that the reduction of active power is a real time phenomenon?</p> <p>Also what if the reduction is only partially causing the MWP's (as in there are other reasons why the MWP is being received). Suggest this language is updated to reflect only the MWP's that is associated with the event.</p> | <p>The provision of reactive support and associated reduction of active power occur during real-time and therefore day-ahead market make-whole payments are not applicable. The IESO has removed reference to the day-ahead market payment in section 9.4.5.</p> <p>9.4.5 If the <i>IESO</i> directs a <i>facility</i> associated with a <i>generation unit</i> or an <i>electricity storage unit</i> to provide <i>reactive support</i> within the range required by the <i>connection</i> requirements provided for in MR Ch.4 or as stipulated in the applicable <i>contracted ancillary service</i> contract, and that <i>generation unit</i> or <i>electricity storage unit</i> has to reduce its active power output in order to comply with the <i>IESO's</i> direction, the associated <i>market participant</i> for a <i>generation unit</i> or <i>electricity storage unit</i> shall not be entitled to a day-ahead-market or <i>real-time market</i> make-whole payment <i>settlement amount</i>, as applicable, for that reduction in active power output.</p> <p>Section 9.4.5 provides treatment consistent with today's approach to resources directed to provide reactive support within the range required by the resources' connection requirements or per any contracted ancillary service contract. The market rule states that the ineligibility for make-whole payments is specifically "for that reduction in active power output." That reduction in active power is associated with the direction received from the IESO to provide reactive support.</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|------------------------------------|---|--|
| 68. | Vlad Urukov | MR Ch.7 s.10.1.7.3 | It is unclear what constitutes a type of “failure to follow dispatch” in terms of materiality that would warrant the IESO to not issue a start up notice. Same comment was made previously in terms of clarity in regards to what constitutes significant instance of not following dispatch. | <p>As per the IESO’s response to the commentary related to section 7.2.5A, the intent of stating that the IESO is not required to issue a start-up notice is to indicate that if circumstances have changed since the results of the applicable calculation engine were issued, certain schedules may be cancelled and could result in the IESO not dispatching and therefore not issuing start-up notices to certain resources. This could occur under the circumstances described in section 10.1.7. This is consistent with what could occur in today’s market, related to the IESO not issuing dispatch instructions.</p> <p>Section 10.1.7.3 only authorizes the IESO to depart from the obligations in section 10.1.6, where a resource’s failure to follow dispatch instructions causes a material change in circumstances.</p> |
| 69. | Vlad Urukov | MR Ch.7 s.10.2.6.3 | I can’t tell if the ‘s’ has been inadvertently deleted? | This appears to be a deletion of a ‘,’ prior to the ‘;’ in section 10.2.6.3. This tracked change will be removed as part of Final Alignment. |
| 70. | Vlad Urukov | MR Ch.7 ss.10.3.3 and 10.3.4 | Could the IESO confirm that the use of different ways to specify the relevant resource (GOG-eligible vs Dispatchable Gen that is a non quick start and not Nuclear) is intentional. An example would be useful. | <p>The use of GOG-eligible resource vs dispatchable generation resource that is a non-quick start resource and is not a nuclear generation resource is intentional.</p> <p>The category of dispatchable generation resources that are non-quick start and are not nuclear generation resources captures additional resources beyond those that are GOG-eligible. There are certain non-quick start resources that are not nuclear and are not eligible for the generation offer guarantee. The applicability to such resources was assessed when determining which nomenclature to apply to a market rule.</p> |
| 71. | Vlad Urukov | MR Ch.7 s.11.1.2.2 | <p>“Intermittent generators” should be its own category and “any generator....” a new item</p> <p>Split into 11.1.2.2 and 11.1.2.3.</p> | <p>The IESO has updated section 11.1.2 as suggested.</p> <p>11.1.2.2 <i>generators with intermittent generation resources</i>;</p> <p><u>11.1.2.3</u> <i>any generators classified as minor generation facilities or as small generation facilities;</i></p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|-----------------------|--|---|
| 72. | Vlad Urukov | MR Ch.7 s.11.1.1.2 | “embedding facility” is not a defined term. Consider defining it for clarity. | <p>The use of embedding facility is intended to refer to the facility/system, other than the IESO-controlled grid, that may have an embedded generator or embedded storage connected to it.</p> <p>The term is used only in sections 11 and 12 of the market rules and the term has not been introduced by MRP. Given the context of these sections, the IESO believes the intent is generally understood.</p> |
| 73. | Vlad Urukov | MR Ch.7 s.11.2.1 | <p>Please confirm that with the deletion of the two hour reference, a quick start resource would have NO obligation to notify the IESO as long as it received an instruction.</p> <p>Please describe how this will work from a timing perspective. If the first instruction is received at the top of the hour for example, the applicable resource may need to have already synchronized. Again, questioning the timing aspect of having the have acknowledged an instrucion as a pre-condition to synchronize.</p> <p>Also in the context of “synchronize to ... embedding facility”, is the notion of dispatch instruction (which indicates dispatchability) appropriate in the context of “embedded gen”, which doesn’t receive a dispatch?</p> | <p>In accordance with section 11.2.1 a quick start resource may connect with no obligation to notify following the receipt and acknowledgement of a dispatch instruction.</p> <p>Section 11.2.1 is applicable to resources that have yet to synchronize. A quick start resource that has already synchronized in advance of subsequent dispatch instruction is required only to acknowledge receipt of that dispatch instruction.</p> <p>Section 11.1.1.2 prohibits embedded facilities from synchronizing or de-synchronizing from an embedding facility. Section 11.2.1 is providing the permissive authority to synchronize embedded resources to an embedding facility. This is contemplated in the existing market rules in the context of synchronization and de-synchronization.</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|----------------------|--|--|
| 74. | Vlad Urukov | MR Ch.7 s.11.2.2A | <p>What is a “proposed synchronization plan”?</p> <p>Please explain on the significance of the plan and as to what that encompasses.</p> | <p>In section 11.2.2A, for a non-quick start resource, a proposed synchronization plan is the time at which the generation resource is intending to start-up, synchronize and reach its minimum loading point. The synchronization plan should be aligned with the resource’s pre-dispatch schedule and is communicated to the IESO at least two hours prior to the intended synchronization time.</p> <p>For GOG-eligible resources, the synchronization plan is included in the start-up notice when issued by the IESO (section 11.2.2). If the IESO is unable to issue a start-up notice to a GOG-eligible resource, a GOG-eligible resource is required to submit a synchronization plan in accordance with section 11.2.2A.</p> |
| 75. | Vlad Urukov | MR Ch.7 s.11.2.4 | <p>How is “receipt of the notification” established?</p> <p>Could you cross-reference the “any applicable provisions ... relating to over-generation dispatch”. It is important for generators to have a clear understanding as to when the IESO may require de-synch.</p> | <p>Receipt of the notification of acceptance is conducted via a phone call with the IESO control room which is documented in the control room logs.</p> <p>The authority to require a resource to de-synchronize due to an over-generation event is established by this section 11.2.4. No other sections related to over-generation in the market rules (e.g. MR Ch.7 ss.7.2.4 and 12.2) includes the applicable authority, which is an existing aspect of the market rule.</p> <p>To clarify that there are not other market rules that address the authority to require a resource to de-synchronize due to an over-generation event, the IESO has updated section 11.2.4 as follows:</p> <p>11.2.4 Receipt by the <i>registered market participant</i> of the notification of acceptance by the <i>IESO</i> under section 11.2.3 allows it to synchronize the <i>non-quick start resource</i> to the <i>IESO-controlled grid</i> or the embedding <i>facility</i>, as the case may be. However, the <i>IESO</i> may, at any time, require the de-synchronization of a <i>non-quick start resource</i> in the event of over-generation in accordance with any applicable provisions of these market rules relating to over-generation.</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|-------------------|--|--|
| 76. | Vlad Urukov | MR Ch.7 s.11.2.4A | Should there be a corresponding section in the preceeding section that specifies that a resource may request approval that will be conditional on 11.2.4A. This section speaks to an ability but it is unclear under what circumstances a participant may ask for such approval in the first place. | <p>The IESO does not intend to provide non-quick start resources the authority to request approval for synchronization late.</p> <p>Section 11.2.4A provides a permissive authority for the IESO to approve synchronization for non-quick start resources when approval is not requested in advance in accordance with sections 11.2.2 or 11.2.2A. The IESO will approve the synchronization if it does not impair the ability of the IESO to maintain security and adequacy.</p> <p>For clarity, the circumstances under which 11.2.4A would apply is when a non-quick start resource has failed to comply with the obligations under sections 11.2.2 or 11.2.2A.</p> |
| 77. | Vlad Urukov | MR Ch.7 s.11.2.6 | Whereas the synchornizaiton plan was limited to “non-quick start resources”, this section applies to all generators. Can you clarify how this applies to “quick-start”, particularly given the condition that getting an instrucion is sufficient to synchronize. Is there a synchronizaiton plan specific to a “quick start” resource? If not consider, revising and limiting to “non-quick start”. | <p>The obligation to notify the IESO of any change to a resource’s intention to synchronize is applicable to all generators and electricity storage participants without qualification.</p> <p>A quick start resource that has acknowledged receipt of a dispatch instruction is required to notify the IESO if the resource intends to operate in a manner, for any reason, that differs materially from the dispatch instruction (MR Ch.7 s.7.5.2). The obligation in section 11.2.6 for a quick start resource would be satisfied by a notification pursuant to section 7.5.2.</p> <p>The applicable information of a quick start resource’s synchronization plan is contained within the dispatch instruction.</p> <p>The IESO prefers to maintain the obligation to notify in both section 7.5.2 and section 11.2.6, to ensure participants communicate expected deviations from IESO instructions/approved synchronizations.</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|--|--|--|
| 78. | Vlad Urukov | MR Ch.7 s.11.3.1A MR Ch.11 <i>GOG-eligible resource</i> | Based on the definition of GOG-eligible resource, does it make sense to include " or embedding facility"? Is there a significance of the pluralization of "dispatch instructions" – does a resource have to receive at least two such instructions? Consider providing an example. | Section 11.1.1.2 prohibits embedded facilities from synchronizing or de-synchronizing from an embedding facility. Section 11.3.1A is providing the permissive authority to de-synchronize embedded resources from an embedding facility. This is contemplated in the existing market rules in the context of synchronization and de-synchronization. No, a resource does not have to receive more than one dispatch instruction below its minimum loading point to request approval to de-synchronize. Use of the plural or singular form of "dispatch instruction" may be utilized in the market rules as is permitted under MR Ch.1 s.7.1.1.1. |
| 79. | Vlad Urukov | MR Ch.7 s.11.3.2 | Deleted language specified "at least one hour", whereas new language is "one hour". Clarify if "at least one hour" still applies and if not, what is the flexibility that must exist as participants won't be able to notify exactly one hour in advance. | The flexibility provided by "at least one hour" for a notification to de-synchronize is intended to be maintained. For clarity, the IESO has modified section 11.3.2 to reinsert "at least one hour" 11.3.2 Subject to 11.3.1A, a <i>registered market participant</i> for a <i>non-quick start resource</i> intending to de-synchronize from the <i>IESO-controlled grid</i> or embedding <i>facility</i> , as the case may be, shall request the <i>IESO's</i> approval <u>at least</u> one hour in advance of the intended de-synchronization time unless an advisory notice for over-generation is in effect, in which event the <i>resource</i> may de-synchronize at will subject to the conditions of the advisory notice. |
| 80. | Vlad Urukov | MR Ch.7 s.11.3.4 | Please clarify how this process will work for "quick start" resources. If the resource needs to notify five minutes in advance (see 11.3.1) and the IESO has 5 minutes to accept, then there is an obvious possibility that there will be lack of clarity by the time the resource needs to take action. Or, is 11.3.4 specific to non-quick start as it speaks to a "plan". See comment on needing to define what such | Section 11.3.4 is intended to be applicable for both quick start and non-quick start resources. The IESO expects that the request by the quick start resource and response by the IESO to occur within five minutes. |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|------------------|---|---|
| | | | plan is. If the latter consider, limiting to the relevant resource. | |
| 81. | Vlad Urukov | MR Ch.7 s.11.3.7 | How does this work for “quick start” resources, given the 5 minute window? See comment above. | <p>Similar to the IESO response to comment ID#77, the obligation to notify the IESO of any change to a resource’s intention to de-synchronize is applicable to all generators and electricity storage participants without qualification.</p> <p>For a quick start resource that has acknowledged receipt of a dispatch instruction, it is required to notify the IESO if the resource intends to operate in a manner, for any reason, that differs materially from the dispatch instruction (MR Ch.7 s.7.5.2). The obligation in section 11.3.7 for a quick start resource would be satisfied by a notification pursuant to section 7.5.2.</p> <p>The applicable information of a quick start resource’s synchronization plan is contained within the dispatch instruction.</p> <p>The IESO prefers to maintain the obligation to notify in both section 7.5.2 and section 11.3.7 to ensure participants communicate expected deviations from IESO instructions/approved de-synchronization.</p> |
| 82. | Vlad Urukov | MR Ch.7 s.11.4.1 | <p>There is a material difference between “de-synchronize” and “to not synchronize”.</p> <p>Isn’t the IESO’s ability to request desynch for reliability already captured in other sections?</p> | <p>This is a notwithstanding provision intended to ensure clarity with respect to the IESO’s authority to direct resources to de-synchronize or not to synchronize to maintain reliability.</p> <p>This provision is an existing market rule (MR Ch.5 s.5.8.6) that has been moved for alignment purposes to section 11.</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|-----------------------------------|--|--|
| | | | <p>Isn't the "to not synchronize" covered in the above sections which give the IESO the right to reject approval in all possible cases?</p> <p>As per above, I do not think this section is required unless it introduces a new case – please explain.</p> | |
| 83. | Vlad Urukov | MR Ch.7 s.12.1.1.6 | What is the definition of "energy capability of generation resource". Is this different than the "generator capability" report which is an after the fact report? | <p>The reports identified in section 12.1.1.6 are further explained in MM 7.2 s.3 Adequacy, Demand Forecasts and Transmission Limits Reports. "Energy capability of generation resources" is referring to the aggregated values of capacity offers and bids for a dispatch day, this information presented by fuel type.</p> <p>The "generator output and capability report" includes the actual output a resource and the maximum potential output of a resource under current conditions, which includes derates or outages.</p> <p>Please refer to examples of existing reports available in the Data Directory for more information.</p> |
| 84. | Vlad Urukov | MR Ch.7 ss.12.1.1.6 a. – b. | <p>What is the significance of the use of EPT in a. on days prior and EST in d. ?</p> <p>Is the ";", supposed to be a ", "?</p> | <p>Use of EPT and EST is deliberate throughout the market rules as timelines associated with the day-ahead calculation engine and associated processes are stipulated in Eastern Prevailing Time (EPT). Section d. is linked to the commencement of the pre-dispatch calculation engine which is stipulated in Eastern Standard Time (EST).</p> <p>The use of semi-colons in section 12.1.1.6 is appropriate, and consistent with other sections of the market rules where a list is specified.</p> |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|---|--|---|
| 85. | Vlad Urukov | MR Ch.7 s.12.1.3.2 | <p>What is the significance of “or an advisory of the total MW of energy being directed to submit....”</p> <p>Seems there would be duplication of advisory notices – is that intentional?</p> | <p>The provision allows the IESO to publish an advisory notice if it “expects over-generation, under-generation or shortfalls in operating reserve or contracted ancillary services OR an advisory of the total MW of energy being directed to submit bids.....” The rule does not require an advisory to be published for both conditions separately. The IESO will determine the necessity for publishing each advisory notice in accordance with these market rules and MM 7.2.</p> <p>MM 7.2 s.4 Advisory Notices provides information related to the process for issuing such advisory notices, and the IESO assessment conducted when doing so. The market manual indicates that the IESO will determine the need for advisory notices and publish the notices as required.</p> |
| 86. | Vlad Urukov | MR Ch.7 ss.12.2.1.1 and 12.2.2.1 MR Ch.11: <i>response</i> | <p>Inconsistency of “to increase demand” as compared to “that will reduce demand”. Recommending to align.</p> <p>Also I don’t think the definition of “response” (italization of defined term) is what is captured in the Chapter 3 definition which is the basis of the defined term. Remove italicization.</p> | <p>The IESO has updated section 12.2.2.1 to state “to decrease demand” to align language with 12.2.1.1 as suggested.</p> <p>12.2.2.1 solicit and accept additional or revised <i>bids</i> that will decrease<i>reduce</i> demand in <i>response</i> to higher prices;</p> <p>The IESO has removed the italics from the term “response” in section 12.2.1.3, 12.2.2.1, 12.2.2.3 and 13.3.1.</p> |
| 87. | Vlad Urukov | MR Ch.7 s.13.2.4.4 | Consider changing “implement” to “enact” or “execute”. | The IESO prefers to maintain the existing language which is aligned with the existing language used in MR Ch.5 s.11 Emergency Preparedness and System Restoration. |
| 88. | Vlad Urukov | MR Ch.7 ss.13.1.1 and 13.5.1 | I don’t see “market operations” as a defined term in Ch 11. Therefore the deletion in 13.1.1 is inappropriate as it leaves the term undefined. | The term “market operations” was included in Chapter 11 as part of the MSO batch of MRP market rule amendments MR-00461-R05. The term has been included in the Final Alignment Chapter 11 proposal which includes all applicable defined terms. |

| ID | MP | Section | Feedback | IESO Response |
|-----|-------------|---------------------|---|--|
| | | | | |
| 89. | Vlad Urukov | MR Ch.7 s.13.6.2 | Given the locational nature of the prices, will the IESO also validate revenue sufficiency as it relates to instances when these prices are not sufficient to cover participant costs at a locational level. (see comment re: locational nature of administered prices) | <p>The principles to establish administrative prices specify that the best available data is to be used to determine market prices that would normally be produced through the day-ahead market or real-time market.</p> <p>Administrative prices determined for hours where the IESO has suspended the market will be utilized in the calculation of any applicable make-whole payments.</p> |
| 90. | Vlad Urukov | MR Ch.7 s.19.9A.1.2 | Correct font size. | The font size has been corrected as part of Final Alignment. |
| 91. | Vlad Urukov | MR Ch.7 s.21.4.2 | <p>Italicize “offer” in i).</p> <p>Could you clarify if non complinace with 21.4.2 will result in further action than the forgoing of DA and RT MWPs described in 21.4.3?</p> | <p>The IESO has updated section 21.4.2 (i) to italicize the defined term “offer”</p> <p>Section 21.4.3 describes the applicable settlement impact of not complying with section 21.4.2 when submitting bids in the day-ahead market or real-time market. Submitting bids contrary to the obligations in section 21.4.2 will also be considered a breach of the market rules. Breaches of the market rules are addressed in section 6.2 of Chapter 3.</p> |