

Stakeholder Feedback and IESO Response

Market Renewal Program: Proposed Categories for the Independent Review Process and Design Implementation Solutions from June 22, 2023

The IESO presented the proposed categories for the Independent Review Process and two design implementation updates on the 1-Day Advance Approval Process Timeline and Market Facing Reports on June 22, 2023 and received written feedback from:

- Electricity Distributors Association
- Ontario Power Generation

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

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

Table 1 | Electricity Distributors Association Feedback and IESO Responses

Feedback	IESO Response
<p>1. <u>Design Implementation Solutions – 1-Day Advance Approval Process Timeline</u></p> <p>Please confirm and provide analysis, if possible, if the revised process would result in likely decrease in the magnitude of the Load Forecast Deviation Charge (LFDC) (i.e., reduced scheduling deviations and reduced price deviations, etc.). Please provide an example of overall benefits to customers.</p>	<p>Thank you for the feedback.</p> <p>To the extent that the 1-Day Advance Approval process allows for additional planned outages to be reflected in the Day-Ahead Market (DAM), this would help to directionally decrease the magnitude of the LFDC.</p> <p>It should also be noted that the potential reductions in the LFDC that would result from the 1-Day Advance Approval process do not necessarily result in lower overall costs for consumers. The same total load will still need to be served with or without the 1-Day Advance Approval process, but with the process in place, additional supply will be secured in the DAM instead of the Real-Time Market (RTM). At a high level, to the extent that as intended the DAM allows for more efficient dispatching of resources and sends more transparent price signals, there should be directional downward pressure on system costs.</p>
<p>2. <u>Design Implementation Solutions – Market Facing Reports</u></p> <p>The update presents reports that have been updated since the detailed design phase, which was completed in 2021. Given the changes, it would be useful to have a complete list of all reports, including the new reports that have changed, to ensure complete understanding and context for these changes.</p> <p>Based on the summary presentation, changes impacting LDCs are as follows:</p> <ul style="list-style-type: none">• Day-Ahead Schedule Report – no longer includes NDL scheduled withdraw (to be	<ol style="list-style-type: none">1. The Load Forecast Deviation Report will include the trade date, trade hour, status (Final or Preliminary) and the LFDC rate. <p>Both the DAM_OZP and the RT_OZP will be published on the IESO's website.</p> <ol style="list-style-type: none">2. For clarity, LDCs will be settled at the DAM_OZP, adjusted by the LFDC. In the event of a DAM failure, LDCs will be settled at the RT_OZP. <p>The IESO is assessing how we will present the updated pricing information on our website, in addition to the new and updated reports that</p>

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included in new Load Forecast Deviation report)

- Load Forecast Deviation Report – NDL forecast deviation between DA and RT for settlement purposes.
- Reports Published via Website Content – including content such as Locational Marginal Prices (LMPs) and Ontario Zonal Price.

Overall, EDA is supportive of these changes. In particular, the addition of the new Load Forecast Deviation Report appears to address a specific request previously made by the EDA in the detailed design phase.

We offer the following comments for constructive improvements:

1. We recommend clarifying the content that will be included in the Load Forecast Deviation report. For example, which quantities will be included in the report (e.g., DAM_QSW for each hour, RT Purchase cost/benefit for each hour, DAM Volumetric cost/benefit for each hour, Load Forecast Deviation Charge (LFDC) for each hour, etc.) and which quantities will be referenced from other reports (e.g., RT_LMPs, AQEI, AQEW, etc.)
2. Please clarify which Ontario zonal prices will be published on the IESO's website (i.e., DAM_OZP vs. RT_OZP). Please clarify how this information will be made relevant and contextualized for typical LDC customers.
3. Recently, the IESO completed an exercise of mapping all charge types as they remain, change, or are removed due to MRP implementation. The document serves as a useful guide to support LDC and OEB readiness for MRP implementation. We recommend that as a next step, the IESO

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will be available at MRP Go-Live. We will provide more information related to website changes next year.

3. The IESO has reviewed this request and is unable to provide a mapping of all charge types to our market and system reports due to the large number of combinations and scenarios that must be considered to perform this analysis. The IESO is working with the EDA to determine how we can support LDCs in understanding how specific parameters from these charge types are used in these reports.

The IESO recognizes the work that stakeholders will need to do to prepare for MRP Go-Live.

To assist market participants with their development work, the IESO has provided a *Charge Types Mapping Summary* in June 2023 that maps the new charges that will be introduced at MRP Go-Live to the existing charge types that are used in the current market. The IESO also posted the *IESO Charge Types and Equations* document in August 2023 to provide participants with a full list of the charge codes that will be used by the IESO settlement process in the renewed market, and the formula and variable definitions behind each of these charges.

In addition to the materials noted above, the IESO will publish additional resources that will help market participants to prepare for these settlement changes:

- In Q2 2024, the IESO will release the updated *Format Specifications for Settlement Statement Files and Data Files*. Market participants can use this document to assess and implement changes in their own systems to align with the updated structure and

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map each charge type to the new/existing market reports that will be available post MRP.

With respect to the timelines for schema and sample files, the EDA is concerned with the timelines proposed. The most important group of reporting documents for LDCs relates to "Settlement" – which the IESO proposes to be released Q2 2024. Given the many changes that LDCs are anticipating for implementation, we highly recommend that the IESO advance this schedule. The additional time is needed as LDCs must align processes related to wholesale market settlement, as well as retail settlement with customers and regulatory accounting.

characteristics of the fields that will be used in these files.

- As part of our batch rollout of sample reports and schemas, the IESO is targeting to post the files related to settlement reports in Q2 2024. This includes the sample, schema and help files for the following reports: *Hourly and Monthly Charge, Intertie Offer Guarantee Charges 2002 to 20yy, IOG Settlements Detail Report, Load Forecast Deviation, and Variable Generation Foregone Energy Calculation Inputs.*
- Finally, to support testing activities, the IESO will provide generic sample settlement statement and data files to market participants in Q4 2024.

Table 2 | Ontario Power Generation Feedback and IESO Responses

Feedback	IESO Response
1. <u>IRP Categories – Technology Type Segments</u>	
<ol style="list-style-type: none">1. There is overlap between the “Storage Non-battery” and “Hydroelectric – Pumped Storage” categories, as hydroelectric pumped storage is a type of non-battery storage technology. If there is a requirement to have a separate category for “Hydroelectric – Pumped Storage”, the “Storage – Non-battery” category should specifically exclude hydroelectric pumped storage.2. “Hydroelectric” and “Hydroelectric – Cascade” can be combined into one category. Hydroelectric cascade operation is a subset of hydroelectric operation.3. Dual-fuel thermal resources can fall under the listed thermal technology types, however, it should be noted there are complexities associated with a dual-fuel thermal resource that would require additional expertise compared to a single-fuel thermal resource.	<ol style="list-style-type: none">1. The IESO will update the categories to reflect this feedback.2. The IESO will update the categories to reflect this feedback.3. Given the complexities of dual-fuel resources noted in the comment, the IESO will not remove the dual-fuel thermal category.
2. <u>IRP Categories – Reference Level and Reference Quantity Type Segments</u>	
<ol style="list-style-type: none">1. There should be detailed parameter itemization within the expert qualification process for the Reference Levels and Reference Quantities within each technology type. As an example, an expert in the “Thermal – Simple Cycle Gas” Financial Reference Level Category should be qualified for the complete set of financial reference level parameters, including incremental heat costs and emissions costs.	<ol style="list-style-type: none">1. Experts that are qualified under the financial reference level category for a given technology type will be qualified to consider all financial aspects of a reference level consultation under the current approach. <p>Requests for services resulting from a request to use the independent review process will include the necessary details to allow a potential expert to demonstrate their qualification in a particular area as an input to the selection process. As a result, a</p>

2. Emission cost should be included as a parameter/area of expertise under the Financial Reference Levels Category on slide 16.

detailed parameter itemization at the qualification stage is not necessary.

2. The IESO will update areas of expertise to include emissions costs for the category of Thermal – Financial Reference Levels in the qualification process.

3. Design Implementation Solutions - 1-Day Advance Approval Process Timeline

OPG has no objection to the IESO's revision to the 1-Day Advance Approval Process Timeline with respect to resource outages that are system impactive, i.e. generator outages. However, OPG does not agree that the change should be applied to outages that are not system impactive. These non-impactive outages include outages to communication equipment, equipment protection outages, loss of equipment redundancy, etc.

The rationale for the change to the 1-Day Advance Approval Process Timeline is given in the May 19, 2023 memorandum, which is to avoid divergence in scheduling and pricing between the Day-Ahead Market (DAM) and the Real-Time (RT), i.e. no mismatch of resource outage data between the two markets. The benefit of the change is to "...ensures dispatch data submitted into the DAM will be properly respected by the outage data passed to the DAM."

From above, the main concern is regarding resource availability. Non-impactive outages are not resource outages and therefore would have no impact on scheduling and dispatches. Implementing a blanket revision to the 1-Day Advance Approval Process Timeline for all types of outages, instead of applying it specifically to system impactive outages, is an excessive reduction of flexibility allowed for market

Thank you for the feedback. There are outages other than those associated with generator/electricity storage resources for the 1-Day Advance Approval process that can have a system impact that can cause scheduling and pricing deviations between the Real-Time Market and Day-Ahead Market. These outages can have impacts that include changes to security limits, thermal limits and contingency monitoring, which are not associated with resource availability. The change in timing for all 1-Day Advance Approval outages isn't expected to have a material impact on Market Participants given that nearly 97% of all 1-Day Advance Approval outages submitted from the past two years were submitted prior to the proposed 10:00 EST submission deadline.

participants (MPs) under the current Market Rules and Market Manuals.

4. Design Implementation Solutions – Market Facing Reports

OPG recommends the IESO to provide the report release timelines on a monthly resolution, rather than in the quarterly resolution as currently presented.

1. In the posted *List of external reports impacted by MRP*, there are nine reports that are listed as 'NEW' under "DD Impact" and 'No longer required' under "Updated Impact":
 - ADE Expansion Request Approval;
 - Notice of Mitigation of a Resource for a Make Whole Payment Impact;
 - Notice of Mitigation of a Resource for a Price Impact;
 - Notice of Mitigation of a Resource for Physical Withholding;
 - Notice of Mitigation of a Resource on an Uncompetitive Intertie for Economic Withholding;
 - Notice of Response to request to Modify a Fuel Cost Report;
 - Uncompetitive Interties Report;
 - Physical Transaction Dispatchable Resource Energy Price Report;
 - Physical Transaction Non-Dispatchable Load Energy Price Report.

The two reports highlighted in yellow are presented as being removed in the June 22, 2023 presentation. There is no update to the status of the remaining seven reports in the same presentation. Please clarify and confirm that the remaining seven reports are also being removed as part of this Market Facing Report update.

The IESO will be releasing the reports as a batch per quarter not per month. We will look to provide clarity of the estimated release date per quarter.

1. Correct, the other 7 reports are being removed. The revised procedures for communicating MPM related information were provided through the published MPM batch Market Manuals. The change to the two MPM reports that was highlighted was an incremental change since that publication.
2. Thank you for identifying this discrepancy. These two reports were added as part of detailed design version2 and missed in our *List of external reports impacted by MRP* spreadsheet. MRP will include these two reports in our final batch during Q2 2024.
3. Thank you for identifying this error; these are Market Participant Confidential reports.

2. The two following reports:
 - Transmission Facility Outage Limits Report (Days 0 to 2)
 - Transmission Facility Outage Limits Report (Days 3 to 34)

are listed as "Revise for Content" in *Publishing and Reporting Market Information Detailed Design Issue 2.0*, Table 3-17. However, these two reports are not included in the *List of external reports impacted by MRP*. What is target posting for these two reports?

3. The report audience for Day-Ahead Financial Reference Level Report and Real-Time Financial Reference Level Report (*List of external reports impacted by MRP* rows 32 and 46) are listed as "Public". These two reports should be "Market Participant Confidential" reports, in alignment with the report audience for the Day-Ahead and Real-Time Reference Quantity Reports (*List of external reports impacted by MRP* rows 34 and 47).

5. The comments below are for the Independent Review Process.

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| <ol style="list-style-type: none"> 1. Does the IESO have an estimate of the demand for expert support to resolve IRPs in a timely manner? 2. Can the IESO provide a graphical timeline for the IRP in Market Manual 14.2, outlining the minimum and maximum timeframe to complete an IRP process? 3. The IESO should provide a cost schedule for the use of the IRP. This cost schedule should include breakdown detailing how MPs will be charged for the IRP, such as if the charge will be by the hour, by resource, by evaluated reference parameter, etc. and what the associated | <ol style="list-style-type: none"> 1. The IESO does not currently have any information regarding potential use of the independent review process, so cannot form an estimate for the demand for experts for this process. 2. Timelines for execution of certain steps of the independent review process are currently found in the MRP Consolidated Draft at Chapter 7, sections 22.8.10 and 22.8.11 and Market Manual 14.2, section 3.5. Where a step in the process lies within the IESO's control, the IESO has created reasonable timelines to complete that step. However, timelines only exist for the steps in the process |
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rate(s) will be. Would the charges be the same across technology types or will there be price differentiation for each technology type?

that are within the IESO's control. Numerous steps, such as the time required to draft an independent review process report, will be impacted by the scope of a particular independent review.

3. Part of the request for services process to select an expert to perform an independent review will involve the experts providing an estimate of the cost of providing the review. Pricing for a particular review will be determined at the discretion of each expert. The IESO will provide the market participant that has requested an independent review with the cost estimate after selecting an expert through the request for services process. Market participants will then have the opportunity to assess whether to proceed with the process.

6. The comments below are for the Market Renewal Sandbox.

1. Will the current Sandbox and the new Market Renewal Sandbox be two different environments within the same Sandbox, or will they be two separate Sandboxes?
2. Would MPs be able to use existing Sandbox APIs or EMI logins for the Market Renewal Sandbox Testing?
3. What is the timeline for the IESO to publish details on Connectivity Testing that is scheduled to start on January 2024? There are many pre-steps MPs need to take (e.g. development, testing) prior Market Renewal Implementation, to connecting to the IESO system and these steps need to be scheduled before MPs can connect to the IESO system.

1. Four external systems will change as a result of MRP: Online IESO, Market Information Management (MIM), Dispatch Services, and Reports Site.

The existing Sandbox systems for Online IESO and Reports Site will be used for testing next year.

Market participants will be asked to connect to a new MRP Sandbox environment for MIM and Dispatch Services to view the changes that are introduced by MRP. Further details will be provided in Q4 2023.

2. Market participants can use their existing user and API accounts to connect to the applications that are in-scope for testing. If they require new accounts to participate in testing
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activities next year, market participant will follow the existing registration process to register these accounts. Details of when they should register new accounts will be provided in October 2023.

3. The IESO will provide testing details to external stakeholders in October 2023.

7. The comments below are in response to IESO feedback dated June 15, 2023.

1. IESO response to OPG's Question 12, Sub-question 3: "Section 22.15.2 will be amended to clarify that the assessment of physical withholding..." When will Section 22.15.2 be amended with the clarification that energy traders and virtual trader are not required to set Market Control Entities for physical withholding? Chapter 7 Section 22.15.2 has not been revised in the June 2023 version of the MRP Consolidated Draft.
2. IESO response to OPG's Question 16: OPG disagrees with the IESO's response that Chapter 7 Section 22.15.12 would have exempted MPs from testing when the MPs could have been able to exercise market power via physical withholding. From *Market Power Mitigation Detailed Design Document Issue 2.0* Section 3.6.2.1: *If there is a binding MAX constraint on a reserve area, resources in that reserve area will be unable to provide additional operating reserve in that reserve area. These resources will be unable to exercise market power due to their inability to provide incremental operating reserve.* In other words, when a reserve area is under a binding MAX constraint, the resources within the area would be unable

1. The IESO anticipates making this update by the end of 2023.
2. The relevant consideration in relation to physical withholding differs from that for economic withholding. The quoted section of the detailed design document relates to assessment of economic withholding by the DSO. In this circumstance, the DSO assesses the operating reserve offers that are part of the least cost solution when determining schedules and prices.

The difference lies in that when a resource physically withholds supply, the DSO cannot consider those withheld offers when determining schedules and prices. When the IESO simulates the market outcomes including the withheld supply, there could be many impacts on other resource schedules as a result of providing this previously withheld supply. Including the withheld supply could result in re-dispatch of other resources that could also impact schedules, prices and binding constraints, including area reserve constraints.

As a result, it is appropriate that the IESO can assess if a market participant physically

to provide incremental reserve and therefore unable to exercise market power. Any incremental MWs offered for operating reserve (OR) beyond the binding MAX constraint value, regardless of the price, would have no impact on the supply of OR in the reserve area, as the reserve area would not be able to utilize any additional offered OR MWs beyond the binding MAX constraint value. If the reserve area is unable to schedule incremental reserve due to a binding MAX constraint, how would resources be able to exercise market power?

If a resource *is* able to exercise market power via physical withholding, that would indicate that the reserve area *is NOT* under a binding MAX constraint, as the reserve area can still schedule incremental OR. Based on the reserve area characteristics outlined in *Market Power Mitigation Detailed Design Document Issue 2.0* Section 3.6.2.1, Chapter 7 Section 22.15.12 should not be removed.

withheld operating reserve supply to determine if that withheld supply significantly impacted prices.

In these circumstances, a market participant would have been found to have: (i) met a condition that warrants testing for physical withholding; (ii) withheld available supply; and (iii) significantly increased prices. Only when all of these conditions are met can a settlement charge result. These are the same circumstances in which mitigation is applied throughout the mitigation framework, so it would not make sense for the IESO not to mitigate in this case.

There are two additional factors that are important to note in the context of this comment. Firstly, market participants will have the opportunity to request alternate reference quantity values to ensure that the IESO's view of the available supply is accurate for that resource and dispatch day. Secondly, if supply that is withheld has no price impact, then no mitigation is applied.