IESO Response to Feedback on the MRP Energy Detailed Design – Incremental Feedback

Incremental Feedback Responses

Below are the IESO's responses to incremental feedback that stakeholders submitted after reading the final calculation engine documents. Feedback is organized alphabetically by design document and then stakeholder.

ID	Design Document	Stakeholder	Feedback	IESO Response
847	General	HQ Energy Marketing (HQEM)	[...] HQEM wants to reiterate its position against the treatment of imports decision published in the high-level design in August 2019, as well as in the Real-time Calculation engine detailed design feedback document posted on October 30th. The feedbacks already posted explain HQEM position and argumentation against the discrepancy of the congestion treatment between imports and exports. HQEM is still waiting to have a clear explanation on how the IESO intends proceed with this discrepancy and answer past comments made.	The IESO responded to the Real-Time Calculation Engine feedback on December 28, 2020 and the Single-Schedule Market High-Level Design feedback on August 8, 2019. The high-level design decision to use a dynamic Intertie Congestion Price (ICP) on import-congested interties is consistent with the principles of Market Renewal. The design will encourage the efficient scheduling and pricing of resources, including those on Ontario's interties. Further details on how intertie settlement prices will be determined can be found in Section 3.10.1.2 of the Day-Ahead Market (DAM) Calculation Engine design document, Section 3.8.1.2 of the Pre-Dispatch Calculation Engine design document, and Section 3.8.1.2 of the Real-Time Calculation Engine design document.
848	General	HQEM	HQEM would like to echo OPG's feedback submitted on August 7th 2020, regarding segregated mode of operation ("SMO"). Theses transactions occurring on an uncompetitive intertie should remain flexible for the participants. The IESO should explain in details the impact of these deadlines, how they are treated as outages and how it affects the transmission system and limits. Participants should benefit from a better flexibility, because a decision that made sense on a day ahead basis could need to be reviewed once the day ahead market ("DAM") window is closed. These modifications should be available, at least on the same day as the transaction, or on a short time basis, to the participant. The 2 hours window could be modified and extended as a solution, but having these transactions setup, without any possible modification, except for reliability and SEAL reasons, appears to be excessive.	Segregated Mode of Operation (SMO) involves taking a generation facility out of the available supply and, in some cases, changing critical transmission limits that impact market outcomes. Allowing a participant the flexibility to initiate or modify SMO transactions after the DAM clears could create opportunities to exploit asymmetric market information regarding transmission limits. A participant who has foreknowledge of SMO transactions that will change system limits after DAM has an unfair competitive advantage in a two-settlement market. Likewise, cancelling SMO transactions after the DAM clears - for reasons other than safety, equipment or applicable law (SEAL) - would have a similar effect. The new deadline in the Grid and Market Operations Integration (GMOI) detailed design is intended to address those SMO transactions that require an outage to a critical transmission element. For SMO requests at locations that do not require an outage to a critical transmission element there is no change to existing submission and cancellation process.

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864	General	Ontario Power Generation (OPG)	The IESO's response on ID 493 states: "[…]Submitting minimum hourly output and hourly must run values for operating conditions that respect person safety, equipment and any applicable law will produce feasible DAM and pre-dispatch schedules, that if dispatched to that schedule value in real-time are operationally feasible." During review of the IESO's responses, such as the response above, it remains unclear whether the hydroelectric parameters may be used in DA and PD for the purpose of producing feasible day ahead market (DAM) and pre-dispatch (PD) schedules that if dispatched to that schedule in real-time could reasonably be expected to prevent the resource from operating in a manner that would endanger the safety of any person, damage equipment, or violate any applicable law (SEAL). It is unclear if SEAL conditions would ever apply in the DAM timeframe since DAM schedules are financial commitments not physical obligations. The use of these parameters is essential to ensure hydroelectric resources receive feasible schedules in the DAM and PD. A clear statement of hydroelectric parameter use may allow for a better understanding of the design intent prior to developing the market rules. OPG proposes the following: "Hourly must run, minimum hourly output, linked resource, time lag & MWh ratio, max number of starts per day, forbidden zones, min DEL, and max DEL may be used for the purpose of producing feasible DA and PD schedules, that if dispatched to that schedule in real-time could reasonably be expected 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 is reviewing the proposed description to see where updates can be made to clarify the language in the detailed design. Updates will be reflected in the final detailed design documents and the tracker of changes.

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865	General	OPG	[…] We encourage the IESO to review the current issues with the joint optimization of energy and operating reserve in the Day Ahead Commitment Process (DACP) and PD and consider alternate proposals to the Max DEL constraint. The alternatives proposed below build on existing good utility practice(s), to plan for at least one hour of water for contingencies. This minimum of one hour of water available for contingencies should not be scheduled for energy production and should be excluded from DEL. This hourly capacity is offered to the market for contingency using appropriate offer prices for energy and OR thereby ensuring it is available for operating reserve activation or other system contingencies. Proposed alternatives: 1. Revise the Max DEL constraint to exclude OR; or 2. Add an additional OR DEL parameter to account for the amount of OR that may be scheduled after binding energy schedules. As an example: i. Max DEL 100 MWh (binds on energy only) ii. Contingency OR DEL 100 MWh (available to be scheduled for OR after energy binds). […] OPG understands there will be implementation and design considerations for both suggestions and are available to discuss. Any solution should aim to allow the scheduling of OR with water/fuel available for contingencies.	The IESO has given due consideration to this topic and understands the position that OPG has brought forward, however the design proposal adequately meets the joint optimization of energy and operating reserve in the future market without introducing additional unintended consequences. The proposed first alternative of excluding the operating reserve from the maximum daily energy limit (DEL) constraint would result in the potential of scheduling operating reserve with unavailable energy, which cannot support reliable system operation. The second proposal for an additional Max DEL constraint cannot be accommodated as the calculation engines do not have the capability to evaluate additional constraints beyond those already accommodated for hydro and non-quick start resources.
866	General	OPG	Economic Operating Point (EOP) calculations impact market participant's DA schedules, PD schedules, RT dispatches, settlement of make-whole payments (MWPs), MWP mitigation, etc. IESO responses have suggested the equations for determining EOP may not be available until market manuals are updated. Without a better understanding of EOP and the calculation of make whole payments (MWP), it is difficult to assess whether the market design meets intent. More information on the EOP calculation, impact on joint optimization, and MWPs should be provided prior to Market Rule development and Technical Panel engagement. [...] This is a very complex topic and would likely benefit from further technical discussions prior to market rule development.	The equations used to determine economic operating point will be provided in the draft market manuals. Engagement on the draft market manuals will provide clarity on the intent of the economic operating point (EOP) calculation and its impact on make whole payments.

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867	General	OPG	OPG requested examples of settlement equations/calculations to better understand whether the design meets the intent of the Market Renewal Program. As the Market Renewal Program moves into the Implementation Phase, further technical discussions are recommended for the more complex calculations. As such, we recommend focusing on higher priority calculation examples, such as: (i) MWP in both DAM and RT (i.e. DAM_MWP and RT_MWP) for: • Hydro Electricity Resources, including cascade resources • Non-Quick Start Resources, including gas and oil generation resources (ii) (ii) Generator Offer Guarantee in both DAM and RT (DAM_GOG and RT_GOG) for • Non-Quick Start Resources, to illustrate settlement amount calculation in Variant 1, Variant 2 and Variant 3 scenarios	Thank you for your feedback. These priorities will help inform planning engagement and technical discussions during the Implementation phase of work.
868	General	OPG	[…] Thank-you for the response [ID 662]. OPG remains interested in the IESO's detailed design for the joint optimization of energy and OR and looks forward to receiving more information about the mitigating actions available to market participants in today's market and whether they will continue to be enabled in the future market. For example: the market power mitigation design may require some changes to allow market participants to manage/reduce the risk of both infeasible schedules in the DAM and OR activation (ORA) compliance risk in RT.	The Market Power Mitigation team has noted the interest, and will be kept up-to-date on all stakeholder feedback and responses.
869	General	OPG	[…] Thank-you for the response [ID 672]. The amount of materials published on the IESO website is vast and it can be difficult to distinguish which are design decisions and which are pre-reading for technical discussions. In this case, it may be more effective to include design decisions in the Appendices of the detailed design document then to point back to previous stakeholder engagements.	Technical session pre-reading materials can be found under the Schedule of Activities on the Energy Detailed Design Engagement web page, organized by the date the session was held. The detailed design documents are on the Energy Stream Detailed Design documents web page. Technical session pre-reading materials were developed to provide background, rationale, and examples for key design concepts in order to build stakeholder understanding and enable discussion. The materials do not always reflect the final state of the design and therefore will not be included in the detailed design documents.

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870	General	OPG	[…] Thank-you for the response [ID 673]. It is unclear why the IESO does not plan to publish shadow price information until five business days after the trade date. In the unfortunate event where there is an IESO input error that causes a resource to be scheduled or not scheduled economically, the market participant should have as much information (as soon as possible) to start conversations with IESO staff. Otherwise, there may be cases where IESO errors are propagated for a number of days which impact resources ability to compete in the market. This would impact the resource involved, other market resources, and the customer. OPG encourages the IESO to publish shadow prices in a timely manner to promote efficient market outcomes.	The IESO will publish locational marginal prices (LMPs) after each successful run of the day-ahead, pre-dispatch and real-time calculation engines. The congestion, loss and reference price components of the LMP for every delivery point will also be provided. This information should be sufficient to address the concerns described. Information regarding binding transmission constraints and the shadow prices of those constraints may provide opportunities for inappropriate conduct, such as the can be used to exercise of market power. As such, the IESO will publish this information no sooner than five business days after the trade date in question.
871	General	OPG	[…] OPG looks forward to reviewing future revisions of design documents to understand if any new parameters for pseudo units may also apply to hydroelectric. It seems that there is a common theme around many different technology types expressing concerns around infeasible operating reserve schedules which may not be able to be mitigated by the market participant due to conflicts with market power mitigation (MPM) and availability declaration envelope (ADE) provisions.	All material changes made to the detailed design documents will be recorded in a tracker document, to be published with the final design documents at the end of January. The IESO has not changed the design to apply new parameters for pseudo units to hydroelectric resources.
872	General	OPG	[…] Thank-you for the responses [IDs 331 & 376]. It remains unclear to OPG whether the design upholds the intentions of the DAM HLD. We look forward to Version 2 of the detailed design and future market rule stakeholder engagements to ascertain whether the hydroelectric parameters will be effective in the renewed market.	Final versions of the detailed design will be published in late January 2021 along with a tracker of all changes made between V1 and V2.
873	General	OPG	[…] Thank-you for the response [ID 377]. The ability of a resource to use offers to mitigate the potential financial risk due to unplanned transmission outages (outside of a generator's control) will require consideration during reference level negotiations. Please highlight this issue for further discussion with the MPM team.	The Market Power Mitigation team will be kept up-to-date on all stakeholder feedback and responses.

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874	General	OPG	[...] Thank-you for the response [ID 140]. The ability of a resource to use offers reflecting the opportunity cost of starting a unit in an hour where it is not scheduled in the DAM does not appear to be part of the MPM reference level methodology. Please highlight this important issue to the MPM team for further discussion. The IESO's expectation of greater alignment between PD and RT may not come to fruition as there will be still be demand and variable generation forecasts which will likely still result in a higher degree of volatility in RT vs PD.	The Market Power Mitigation team will be kept up-to-date on all stakeholder feedback and responses.
875	General	OPG	[...] This response [ID 217] requires consideration within MPM reference level design and negotiations as the reference levels set by the IESO will determine if a market participant can manage the risk of infeasible DA schedules and RT dispatches. If the design is not efficient manual interventions by IESO staff may increase as compared to today's market.	The Market Power Mitigation team will be kept up-to-date on all stakeholder feedback and responses.
876	General	OPG	[...] Thank-you for the response [ID 225]. Please highlight the need to maintain existing mechanisms to manage uncertainty to the MPM reference level team as this is an important concept which should be included in opportunity cost methodology.	The Market Power Mitigation team will be kept up-to-date on all stakeholder feedback and responses.

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850	General	Power Advisory	Ontario Specific Detailed Design Features […] The application of PD LAP must effectively take into account operational considerations of Ontario's unique supply mix, efficiently incorporating baseload generation, variable (i.e., wind and solar) generation, quick-start and non quick-start (NQS) hydroelectric and gas-fired generation, imports, and demand-side resources. Further, the following MRP detailed design features, and some of their potential outcomes, will need to also be effectively designed and considered regarding PD LAP along with the Day-Ahead Market (DAM) and Real-Time Market (RTM) detailed design: • New dispatch data […] for applicable hydroelectric generators […]; • […] outcomes of committing less NQS gas-fired generators […]; • Application and outcomes relating to IESO's proposed price settlement floor of $-100/MWh […]; and, • Application and outcomes of market power mitigation, in particular economic withholding. The Consortium recommends that IESO conduct analysis on potential scheduling/dispatch, market-clearing pricing, and settlement outcomes to 'test drive' the above MRP detailed design features – and do so prior to testing new systems based on MRP detailed design. Such analysis should be accompanied by new stakeholder engagement meetings, so MPs and stakeholders could better understand how MRP will reform today's IAM. Further, such analysis and stakeholder engagement will also inform generators and energy storage providers regarding potential MRP-related implications to their operations, contracts, rate-regulated framework, and revenues. In turn, any potential implications to operations, contracts, rate-regulated framework, and revenues could then have causal implications to MRP detailed design (and potentially amendments to IESO Market Rules). The Consortium believes the above recommendation is prudent because any realized issues during system testing phases will be more difficult to address, and will prolong MRP implementation and increase costs to deliver the MRP project. Therefore, such analysis should be done prior to testing the new systems.	Interconnections between design components, including new design features, have been considered throughout the design process. During the Implementation phase this work will include formal testing and analysis to ensure that the design as a whole 'hangs together' and functions as intended. The IESO remains committed to working collaboratively with stakeholders to further stakeholder understanding of the design, including providing background, clarification, rationale, and examples where needed. The IESO will aim to respond to requests that provide the greatest value to the broad stakeholder community, at the time and level of detail that provide the greatest efficacy. In terms of settlement outcome examples, the IESO will balance providing information that stakeholders can use to analyze how their individual strategies and business processes should change in the renewed market, without providing strategic advice to market participants.

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851	General	Power Advisory	Application of Market Power Mitigation First, the designated Constrained Areas need to be defined in more detail, so as to describe the engineering methodologies (where applicable), power system conditions, and/or IESO protocols (e.g., IESO operator actions) to derive/determine the Constrained Areas themselves. […] […] the Consortium recommends that IESO should establish new stakeholder engagement meetings to address: i) methodologies used to determine Constrained Areas; and, ii) conditions/protocols used to determine Constrained Areas.	Details regarding the methodologies for determining constrained areas will be established during the Implementation phase. The IESO will explore opportunities to discuss constrained areas with stakeholders during that phase of work, including providing further details on how constrained areas will be determined.
852	General	Power Advisory	Application of Market Power Mitigation Cont'd Second, regarding IESO application of assessing and potentially mitigating for physical withholding, IESO needs to provide more clarity regarding when IESO will apply a Conduct Test. […] Application of any aspect of economic or physical withholding market power mitigation and all components within the Conduct & Impact Test must be made clear and transparent. Therefore, the Consortium recommends that IESO should establish new stakeholder engagement meetings to address the application of Conduct Tests regarding potential physical withholding, including all methodologies, conditions, and protocols.	The conduct and impact test thresholds for physical withholding are detailed in the Market Power Mitigation detailed design document. Reference quantities for individual resources will be established through the Implementation engagement on reference levels and quantities, and market participants will know what their values are. Taken together, these data points will provide market participants with transparency into when their offers would be in violation of the physical withholding framework. It is expected that market participants will comply with the framework at all times, regardless of whether or not the IESO conducts ex-post testing.

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853	General	Power Advisory	Application of Market Power Mitigation Cont'd Third, regarding the derivation and application of generator specific Reference Levels to be used within the Conduct & Impact Test, the Consortium offers the following comments. […] Considering that IESO has defined a price threshold to not apply the Conduct & Impact Test when applicable energy Locational Marginal Prices (LMPs) are $25/MWh or lower (i.e., 'no-look' threshold), and based on short-run marginal costs for variable generators well below this threshold combined with contract incentives to submit offer prices between $0/MWh and offer price floors specified in the applicable IESO Market Manual, IESO should provide a 'check the box' option for variable generators to choose a pre-determined Reference Level rather than needing to submit cost information to IESO then engage in a one-on-one process to finalize Reference Levels. Regarding hydroelectric generators, […] because hydroelectric generators are very site specific, IESO should expect wide variation of actual costs across all hydroelectric generators. Therefore, it will take time for hydroelectric generators and IESO to establish Reference Levels – with a potential outcome of disagreements on Reference Levels resulting in potential issues relating to IESO's ability to make final decisions on Reference Levels and what recourse hydroelectric generators may have if disputes arise.	The IESO is working with stakeholders to address these comments through the Implementation engagement on reference levels and quantities. Market participants will have the option to request a reference level of $0/MWh, and the IESO is seeking an efficient way to implement that option. Market participants will also have access to an independent review process.
854	General	Power Advisory	Application of Market Power Mitigation Cont'd Fourth, […] if incremental imports are to be the framework to assess and mitigate global market power, this framework needs to be expanded to include all of Ontario's interconnections. However, based on IESO's October 19, 2020 feedback, only interconnections from New York and Michigan are to be included within the global market power mitigation framework, as these interconnections to Ontario comprise part of wholesale electricity markets in the U.S. (i.e., NYISO and MISO). The Consortium continues to not understand this rationale, considering the significant volumes of import supply from Quebec relative the import supply from New York (through NYISO) and Michigan (through MISO). […] Considering the significant majority of supply from imports into Ontario have been through the Ontario-Quebec interconnections, it is very clear that these imports should also be subject to market power mitigation.	As detailed in the Market Power Mitigation detailed design document, market power mitigation applies to all interties that are designated as uncompetitive. Transactions occurring at uncompetitive interties would be subject to similar tests of market power as internal resources. Use of the New York and Michigan interties is solely to determine when global market power could exist for internal resources. More details can be found in Section 3.10 of the Market Power Mitigation detailed design document.

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855	General	Power Advisory	Market-Clearing Prices Should Best Reflect Shortage/Scarcity Conditions […] IESO should commit to shortage/scarcity pricing in MRP design and rules to accurately value energy and OR. Over the last several years, shortage/scarcity pricing design and rule changes have been implemented within the U.S. wholesale electricity markets in order to improve price fidelity and market efficiency. […] Further, when market-clearing prices are inefficiently suppressed […], revenue adequacy concerns increase. That is, market-clearing prices that best reflect shortage/scarcity conditions result in needed and justified inframarginal rents contributing to fixed cost recovery for generators and other resources. To the extent that market-clearing prices do not accurately reflect shortage/scarcity conditions, mechanisms such as offer guarantee and make-whole payments will be increasingly needed. Since these additional payments will be required when market-clearing prices do not sufficiently reflect shortage/scarcity conditions, these costs accrue to uplifts which lessen efficiency and transparency within the wholesale market. Additional to the need for offer guarantee and make-whole payments, resource adequacy mechanisms (e.g., Capacity Auctions, contracts) will also be required to ensure continued operations of needed generators and other resources, as well as sufficient revenues to ensure development of needed new generation projects and other resources. Therefore, now that all draft MRP detailed design documents relating to the DAM, PD, and RTM calculation engines have been reviewed, the Consortium recommends that IESO should schedule new stakeholder engagement meetings to go through examples of multiple scenarios how the calculation engines will derive LMPs for energy and OR, including potential implications for the application of offer guarantee and make-whole payments. After MPs, stakeholders, and IESO discuss and review these examples, LMPs could then be better assessed whether they are best reflecting shortage/scarcity power system conditions.	The materials presented at the Constraint Violations stakeholder engagement meeting on November 25, 2019 describe the interrelationship of the operating reserve penalty curves and include supporting graphs and illustrations. The curve quantities and prices presented in the materials are used for illustrative purposes only. The actual values that will be used for the future market will be determined during the development of market rules and market manuals. The active stakeholder engagement on Resource Adequacy will further develop a long-term competitive strategy to meet Ontario's resource adequacy needs reliably and cost-effectively, while recognizing the unique needs of different resources.

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856	General	Power Advisory	Negative Pricing and Proposed Price Settlement Floor As predominantly discussed within the Consortium's submission commenting on the draft DAM Calculation Engine Detailed Design Issue 1.0, […] the Consortium continues to believe that negative pricing will impact IAM post implementation of MRP. […] In the Consortium's opinion, IESO's proposed $-100/MWh energy price settlement floor may result (and actually incentivize) in some generators offering prices between $-101/MWh and $-2,000/MWh […]. Consequential to potential changes in offer behaviour and strategies from some generators, under circumstances of Surplus Baseload Generation (SBG) in some sub-zones within the Northeast and Northwest zones, IESO will need to make decisions on which generators will be dispatched to produce energy and which generators will be economically curtailed so as to not produce energy. This potential dynamic and outcome continues to not be contemplated within any of the draft MRP detailed design documents. IESO's October 19, 2020 feedback stated that the "rationale for the settlement floor price at $-100/MWh was provided at MRP Calculation Engine Technical Session on August 27, 2020. The presentation and recording are available for review on the Energy Detailed Design Stakeholder engagement page". This IESO response represents very limited feedback to negative pricing and SBG issues raised by the Consortium through multiple submissions, as well as questions and concerns raised by other MPs and stakeholders within their submissions or within IESO stakeholder engagement meetings this year. The Consortium recommends new and specific stakeholder engagement meetings to address remaining questions and continued concerns over the proposed price settlement floor and potential implications to the efficiency of the IAM and impacts to applicable MPs.	Since this feedback was submitted, the IESO has published responses to feedback on the settlement floor under the Day-Ahead Market and Real-Time Market Calculation Engine detailed design documents (on December 2 and December 28, respectively). The IESO does not foresee any tie-breaking issues as a result of the settlement floor. The calculation engines will determine the optimal schedules based on offers and bids to resolve constraints such as energy balance (which can include surplus baseload generation conditions) or transmission limits. In the event the optimization results in a tie between resources, the tie-breaking rules described in Section 3.4.1.4 of the DAM Calculation Engine, Section 3.4.1.5 of the PD Calculation Engine, and Section 3.4.1.5 of the RT Calculation Engine design documents will apply. In response to requests from stakeholders for background information on the settlement floor, the IESO will be publishing a 'Did You Know' section on the topic in February's Market Renewal Newsletter. This article will detail the problem the settlement floor is trying to solve and the impact on market participants. The IESO believes that the settlement floor price will not impact the efficiency or the economics in the dispatch order, and the generator community will not be impacted by this change.

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857	General	Power Advisory	GOVERNANCE, DECISION-MAKING, AND RECOURSE WITHIN IAM […] the Consortium was pleased that IESO launched the Advisory Group on Governance and Decision-Making a few years ago […] and applauds IESO for accepting then implementing the recommendations from this Advisory Group. However, the Consortium's support was also contingent on IESO's scope of review of the governance, decision-making, and recourse framework within IAM through the Advisory Group. […] The Consortium generally supported the recommendations and accompanying implementation plan for reforms but believes further reforms will be needed […]. […] the framework for governance, decision-making, and recourse within other wholesale electricity markets provides MPs and stakeholders with more robust input and/or decision-making authority regarding market design changes and rule amendments, as well as regulatory oversight and recourse. […] […] Considering the impactful nature of the MRP detailed design for market power mitigation, specifically its components that will drive economics within IAM and for mitigated MPs, governance, decision-making, and recourse within IAM needs to be revisited. For example, establishing Reference Levels for some MPs may prove to be very contentious. Under the present governance, decision-making, and recourse framework within IAM, IESO has ability to make final decisions on facility-specific Reference Levels. […] Another example is IESO's present position of not including the Ontario-Quebec interconnections within the global market power mitigation framework […]. […] the Consortium recommends that IESO either re-launch the Advisory Group on Governance and Decision-Making or launch a new stakeholder engagement initiative […].	In response to stakeholder feedback on the Market Power Mitigation design, specifically for determining reference levels and reference quantities, the IESO has introduced an independent review process. The IESO will allow market participants to request a third party review of certain aspects of the materials submitted in support of a market participant's proposed reference levels or reference quantities as part of the registration process. Market participants may request review of reference level cost eligibility and amount, supporting material eligibility, and of the IESO's proposed opportunity cost methodology and reference quantity methodology. The draft process design was shared with stakeholders at the December 15 2020 engagement meeting and will be included in V2 of the Market Power Mitigation detailed design document. The IESO will continue to engage with stakeholders and seek their input on the independent review process during the Implementation phase As detailed in the Market Power Mitigation detailed design document, market power mitigation applies to all interties that are designated as uncompetitive. Transactions occurring at uncompetitive interties would be subject to similar tests of market power as internal resources. More generally, the IESO is implementing the recommendations of the Governance and Decision-Making Panel, including critical elements to stakeholders, like the review of Market Rules and Market Manuals prior to the Technical Panel process. While a number of these questions are noted as being out of scope for the Market Renewal Program, the IESO continues to work with the broader stakeholder community to find collaborative solutions to challenges that recognize the unique attributes of the Ontario system.

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858	General	Power Advisory	ADDITIONAL STAKEHOLDER ENGAGEMENT MEETINGS Based on the points made in the above sections of this submission, it is clear that new stakeholder engagement meetings are required – and these should be additional to the regular MRP update meetings that have been taking place at the end of each month. Listed below is a compilation of the Consortium's proposed additional MRP related stakeholder engagement meetings that IESO should plan for within 2021: • Design and application of new dispatch data for applicable hydroelectric generators […]; • Analysis and review of results of potential scheduling, dispatch, pricing and price-setting, and settlements of the calculation engines for DAM, PD, and RTM, including clear application and outcomes of potential to best ensure shortage/scarcity pricing for energy and OR; • Design and application of these features of market power mitigation: o Methodologies, power system conditions, and protocols to determine Constrained Areas; o More definitive application of Conduct Test to assess for physical withholding; and, o Determination of Reference Levels and Quantities (the Consortium acknowledges IESO has been having, and will continue to have, meetings with MPs and stakeholders on this design feature); • Design and application of proposed $-100/MWh price settlement floor […]; and, • Review existing framework of governance, decision-making, and recourse within IAM, keeping in mind MRP detailed design, including any additional implications (e.g., contract amendments, etc.).	Thank you for your feedback. Each specific request for further engagement has been addressed in the IESO's responses above. In general, and as indicated in the Stakeholder Engagement Plan, there will be multiple streams of engagement during the Implementation phase. The IESO will continue to be open to opportunities to drive stakeholder understanding and awareness, and will take a flexible and nimble approach if/when the need for additional engagements with specific outcomes are identified and communicated to stakeholders.

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859	General	Power Advisory	CONTRACT AMENDMENTS RELATED TO MRP IMPLEMENTATION […] Considering the stage of development within the MRP project, and the first batch of MRP-related amendments to the IESO Market Rules have been released for comments from MPs and stakeholders, the Consortium believes now is the time to raise general MRP-related contract amendment implications within MRP stakeholder engagement. There are two aspects regarding the inter-connectedness of IAM design and rules (i.e., MRP detailed design and amendments to IESO Market Rules), and contracts regarding drivers how generators participate within IAM along with applicable contract amendment provisions. First, […] some features within MRP draft detailed design have potential to impact how generators may alter their offer behaviour and strategies in combination with applicable contract drivers (including potential MRP-related contract amendments). […] Therefore, the Consortium recommends that much more attention and specific stakeholder engagement is required to better assess the interplay of MRP design/rules and MRP-related contract amendments towards finalizing MRP detailed design and amendments to the IESO Market Rules. Second, potential MRP-related contract amendment provisions need to assess a broader view of the totality of Ontario's wholesale electricity market to which contracts are a significant part. […] Therefore, the Consortium recommends that any MRP-related contract amendments not be unnecessarily and inefficiently confined, so as to potentially not achieve fairness to generators and/or inadvertently creating inefficiencies within IAM post MRP implementation which could lead to higher costs to customers. […]	The Market Renewal team continues to coordinate with the Contract Management team on the detailed design where necessary and appropriate. Neither team, nor any stakeholders, have identified any specific aspect of the market design that would impair a market participant's ability to both operate in the renewed market and meet its contractual obligations. Given that the contract amendment process is responsive to market rule changes as a result of MRP, IESO's Contract Management team has provided term sheets to all market participant contract holders addressing anticipated market rule changes as per the terms of the respective contracts. Although the contracts to be amended are ultimately bilateral in nature in accordance with their terms, the IESO continues to engage with a broad stakeholder group and welcomes specific feedback from contract counterparties with respect to the proposed amendments set out in the term sheets. Discussion on the term sheets have taken place and will continue to take place with both groups of contract holders and individual contract holders, with the aim of finalizing the term sheets when all design changes have been finalized.
863	Market Billing and Funds Administration	Electricity Distributors Association	Omissions of NDL settlement amount A specific example of an omission is found in Market Billing and Funds Administration (v1.0), at Table D-1 that it omits reference to the Hourly Physical Transaction Settlement Amount for NDLs (HPTSA_NDLs). We suggested adding the HPTSA_NDLs to Table D-1.	Appendix D (including Table D-1) will be replaced with a reference to Appendix D of the Market Settlement Detailed Design in version 2. Appendix D of the Market Settlement Detailed Design is comprised of a list of all settlement amounts including HPTSA_NDLs amounts.
860	Publishing and Reporting Market Information	Electricity Distributors Association	As was stated in our earlier comments, we request that the IESO consistently use its standardized terminology. As an example we point to Tables 3-8 and 3-10 that provide a list of Day-Ahead Market (DAM) Price Reports and a list of Real-time (RT) Price Reports that use terminology that is different than that used in other Detailed Design Documents; for example, "DAM Hourly Ontario Zone Energy Price" rather than "DAM Ontario Zonal Price".	Thank you for your feedback. The IESO will amend V2.0 of Publishing and Reporting Market Information detail design chapter to consistently use naming convention recognizing there can be a difference between the report name and the parameter(s) which they are reporting.

ID	Design Document	Stakeholder	Feedback	IESO Response
861	Publishing and Reporting Market Information	Electricity Distributors Association	Also as was stated in our earlier comments, we request that the IESO ensure that all data is clearly and completely referenced. As an example, the LFDC that is to be used by the IESO when it settles with an NDL is not referenced in this Detailed Design document. We suggest that the LFDC be added to Table 3-10: Real Time Pricing Reports, and that Section 4 be amended accordingly.	The detailed design does not contemplate reporting of Load Forecast Deviation Charge (LFDC) in a dedicated public report. The LFDC will be provided to market participants on their settlement statements for each trade day for the reconciliation of settlement amounts for non-dispatchable loads. More information on reporting of LFDC on settlement statements will be provided during the implementation phase. Please refer to Market Settlements detailed design document, section 6.1.2 Process 2 – Calculate Credits, Charges, Uplifts Settlements Amounts.
862	Publishing and Reporting Market Information	Electricity Distributors Association	Again, as set out in our earlier comments, the document does not describe the level of granularity that will be reported. See Table 3-12 that summarizes Demand Reports produced. NDL settlement requires the DAM quantity scheduled for withdrawal (DAM_QSW) for NDLs and hourly demand response resources that are not price responsive loads to calculate the LFDC. It is unclear whether IESO's Demand Reports will summarize DAM_QSW.	DAM Quantity of Energy Scheduled for Withdrawal (DAM_QSW) by market participant will be reported on their settlement statement. More information on reporting of DAM_QSW on settlement statements will be provided during the implementation phase.