
IESO's Approach to Amending Market Participant Contracts in Response to the Market Renewal Program

EXTERNAL PUBLICATION

Disclaimer

In an effort to be transparent to all stakeholders, IESO contract management has prepared and published this document and certain other non-confidential information relating to the contractual implications of the Market Renewal Program (MRP). However, any potential contractual implications or required contractual amendments will be determined through a process that is separate and distinct from MRP design. Any contractual implications or required contractual amendments will be addressed with the applicable contract counterparties, as required, by IESO contract management. References to the IESO in this document are references to IESO contract management, unless the context otherwise requires.

The information in this document is based on the proposed parameters and design decisions that have been published by the IESO in connection with the MRP as of the date of this document. As the MRP progresses, and as available information and decisions evolve, the IESO's proposed approach and strategy for addressing contractual implications of the MRP may also evolve.

This document is provided for information purposes only. It does not constitute, nor should it be construed to constitute, legal advice or a guarantee, offer, representation or warranty on behalf of the IESO. In the event of any conflict or inconsistency between the information contained in this document and the Market Rules, the Market Manuals, any IESO contract or any applicable legislation or regulation, the provisions of the Market Rules, Market Manuals, contract, legislation or regulation, as applicable, shall govern. This document is being provided without prejudice to any party's rights or remedies under any contract and does not constitute an amendment or waiver of any terms or conditions of any contract.

Executive Summary

Following the release of the four high-level design (HLD) documents, the Independent Electricity System Operator (IESO) believes it is now timely to outline its intended approach for addressing the implications from the Market Renewal Program (MRP) on its existing electricity supply contracts.

The IESO is party to 110 electricity supply contracts for facilities that are registered to participate in the IESO-Administered Markets (Market Participant (MP) contracts) and are expected to be impacted directly by the MRP. In addition, the IESO is party to approximately 33,600 contracts for facilities that are connected to the distribution system and are not market participants. Of these, the vast majority (approximately 30,200) are microFIT contracts that are not expected to be impacted by the MRP, while the remainder (approximately 3,400) may be impacted by changes to the Ontario Energy Board's (OEB) Retail Settlement Code resulting from the MRP. The remaining discussion in this document is focused on the implications to MP contracts.

The IESO's objective is to ensure that the contractual implications arising from the MRP are addressed within a timeline that is appropriately aligned with the MRP and in a manner that is consistent with the existing terms in the affected contracts. This includes making any necessary contract amendments as a result of changes to energy pricing, as well as commitment and dispatch mechanisms that are part of the energy stream of the MRP, and also providing contractual certainty for contract counterparties interested in participating in the Incremental Capacity Auction (ICA). The changes will allow for contracts to continue functioning in a manner that is aligned with the incentives of the renewed markets.

The IESO's contract management team has been actively engaged in the MRP from the outset with various stakeholders, including many of the contract counterparties, to discuss potential implications that the MRP may have on contracts. Through webinars, group meetings, and individual discussions, the lines of communication have been open. The IESO appreciates the constructive engagement by affected contract counterparties. With the release of the HLD documents, and as the MRP transitions to the detailed design phase, contract implications can be more fully understood, and potential amendments will be explored in more detail with affected parties. As part of the process, the IESO expects to adopt a more structured approach to discussions with contract counterparties and, as appropriate, with other affected stakeholders.

Although the engagement approach with respect to contract implications as a result of MRP will be separate and distinct from the stakeholder engagement regarding the design of the energy and capacity streams of the MRP, it will continue to be aligned and coordinated with developments within the MRP. While the MRP stakeholder engagement process is primarily for market design matters, the IESO will leverage opportunities to address issues that may have joint contracts and markets implications. Engagement in respect of MRP implications on IESO contracts will be targeted for contract counterparties, but will also utilize a dedicated

webpace for contract implications to be located on the IESO website, and thus be accessible to all stakeholders. This will provide transparency for all stakeholders with respect to non-confidential aspects of discussions with groups of contract counterparties.

The MRP HLDs provide a significant level of detail regarding market changes that may have implications on existing IESO contracts. This document strives to identify the various implications and suggests approaches for addressing them going forward.

The IESO is seeking comments and feedback on the information presented in this document. Written feedback can be provided directly to the IESO's contract management group, via email at mr.ContractManagement@ieso.ca.

Contents

| | |
|--|-----------|
| Disclaimer | 1 |
| Executive Summary | 2 |
| 1. Purpose of Document | 5 |
| 2. Contracts Overview | 6 |
| 3. Objective, Principles and Considerations | 8 |
| 4. Market Renewal Program Implications on Contracts | 10 |
| 4.1 Energy Stream | 10 |
| 4.1.1 Single Schedule Market (SSM) | 10 |
| 4.1.2 Day-Ahead Market (DAM) | 10 |
| 4.1.3 Enhanced Real-Time Unit Commitment (ERUC) | 11 |
| 4.1.4 Single Schedule Market (SSM) and Day-Ahead Market (DAM) related implications | 11 |
| 4.2 Capacity Stream | 12 |
| 5. Engagement | 17 |
| 6. Timing and Next Steps | 19 |
| 7. Request for Feedback | 20 |
| 8. List of Acronyms | 21 |

List of Figures

| | |
|--|----|
| Figure 2-1-1 Projected lifecycle for contracted capacity, by resource type (<i>Progress Report on Contracted Electricity Supply, IESO, 2018</i>) | 6 |
| Figure 2-2-2 Non-Market Participant contracts compared to Market Participant contracts based on the number of contracts and overall capacity, broken down by resource type | 7 |
| Figure 6-1 Estimated timeline of aspects of the energy and capacity streams, as well as contract management | 19 |

List of Tables

| | |
|---|----|
| Table 4-1 Impacts of SSM and DAM by contract type | 11 |
| Table 4-2 Contract changes based on contract type for the energy stream | 12 |
| Table 4-3 ICA impacts by contract type | 13 |
| Table 4-4 Contract changes based on contract type for the capacity stream | 14 |

1. Purpose of Document

The purpose of this document is to describe the approach that the IESO plans to adopt in order to address implications from the MRP on existing electricity supply contracts for facilities registered to participate in the IESO-Administered Markets (MP contracts). This document outlines the IESO's objective and the supporting high-level principles that will guide discussions with contract counterparties and ultimately lead to any necessary contract amendments. High-level implications, and suggested strategies to address them, are identified and discussed throughout this document.

2. Contracts Overview

At the present time, nearly all of Ontario's electricity generation is either contracted or rate-regulated. The IESO is the contract counterparty to 23.4 GW (approximately 63%)¹ of total grid-connected generation and 3.4 GW of distribution-connected generation. The IESO's predecessor, Ontario Power Authority, began contracting for generation in 2005 through competitive, standard offer, and bilateral procurements. The majority of the IESO's contracts are for 20-year operating terms, while some are shorter and certain hydro and nuclear contracts are longer. Contracts will begin to expire in the 2020s and a majority of the contracts for generating facilities will expire by the end of the 2030s.

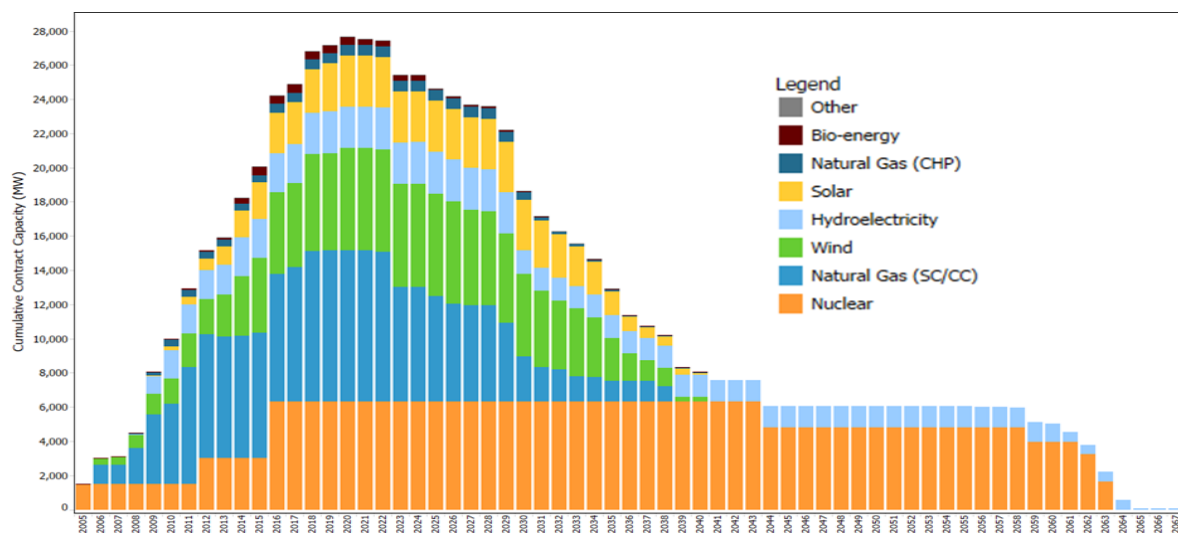


Figure 2-1-1 | Projected lifecycle for contracted capacity, by resource type (*Progress Report on Contracted Electricity Supply, IESO, 2018*)

The vast majority of IESO contracts are for smaller, distribution-connected facilities, which are mainly solar-powered. For example, over 30,000 microFIT contracts make up a small amount of capacity and are not expected to be impacted by the MRP. The remainder, approximately 3,400, of distribution connected contracted facilities that do not participate in the IESO-Administered Markets, may be affected by changes in the OEB's Retail Settlement Code triggered by the MRP. Implications for those contracts are not yet known and can only be addressed once the MRP-related changes to the OEB's Retail Settlement Code are known.

Contracts that are likely to be directly impacted by the MRP are the 110 contracts for facilities that are registered to participate in the IESO-Administered Markets (MP contracts). These contracts, which represent almost 90% of contracted capacity, are expected to be the primary focus of discussions as the MRP progresses. The remaining discussion in this document is focused on the implications to these MP contracts.

¹ As of February 15, 2019.

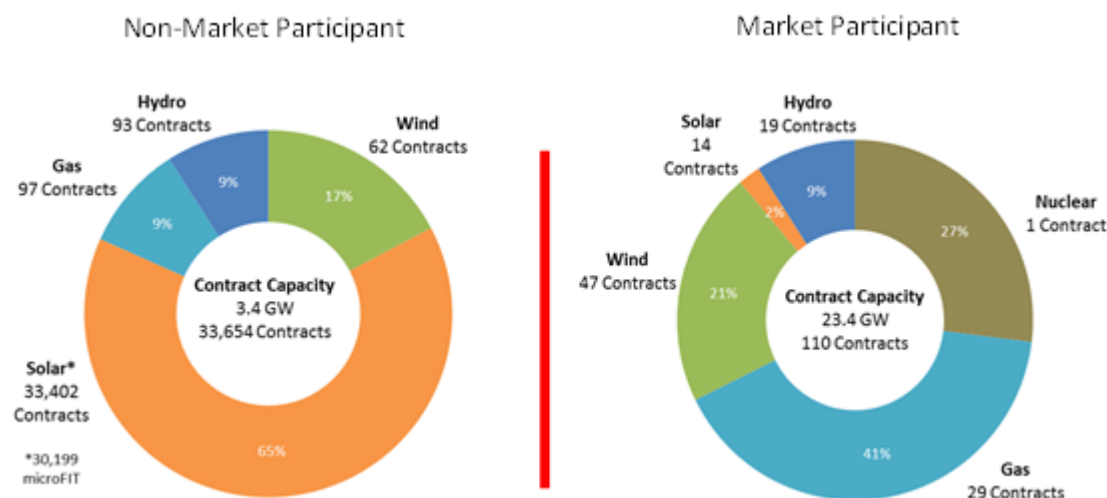


Figure 2-2-2 | Non-Market Participant contracts compared to Market Participant contracts based on the number of contracts and overall capacity, broken down by resource type

Although the MP contracts span across different electricity generation technologies, procurements, and forms of contracts, there are several commonalities that are important in relation to the MRP.

Fundamental commonalities of MP contracts include:

- Financial Hedge – In their simplest form, most of the MP contracts provide a hedge against a market price for electricity through a top-up to a strike price or to a fixed monthly amount. Therefore, at a conceptual level, it should be possible to maintain the hedge in principle, even though the mechanics of the market price may change through the MRP.
- Operationally Impartial – With the exception of a few specific physical obligations, the MP contracts generally do not dictate how a facility is to be operated. This is left up to the facility owners and operators. Therefore, at a conceptual level, the opportunities and risks of operating a facility that were being managed by the facility's owner or operator before the MRP should continue to be managed by the facility's owner or operator after the MRP has been implemented.
- Contemplate Market Evolution – The introduction of Locational Marginal Pricing (LMP) (as introduced in the MRP Single Schedule Market (SSM) initiative) has been contemplated in most of the MP contracts. Similarly, the introduction a Day-Ahead Market (DAM) is also contemplated in many of the MP contracts. The MP contracts that contemplate these elements of the MRP contain provisions setting out the basis upon which any applicable contract changes will be made, and in some cases provide guidance as to the parameters upon which the changes contemplated in the MRP energy stream are to be reflected in the contracts.

These fundamental commonalities help provide a common starting point for all parties in future discussions when assessing implications on contracts from the MRP.

3. Objective, Principles and Considerations

The IESO's primary objective is to ensure that any contractual implications are addressed in a manner consistent with the terms of the applicable contracts, through any necessary and appropriate contract amendments, to ensure that all MP contracts function seamlessly and efficiently in accordance with their terms in the renewed markets.

The primary principle to be employed by the IESO is to proceed on the basis of the existing provisions in the relevant contracts. As noted previously, most of the MP contracts expressly contemplate market evolution. Some contracts have specific provisions directly applicable to the changes that are being contemplated by the MRP, while some may address changes to the markets more broadly. The IESO intends to proceed on the basis of those specific provisions where applicable and otherwise in accordance with the more general applicable terms and principles of the contract if specific elements are not contemplated by the contract.

There are several key considerations that apply to the principle described above, as follows:

- ***Consideration #1: Treat similar contracts in a similar manner***
 - As contract procurements evolved and changes were made over time, it became apparent that differences have arisen between the same types of contracts. Despite those differences, in most cases, the fundamentals of contracts belonging to the same type are substantially the same. For this reason, and to maximize consistency, administrative simplicity, and transparency, the IESO intends to make the same contractual amendments to contracts belonging to the same type, subject to any contract-specific considerations that may apply.
- ***Consideration #2: Contract incentives should be aligned with market incentives***
 - One of the core considerations for MP contracts is ensuring that they do not impede efficient market operations. With the MRP intended to advance the efficiency of electricity markets, it is important to ensure that the contracts do not distort or undermine market incentives, and that contracted generators have substantially the same incentives to respond to market signals as they would in the absence of their contracts. Opportunities for the most efficient alignment of incentives will be explored with a view to advancing the market dynamics under the MRP to the benefit of all parties.

- ***Consideration #3: Timely resolution of amendments***

- The MRP will bring significant changes to the electricity markets in Ontario. While the language of many contracts contemplates the resolution of amendments after the implementation of market rule changes, the IESO believes that all parties would benefit from clarity of contract-market interaction by the date of implementation of the MRP. The timeframe for the MRP design and implementation should allow for this. Accordingly, discussions will be planned with this in mind, starting with the use of the HLD documents as a basis for developing the framework of proposed contract amendments.

It is not an objective of the IESO to extract financial value from contracts by way of the MRP. This has been expressed by the IESO to all stakeholders throughout the discussions related to contract implication from the MRP. The IESO intends to maintain the allocation of risk and reward that has been established by the contracts to the greatest extent possible, including, where applicable, the impacts of market rule changes. The IESO's focus will be on making principled amendments based on the provisions of the applicable contract and not on achieving a particular commercial outcome.

4. Market Renewal Program Implications on Contracts

Consistent with how the MRP has been divided into two streams, MP contract implications will be treated in the same two streams – ***energy and capacity***. The energy stream will be relevant to all MP contracts. The capacity stream will have general applicability with respect to end-of-term transition, but is otherwise likely to have limited applicability only to MP contracts that are interested in participating in the Incremental Capacity Auction (ICA) in respect of merchant capacity.

The implications from the energy stream arise mainly from the introduction of a DAM and a SSM with locational marginal pricing, as they impact the mechanisms used for MP contract settlement. The implications from the capacity stream, specifically the ICA, will be driven by end-of-term transition issues and by the need for contractual clarity in respect of the participation of incremental capacity from existing contracted generating assets in the ICA.

The following describes the high-level implications that have been identified by the IESO based on the current MRP design and proposed high-level solutions to address them.

4.1 Energy Stream

4.1.1 Single Schedule Market (SSM)

With respect to SSM and moving to a locational marginal price, all MP contracts will need to address that Hourly Ontario Energy Price (HOEP)², which is currently a fundamental parameter in the settlement of all MP contracts, will no longer exist. As noted in the SSM HLD, the current two-schedule market that was introduced in 2002 was always contemplated to be a transitional step to facilitate moving to a single schedule market with locational marginal pricing (LMP). Many MP contracts contemplate and address this potential change with language that is reasonably clear in the context of the present MRP. Implementation of such changes is a part of the risk and reward structure embodied in those contracts.

4.1.2 Day-Ahead Market (DAM)

With respect to the contractual implications of DAM, there are two major groups of contracts:

- First group - the Clean Energy Supply (CES) and similar “imputed dispatch” contracts, which generally include a provision that settlement should transition to a DAM basis, and which set out the principles to be used in implementing the switch.

² For the purpose of this document, HOEP also refers to the uniform Energy Market Price (EMP) or Market Clearing Price (MCP).

- Second group - contracts in respect of variable generation and other contracts where IESO payment is based on the output of the facility (i.e. power purchase agreements or PPAs), which generally do not have provisions addressing the implementation of a DAM. The IESO is of the view that the introduction of DAM-based contract settlement would be advantageous to the proper alignment of incentives between these contracts and the market. The IESO believes that it is possible to achieve this without any downside to contract counterparties, while providing contract counterparties the opportunity to benefit from the flexibility to respond to market incentives.

4.1.3 Enhanced Real-Time Unit Commitment (ERUC)

ERUC is the third initiative in the energy stream of the MRP. While market participants may be able to participate in the ERUC program, the contract settlement provisions of the MP contracts are not generally expected to be impacted by ERUC. Accordingly, the IESO has not identified any contract implications arising from ERUC.

4.1.4 Single Schedule Market (SSM) and Day-Ahead Market (DAM) related implications

Table 4-1 provides an overview of high-level contract implications arising from the SSM and the DAM:

Table 4-1 | Impacts of SSM and DAM by contract type

| MP Contract Type | SSM Impact | DAM Impact |
|--|--|--|
| CES and similar contracts (ACES, CES, CHP, PGC) | HOEP will no longer exist and contracts will be settled on locational marginal prices. | Contracts provide for a change to contract settlement deeming provisions in Exhibit J to the DAM. |
| Renewable wind and solar PPAs (FIT, RES, LRP) | | Forecast and balancing risk between DAM and Real-Time (RT) needs to be addressed to provide a basis for efficient market behavior without introducing a new contract risk. |
| NUG capacity contracts | | Contracts provide for certain elements to switch to the DAM. |
| Other (including nuclear and hydro) | | This will be contract dependent but generally will need to address contract settlement changes to the DAM to support efficient market behaviours. |

As a starting point, to address the implications from the MRP that are identified in Table 4-1 in a manner consistent with the principle and considerations noted above, the IESO has developed a framework for contract amendments that may be appropriate for the energy stream. This framework for both CES and similar contracts and PPAs is outlined in Table 4-2 below.

Table 4-2 | Contract changes based on contract type for the energy stream

| Element | CES and Similar Contracts | Power Purchase Agreements |
|------------------------|---|--|
| Single Schedule Market | Change the use of HOEP in contract settlement to the applicable locational marginal price, as specified in the contracts. | Change the use of HOEP in contract settlement to the applicable locational marginal price as a successor to HOEP, as specified in the contracts. |
| Day-Ahead Market | Amend Exhibit J to settle contracts and calculate imputed net revenues based on the DAM. | Amend contract settlement to offset economic impact of differences between day ahead forecasted quantity and real-time delivered quantities. Payment for energy continues to be based on real-time production and includes the same real-time foregone energy provisions as in the existing contracts, as applicable. |

4.2 Capacity Stream

The HLD for the ICA contemplates allowing contracted resources to offer capacity that is incremental to their contract capacity (i.e. merchant capacity) into the auction, in accordance with applicable rules and requirements of the ICA. Therefore, in order to facilitate incremental capacity participation in the ICA, contractual implications will need to be resolved to provide certainty to contract counterparties that are interested in participating. Unlike the energy stream, where implications need to be addressed for all MP contracts, capacity stream implications may only need to be addressed for those contracted resources that intend to participate in the ICA, and to deal with end-of-term issues (discussed below). It is not yet clear how many contracted resources plan to offer incremental merchant capacity or pursue uprates to increase the amount of merchant capacity. Despite this, it is important to identify and address contractual interactions that may need to be addressed through contract amendments, in order to provide clarity to all parties considering

such a plan, and to facilitate participation in the ICA. This will also provide contract counterparties with the foundation needed to begin assessing their economic feasibility and opportunities associated with participating in the ICA well in advance of scheduled auctions and commitment periods.

One of the most important elements of any amendment will be to ensure that incremental capacity can be clearly differentiated from contract capacity across all contracts and technologies. It is imperative to the IESO that total capacity is accounted for correctly as part of the process for meeting Ontario's resource adequacy needs and ensuring that there is no duplication of payments for existing contract capacity through the contract and the ICA. The IESO will establish a procedure for calculation of the incremental installed capacity (ICAP)³ available at a contracted facility. The qualification (i.e. determination of the Unforced Capacity⁴) of this incremental ICAP will be established as part of the ICA pre-auction requirements. The interaction between ICA committed capacity and contract capacity and/or energy generated by contract capacity will need to be addressed in the contracts.

There is also an opportunity to ensure that the transition of capacity from being under a contract to operating in the ICA at the end of a contract term does not result in any inefficiencies should the contract term not end immediately before the start of an ICA obligation period. There is no anticipation of any restriction on contract counterparties offering capacity into an ICA in respect of obligation periods commencing after the contract term expires, however an appropriate strategy must be developed for addressing a contract term that ends during an obligation period and would therefore result in that capacity not being eligible to offer into the ICA until the start of the next obligation period.

Table 4-3 provides an overview of high-level implications related to the ICA that may affect contracts:

Table 4-3 | ICA impacts by contract type

| Contract Type | Calculation of Incremental Capacity | Other Interactions with Contracts |
|--|--|---|
| CES and similar Contracts (ACES, CES, CHP, PGC) | Separate the contract capacity stated in each contract from incremental capacity available for offer in the ICA. | Capacity check tests, outages, derates, force majeure, and offer obligations, as applicable, will have to be aligned between contract obligation and ICA. |

³ From the ICA HLD document, Installed Capacity (ICAP) reflects the maximum output capacity of a resource as assessed by the IESO, or as demonstrated in a physical test during periods prescribed by the IESO to reflect conditions expected (e.g., temperature and humidity) at times of peak system need during each obligation period.

⁴ From the ICA HLD document, Unforced Capacity (UCAP) is a unit of measure that reflects the resource assessment quantity of a resource, which may be further reduced due to the results of the deliverability assessment.

| | | |
|---|--|--|
| Renewable Wind and Solar PPAs (FIT, RES, LRP) | Separate the contract capacity stated in each contract from incremental capacity and any energy associated with that incremental capacity available for offer in the ICA. | Energy metering, outages, derates, force majeure, and offer obligations will have to be aligned between contract obligations and ICA. |
| NUG Capacity Contracts | Separate the contract capacity stated in each contract from incremental capacity available for offer in the ICA. | Capacity check tests, outages, derates, force majeure, and offer obligations will have to be aligned between contract obligations and ICA. |
| Other (including nuclear and hydro) | Will be contract dependent, but if applicable, separate the contract capacity stated in each contract from incremental capacity and any energy associated with that incremental capacity available for offer in the ICA. | Similar to those noted above if applicable and on a case-by-case basis. |

As a starting point, to address the implications from the MRP that were identified in Table 4-3 and consistent with the principle and considerations also noted above, the IESO has considered the contractual amendments that may be necessary for the ICA stream. The framework for those potential changes for both CES and similar contracts and PPAs is outlined in Table 4-4 below.

Table 4-4 | Contract changes based on contract type for the capacity stream

| Element | CES and Similar Contracts | Power Purchase Agreements |
|---|--|---|
| Contract Capacity/Merchant Capacity Differentiation | Define calculation of incremental installed capacity that is above contract capacity, while “Qualified Capacity” ⁵ under the ICA to be determined in accordance with ICA rules. | Define calculation of incremental installed capacity that is above contract capacity, while Qualified Capacity to be determined in accordance with ICA rules. |

⁵ From the ICA HLD, Qualified Capacity means the amount of capacity a capacity auction participant is determined by the IESO to be able to offer into a specific auction for a capacity auction resource. A resource’s qualified capacity amount is determined through the capacity qualification process.

| | | |
|-------------------------------|---|--|
| Energy Compensation | Not applicable as contract settlement is based on deemed parameters utilizing contract capacity. | <p>Separate metering of energy from existing capacity and from the ICA capacity may be required.</p> <p>The IESO is exploring the possibility of proportionate allocation of commonly metered energy based on actual and verified capacity additions made for ICA participation.</p> |
| Energy Must-Offer Obligations | Where energy must-offer obligations exist in the contract, modify the obligations, if required, to not conflict with any ICA offer obligations where ICA offer obligations apply to all capacity. | No contractual offer obligations currently exist and are not expected in the future. |
| Capacity Check Test | Capacity check test protocols to be changed to account for capacity (ICAP) committed to the ICA and the outcome during a contractual capacity check test would be adjusted to account for this. | Generally not applicable to these contracts as PPAs typically do not have contractual capacity check test obligation. |
| Metering Plans | Metering plans to be changed to align with any changes to capacity check test protocols. | Metering plans to be changed to align with any changes to calculation of energy output. |
| Force Majeure | Consistent with contract provisions, the impact of any force majeure event would be attributed to merchant capacity (including ICA capacity) before providing any relief to contract capacity. | Generally not required given the interaction of force majeure with PPA requirements during the operating term. |

| | | |
|------------------------------|--|--|
| Outages | Consistent with contract provisions, the impact of any outage event would be attributed to merchant capacity (including ICA capacity) before providing any relief to contract capacity. | Generally not applicable, as PPAs for the most part do not have provisions related to outages. |
| End of Term Obligations | Allow a contract counterparty option for limited reduction of contract term so that the final date of the term aligns with the start of an obligation period under the ICA. | Allow a contract counterparty option for limited reduction of contract term so that the final date of the term aligns with the start of an obligation period under the ICA. |
| Contract Facility Amendments | IESO will grant approvals of contract facility amendments for the purposes of creating additional capacity for the ICA if agreement can be reached on other contractual amendments related to the ICA. | IESO will grant approvals of contract facility amendments for the purposes of creating additional capacity for the ICA (subject to satisfactory metering or proportioning of energy) if agreement can be reached on other contractual amendments related to the ICA. |

As illustrated in Figure 2-1, a number of contracts will start expiring around the time or shortly after the time the ICA is expected to be in place. These contracts may not require changes to facilitate participation while under contract, but may require amendment to allow timing adjustments to align with the ICA obligation periods.

5. Engagement

Since the early stages of the MRP, the IESO has taken a proactive approach to initiate discussions with contract counterparties to ensure that lines of communication have been established. Now that the HLD documents have been published and the MRP is entering the detailed design phase, the IESO believes that more comprehensive discussions with respect to contracts should take place.

The IESO has received some feedback on how best to engage with contract counterparties. The feedback has ranged from suggestions that the IESO create a separate MRP stakeholder initiative to address contract implications, to continuing to address contract implications grouped by the various types of contracts, to taking a more focused approach to specific contracts. The IESO has considered these suggestions, recognizing that the contract amendment process is to be separate from and responsive to the MRP and is not intended to drive MRP outcomes. A broad stakeholdering approach by its nature does not align well with a desired outcome to amend a specified set of contracts that are ultimately bilateral in nature in accordance with their terms. Similarly, individual discussions for each contract would be very resource intensive and would not align with the considerations noted in this document. For these reasons, the IESO will continue to address contract implications from the MRP as a separate initiative, distinct from the stakeholder engagement dealing with the design of the energy and capacity streams, but will continue employ an approach that is closely aligned and coordinated with developments in the MRP.

The consultation elements identified below are intended to provide a balanced and structured approach to meet the needs of the IESO, contract counterparties and broader stakeholders. This balanced approach recognizes that addressing contract implications from the MRP is inherently different from the broader stakeholder approach that is being taken to design the detailed elements of the various MRP initiatives, yet provides appropriate engagement and transparency. In order to achieve the overall objective set out in this document, the IESO will continue to follow the existing mechanisms that it has implemented along with the addition of other mechanisms to advance contractual discussions, including the following:

- A dedicated webspace has been created on the IESO website to provide information pertaining to contract implications with respect to the MRP. The IESO intends to publish presentation materials, webinar recordings, certain feedback and responses, as well as any other non-confidential information that may be relevant to all contract counterparties or broader stakeholders;
- Contract counterparties and other stakeholders will have the opportunity for input/feedback on contractual implications from proposed design decisions, through group and individual discussions, as well as a central IESO – Contract Management MRP mailbox (*mr.ContractManagement@ieso.ca*) for written questions and comments;

- Webinars targeted to all contract counterparties or types of contract counterparties will be conducted and open to all stakeholders. These will be held periodically, approximately one to three times per year, and will address general contractual issues and feedback that may be pertinent to all (or a subset of) contract counterparties;
- Meetings with groups of contract counterparties will continue to be held as necessary to address specific issues applicable to specific groups of contracts that have been identified in the implications section above;
- Smaller group or individual meetings will be held on an as-needed basis to address any specific issues for individual (or a few) contracts and any matters that may be confidential in nature to a contract counterparty; and
- Updates to the Markets Development Advisory Group, Stakeholder Advisory Committee, and other IESO stakeholder forums will be provided on an as-needed basis where progress will be highlighted and general contracts feedback can be addressed.

6. Timing and Next Steps

The IESO is aiming to align the timing of its contract amendments with the go-live date of the MRP as illustrated in the Figure 6-1 below. The IESO intends to engage and enter into more detailed discussions with counterparties with contracts of similar types during the development of the detailed designs, and once the HLDs have been finalized.

The IESO foresees its process being broken down into several phases which include development of principles, development and finalization of term sheets, and drafting of amending agreements.

The IESO will use its dedicated web space on the IESO website to post non-confidential information and keep contract counterparties abreast of the development of discussions and issue identification. Contract counterparties are also strongly encouraged to proactively engage with IESO contract management throughout this initiative to address any contract-specific matters.

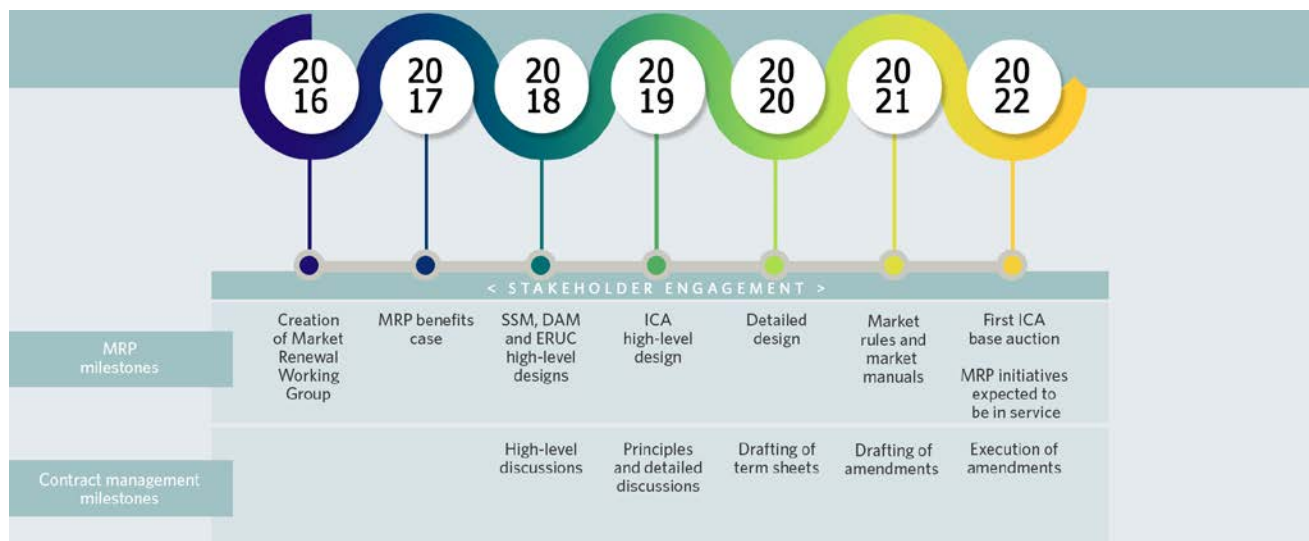


Figure 6-1 | Estimated timeline of aspects of the energy and capacity streams, as well as contract management

7. Request for Feedback

Moving forward, the IESO is seeking comments and feedback on the information presented in this document. If there is significant interest, IESO may present a webinar to provide further clarification. Written feedback can be provided directly to the IESO's contract management group, via email at mr.ContractManagement@ieso.ca. Feedback may be submitted on both confidential and non-confidential basis and should be identified accordingly. Any feedback or questions that are marked as confidential will be treated as such in accordance with applicable contract terms, while all other feedback may be summarized and posted publicly.

8. List of Acronyms

| | |
|------|---|
| ACES | Accelerated Clean Energy Supply |
| CC | Combined Cycle |
| CES | Clean Energy Supply |
| CHP | Combined Heat and Power |
| DAM | Day-Ahead Market |
| EMP | Energy Market Price |
| ERUC | Enhanced Real-Time Unit Commitment |
| FIT | Feed-In Tariff |
| GW | Gigawatt |
| HLD | High-Level Design |
| HOEP | Hourly Ontario Energy Price |
| ICA | Incremental Capacity Auction |
| ICAP | Incremental Capacity |
| IESO | Independent Electricity System Operator |
| LMP | Locational Marginal Price |
| LRP | Large Renewable Procurement |
| MCP | Market Clearing Price |
| MP | Market Participant |
| MRP | Market Renewal Program |
| NUG | Non-Utility Generator |
| OEB | Ontario Energy Board |
| PGC | Peaking Generation Contract |
| PPA | Power Purchase Agreement |
| RES | Renewable Energy Supply |
| RT | Real-Time |
| SSM | Single Schedule Market |
| UCAP | Unforced Capacity |



Independent Electricity System Operator

1600-120 Adelaide Street West
Toronto, Ontario M5H 1T1

Phone: 905.403.6900

Toll-free: 1.888.448.7777

E-mail: customer.relations@ieso.ca

ieso.ca

 [@IESO_Tweets](https://twitter.com/IESO_Tweets)

 facebook.com/OntarioIESO

 linkedin.com/company/ieso