IESO Engagement Update – December 5, 2022

This engagement update provides a snapshot of all active IESO engagement activities. It also helps support a greater understanding of linkages between engagements, and a foundation for more comprehensive and integrated updates. For the most recent information, visit the individual engagement links or the refreshed Engagement Initiatives webpage.



Upcoming Report Releases

Pathways to Decarbonization Study, Annual Planning Outlook, and Conservation and Demand Management Framework Mid-Term Review

The IESO will release the Pathways to Decarbonization (P2D) study in mid-December 2022. The timing of the release will enable the IESO to publish the P2D study together with the latest Annual Planning Outlook (APO) and the 2021-2024 Conservation and Demand Management Framework Mid-Term Review (CDM MTR). The P2D study will provide recommendations on a provincial moratorium on new natural gas generation as well as findings from a potential scenario to achieve zero electricity sector emissions that considers reliability, cost and impacts on broader electrification efforts. The APO provides the yearly long-term view of Ontario's electricity system that forecasts electricity demand and supply needs. The CDM MTR reviews and makes recommendations on the current and future role of CDM in meeting system and customer needs.

2023 Meeting Dates

Monthly Engagement Days

The IESO has published its <u>2023 monthly engagement dates</u> to provide stakeholders ample time to prepare to attend and participate in various electricity industry discussions.

Stakeholder Advisory Committee

The 2023 Stakeholder Advisory Committee meeting schedule will be published in mid-December.

Technical Panel

The 2023 Technical Panel meeting schedule has been published.



Forecasting and Planning

Engagements to support provincial and regional electricity planning over the next 20 years.

Active Engagement

Current Status

Next Steps

Bulk Planning – East Ontario

A bulk planning study is underway for the Gatineau transmission corridor to examine the transmission equipment reaching end-of-life, assess the scope of refurbishment and look at broader reliability needs.

Engagement Lead: Sari Gerwitz Related Active Engagements:

• Regional Planning – Ottawa Area Sub-Region

- The final plan entitled "The Gatineau End-of-Life Study" will be posted on December 8 outlining the recommended solutions to address electricity demand in this area
 - An IESO response to feedback document will also be posted

 This engagement has now concluded

Regional Planning – Burlington to Nanticoke

Regional electricity planning is underway in this region.

Engagement Lead: Rouselle Gratela Related Active Engagements:

N/A

- The final Burlington to
 Nanticoke Scoping Assessment
 Outcome Report was posted
 on December 5 following a
 written comment period for
 which no feedback was
 received
- Engagement on the development of an Integrated Regional Resource Plan (IRRP) for the Hamilton, Brant and Caledonia-Norfolk subregions will commence in early 2023

Regional Planning - Niagara

Regional electricity planning is underway in this region.

Engagement Lead: Rouselle Gratela Related Active Engagements:

N/A

- A final public webinar was held on October 18 to provide an overview of, and seek input on, the options analysis and draft recommendations
- One feedback submission was received and posted to the engagement page
- The final plan, and an IESO response to feedback document, are expected to be posted in December 2022

Regional Planning – North & East of Sudbury

Regional electricity planning is underway in this region.

Engagement Lead: Rouselle Gratela Related Active Engagements:

Bulk Planning – Northeast Ontario

- A second public webinar was held on September 27 to provide an overview of, and seek input on, the defined electricity needs to help inform potential solutions
- No feedback was received by the October 19 deadline

A final public webinar
will be held in Q1, 2023
to seek input on the
draft recommendations

Current Status

Next Steps

Regional Planning – Northwest

Regional electricity planning is underway in this region.

Engagement Lead: Susan Harrison Related Active Engagements:

Resource Adequacy

- A webinar was held on November 3 to provide a response to feedback from the previous webinar and seek input on the draft recommendations
- Five submissions were received and posted to the engagement page

 An IESO response to feedback along with the final IRRP will be posted in early Q1, 2023

<u>Regional Planning – Ottawa Area</u> Sub-Region

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz
Related Active Engagements:

Bulk Planning – East Ontario

- An Integrated Regional Resource Plan (IRRP) was completed in February 2020 for this sub-region
- The plan recommended additional studies to address the identified needs that extend beyond the 20-year IRRP outlook

 Further information to follow

Regional Planning - Renfrew

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz Related Active Engagements:

• <u>Bulk Planning – East Ontario</u>

- A final webinar was held on November 1 to seek input on options examined and the resulting recommendations
- One submission was received and posted to the engagement page
- The final study is expected to be posted in December 2022, along with an IESO response to feedback document for the November webinar

Transmission Losses

This engagement will review IESO and Hydro One's practices on how transmission losses are considered in planning and operation of the system, a comparison of these practices to those used in other jurisdictions, and seek stakeholder feedback on potential improvements to these practices.

Engagement Lead: Colin Campbell Related Active Engagements:

N/A

- The IESO posted a draft transmission losses guideline document in July 2021 for stakeholder review and feedback
- Two feedback submissions were received and the IESO is developing a response to feedback
- An IESO response to feedback document will be posted in December
- Changes will be made to the guideline document and the IESO will post the final version upon closing the engagement

Resource Acquisition

Engagements to ensure we have the tools and processes to acquire the resources we need to maintain a reliable and efficient system.

Active Engagement

Current Status

Next Steps

Capacity Auction Enhancements

The annual Capacity Auction is one of the procurement mechanisms included in the IESO's Resource Adequacy Framework and serves as the short-term balancing mechanism in the framework, securing the capacity required to meet Ontario's short-term resource adequacy needs.

Engagement Lead: **Jason Grbavac** Related Active Engagements:

Resource Adequacy

- enhancements continued on Nov 22 to respond to feedback from the Sept meeting and review feedback on the design memos for the demand curve review, alternative to an HDR availability de-rate in qualification, and a forced contributor outage proposal related to performance thresholds
- November session is due by December 12

 The next webinar will take

Feedback on the

 The next webinar will take place in January 2023

<u>Development of an IESO Competitive</u> <u>Transmission Procurement Process</u>

The IESO is seeking feedback to aid in the development of a competitive transmission procurement process.

Engagement Lead: **TBD**Related Active Engagements:

N/A

 This engagement was put on hold and the IESO is currently determining the next steps associated with this initiative

<u>Distributed Energy Resources (DER)</u> Market Vision and Design Project

The IESO is seeking feedback from stakeholders on how to cost-effectively enhance the value DERs can provide to Ontario's electricity system by expanding participation in the wholesale markets.

- DER Potential Study
- DER Roadmap
- Enabling Resources Program
- Hybrid Integration Project
- Innovation and Sector Evolution
 White Paper Series
- Resource Adequacy

- A webinar was held on September 20 to discuss feedback received following the June webinar, and present recommendations for the foundational participation models
- Three feedback submissions were received and posted to the engagement page
- An IESO response to feedback document will be posted
- In Q4, the IESO will produce options and draft recommendations for enhanced models with associated rationale and criteria to trigger implementation

Current Status

Next Steps

<u>Distributed Energy Resources (DER)</u> Potential Study

To help inform our path forward in enabling DERs, the IESO has commissioned a DER Potential Study. The primary objectives of the study are to determine the types and volumes of DERs that exist and can be expected to emerge in Ontario over a 10-year timeframe, as well as identify the potential for these resources to provide wholesale electricity services.

Engagement Lead: Colin Campbell Related Active Engagements:

- DER Market Vision & Design Project
- DER Roadmap
- Enabling Resources Program
- Hybrid Integration Project
- <u>Innovation and Sector Evolution</u>
 <u>White Paper Series</u>
- Resource Adequacy

- The IESO published the final DER Potential Study materials to the engagement webpage on September 30
- The study materials
 consist of the main report,
 the supplemental
 methodology/
 assumptions report, MS
 Excel appendices, and an
 update on the results
 presentation deck
 delivered during the June
 engagement session
- Eleven feedback submissions were received and have been posted to the engagement webpage

 The IESO will publish a document responding to feedback, and with support of the project consultants, respond to any technical questions relating to the study

<u>Distributed Energy Resources (DER)</u> Roadmap

The IESO is seeking feedback on the development of a roadmap to set out approaches and expected timing for enhancing DER participation in the IESO-administered markets for the products/services they are technically capable of providing.

- DER Market Vision & Design Project
- DER Potential Study
- Enabling Resources Program
- Hybrid Integration Project
- <u>IESO York Region Non-Wires</u>
 Alternatives Demonstration Project
- Resource Adequacy

- A joint meeting with the Ontario Energy Board was held on November 23 on a Distributed Energy Resources Integration Framework for Energy Innovation
- The fifth meeting of the Working Group was held on November 9 (see separate engagement update)
- An IESO response to feedback document for the RPPR August webinar will be posted to the engagement page
- Feedback on the November 23 session is due by December 14
- The next meeting of the Working Group will take place in January, 2023 (see separate engagement update)

Hybrid Integration Project

The IESO is seeking feedback on the development of participation model(s) to enable hybrid resources in the IESO-administered markets and have the capability to support Ontario's future system needs. The changes will be implemented after the implementation of the Market Renewal Project.

Engagement Lead: Colin Campbell Related Active Engagements:

- DER Market Vision & Design Project
- DER Potential Study
- DER Roadmap
- Enabling Resources Program
- <u>Innovation and Sector Evolution White</u> Paper Series

- A webinar was held on October 24 to discuss implementation of the colocated hybrid model, including the timing for proposed changes to market rules and manuals
- Feedback is being sought from participants on the clarity of the designs, as well as the proposed Market Rule amendment and associated Market Manual changes
- One feedback submission was received and posted to the engagement page

- An IESO response to feedback document will be posted
- The IESO will host a webinar in January, 2023 to review the results of the enhanced model study and recommendations from the Hybrid Vision report
- Further next steps include:
 (1) Technical Panel
 education on co-located
 hybrid model in
 December; (2) Market
 Rule amendment proposal
 to Technical Panel in Jan,
 2023; (3) target date for
 Technical Panel vote in
 Feb, 2023; and (4) target
 effective date for
 implementation in the
 IAMs in April, 2023

Long-Term RFP

The IESO is engaging stakeholders on the development of a Long-Term RFP (LT RFP) that will seek resources that can be in service between 2026 and 2028 to address global and regional needs.

Engagement Lead: Colin Campbell Related Active Engagements:

- Resource Adequacy
- Hybrid Integration Project
- Market Renewal Program (MRP)
 Implementation

A webinar was held on
December 5 to provide an
update on the Expedited
Long-Term Procurement
RFP and contract, along
with an updated schedule

- The final Expedited Long-Term Procurement RFP and Contract and RFP will be posted on December 6
- Proposals will be accepted until February 16, 2023

Current Status

Next Steps

Resource Adequacy

The IESO is engaging stakeholders to 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.

Engagement Lead: Jason Grbavac Related Active Engagements:

- DER Market Vision & Design Project
- DER Potential Study
- DER Roadmap
- Enabling Resources Program
- Long-Term RFP

- A detailed resource adequacy update was shared with stakeholders on August 23
- Several Resource Adequacy initiatives such as the Procurements and Capacity Auction Enhancements have branched off into their own respective engagement streams (see separate engagement updates)
- Next steps will be communicated

Operations

Engagements to ensure that Ontario's electricity resources are operating reliably within the IESO-administered market, while also undertaking continuous market improvements.

Active Engagement

Current Status

Next Steps

Adjustments to Intertie Flow Limits

The IESO is proposing to add clarifying language to the market rules specifying when internal transmission constraints will be considered by the IESO in setting intertie flow limits.

Engagement Lead: Jason Grbavac Related Active Engagements:

N/A

- At its July 12 meeting, a majority of Technical Panel members voted to recommend the proposed market rule amendment to the IESO Board of Directors on the Adjustments to Intertie Flow Limits (MR-00468-R00)
- The IESO Board adopted the rule amendment proposal that specifies when internal transmission constraints will be used by the IESO to set intertie flow limits

 A final engagement summary will be posted to the engagement webpage in Q4, 2022

<u>Cost Recovery for Integrating</u> <u>System Changes</u>

This engagement will seek input from stakeholders on how to recover costs from customers for requested services performed by the IESO and the proposed phase-in strategy. The initiative will seek to bring greater alignment between the costs of the service and the customer initiating the request, as opposed to recovering these costs volumetrically from all consumers. *Engagement Lead:* **Jason Grbavac** *Related Active Engagements:*

N/A

- The IESO filed a request for approval with the Ontario Energy Board in February 2022, and received approval through the OEB's Decision and Order EB-2022-0002 in August 2022
- The IESO circulated the Market Manual 1.5: Market Registration Procedures with updates for the Reliable Integration Fee via baseline 48.1
- Effective December 8,
 2022, the IESO will
 implement the Reliable
 Integration Fee for
 activities the IESO
 undertakes to reliably
 integrate facilities into the
 IESO-controlled grid
- A final engagement summary will be posted to the engagement webpage in Q1, 2023

Current Status

Next Steps

Improving Accessibility of Operating Reserve

The IESO is seeking feedback on an issue related to the Operating Reserve (OR), whereby the amount of OR scheduled is not fully accessible.

Engagement Lead: Colin Campbell Related Active Engagements:

N/A

- At the June Technical Panel meeting, Panel members voted unanimously to recommend the proposed market rule amendments to the IESO Board
- On September 15, an update was sent to stakeholders indicating that the earliest the inaccessible operating reserve settlement charge can be implemented is Q1, 2023

 Stakeholders will be informed as soon as possible when the next implementation date is confirmed

Market Renewal Program (MRP) Implementation

The Implementation phase of the Market Renewal Program will begin by codifying the design into the Market Rules and Market Manuals, and then proceed onto creating tools, testing, training and readiness for bringing the renewed market to life.

Engagement Lead: **Declan Doyle**Related Active Engagements:

- Resource Adequacy
- Enabling Resources
- DER Market Vision & Design Project
- Hybrid Integration

- The IESO is responding to stakeholder feedback on the Interim Alignment Market Rules and will have responses posted before the end of December
- The Market Settlement,
 Metering and Billing market
 rules and market manuals have
 been published for stakeholder
 review
- The IESO hosted the second meeting of the Implementation Working Group on Nov 17
- The IESO will be hosting a webinar on December 14 to discuss the Market Settlement, Metering and Billing set of market rules and market manuals
- Stakeholders can sign-up for smaller-group discussions being held in mid-January on MRP Settlement

Registration Timelines

IESO Market Registration is proposing new registration timeline guidelines, intended to make the registration process more efficient for both the IESO and market participants.

Engagement Lead: Colin Campbell Related Active Engagements:

N/A

- A webinar was held on October 24 to review the proposed new registration timeline guidelines and seek stakeholder feedback before finalizing
- One feedback submission was received and has been posted to the engagement webpage
- An IESO response to feedback will be posted
- The timeline guideline is targeted for release as part of the 2023-Q1 baseline

Sector Evolution

Engagements that look to the future to see how innovation, new technologies and new collaborations can improve how we conduct our business.

Active Engagement

Current Status The IESO will

Next Steps

2021-2024 Conservation and Demand Management (CDM) Framework – Mid-Term Review

The Minister of Energy has asked the IESO to assess the performance of existing CDM programs and the alignment of targets and budgets with emerging customer and system needs.

Engagement Lead: Jason Grbavac Related Active Engagements:

- 2021 Annual Planning Outlook
- 2022 Annual Acquisition Report
- Pathways to Decarbonization

- The IESO will release the 2021-2024 Conservation and Demand Management Framework Mid-Term Review in mid-December
- The review makes recommendations on the current and future role of CDM in meeting system and customer needs
- The IESO will provide details on next steps following the release of the review

Clean Energy Credits

The Ministry of Energy has asked the IESO to assess options for the establishment and ongoing operation and management of a registry to support the creation and/or recognition, trading and valuation, and the retirement of renewable and clean energy credits (CECs) within the province.

Engagement Lead: Trisha Hickson Related Active Engagements:

N/A

 The IESO provided a report back to government on the establishment of a clean energy credit registry The IESO is expected to provide an update in Q1, 2023 on the report and next steps

Innovation and Sector Evolution White Papers

The IESO intends to develop and release a series of white papers to support the creation of a shared, fact-based understanding of emerging opportunities and trends.

Engagement Lead: Colin Campbell

Related Active Engagements:

- DER Potential Study
- DER Roadmap
- IESO York Region Non-Wires Alternatives
 Demonstration Project
- A webinar was held on February 23 to seek feedback on the next white paper in the series: Applications of Artificial Intelligence (AI), Machine Learning and other Advanced Technology in the Electricity Sector
- Responses to the AI
 Whitepaper Survey were
 due by March 31

The IESO is reviewing the AI Whitepaper Survey responses

Current Status

Next Steps

<u>IESO York Region Non-Wires</u> <u>Alternatives Demonstration Project</u>

The IESO, with support from Natural Resources Canada, is undertaking a demonstration in York Region to explore market-based approaches to secure energy and capacity services from Distributed Energy Resources (DERs) for local needs.

Engagement Lead: Colin Campbell Related Active Engagements:

- DER Market Vision & Design Project
- DER Potential Study
- DER Roadmap
- <u>Innovation and Sector Evolution White</u> Papers

- Demonstration Program
 Rules and Contracts
 were posted on August
 25 with the opening of
 the Initial Year 2
 registration
- On October 20-21, preand post-auction reports were posted for Year 2
- An Evaluation Report including lessons learned will be published in Q4, 2022; this is the last major milestone for this engagement

Interruptible Rate Pilot

The Ministry of Energy has asked the IESO to design a three-year interruptible rate pilot, which if approved will begin on July 1, 2023 to align with the Industrial Conservation Initiative cycle.

- <u>Industrial Conservation Initiative (ICI)</u>
 <u>Update</u>
- <u>Distributed Energy Resources Survey</u>
- on November 23 to report back to stakeholders on the feedback received and summarize how it will be captured it the report back to the Ministry
- Four feedback submissions were received following the November webinar and posted to the engagement webpage

- An IESO response to feedback will be posted
- A detailed pilot design proposal and proposed participant selection process will be provided in the report back to the Ministry on Dec 9

Current Status

Next Steps

Low-Carbon Hydrogen Strategy

The Ministry of Energy has asked the IESO to investigate and propose program options to integrate low-carbon hydrogen technologies into Ontario's electricity grid.

Engagement Lead: Trisha Hickson Related Active Engagements:

Pathways to Decarbonization

- In August, the IESO communicated that targeted discussions would take place with organizations with existing or potential upcoming hydrogen projects, and a presentation was prosed to the engagement webpage
- A report back on program options was provided to the government on Oct 31

 Engagement will commence in Q1, 2023 to discuss the program design

Pathways to Decarbonization

The IESO will inform stakeholders on the study approach and provide transparency around the assumptions that will be used in the analysis of the Ministry's request that the IESO evaluate a moratorium on the procurement of new natural gas generating stations in this decade (reliability, cost, environmental considerations) and develop an achievable pathway to phase out natural gas generation and achieve zero emissions in the electricity sector.

Engagement Lead: Trisha Hickson

Related Active Engagements:

- 2021 Annual Planning Outlook
- 2022 Annual Acquisition Report
- Clean Energy Credits
- DER Potential Study
- Low-Carbon Hydrogen Strategy
- Resource Adequacy

- The IESO will release the Pathways to Decarbonization study in mid-December 2022
- recommendations on a provincial moratorium on new natural gas generation as well as findings from a potential scenario to achieve zero electricity sector emissions that considers reliability, cost and impacts on broader electrification efforts
- The IESO will provide details on next steps following the release of the study

Updates on the Stakeholder Advisory Committee, Technical Panel and Transmission-Distribution Coordination Working Group

Group Current Status Next Steps

<u>Stakeholder Advisory Committee</u> (SAC)

The Committee is a forum for its members to be informed of IESO activities and to provide timely policy advice and feedback both broadly on behalf of the electricity sector and their constituency, directly to the IESO Board and Executive with respect to the IESO's mandate.

Engagement Lead: Jason Grbavac

- SAC has completed the public 2022 meetings and are in the process of planning the 2023 meeting schedule and areas of focus
- Meeting recordings and materials from all 2022 public meetings are available on the SAC engagement page
- The next public SAC meeting will take place in Q1, 2023
- A calendar of the 2023 SAC meeting dates will be posted to the engagement webpage in mid-December

Technical Panel (TP)

The Technical Panel's mandate is to review amendments to the Market Rules for Ontario's electricity market, and as requested, advise the IESO Board of Directors on specific technical issues relating to the operation of the IESO-administered market.

Engagement Lead: Agatha Pyrka

- A special Technical Panel meeting was held on September 30 to vote to recommend market rule changes to facilitate the delay to the go-live date for the IESO Replacement of the Settlement System (RSS)
- The October 11 Technical Panel meeting focussed on the MRP project schedule for the remaining batches as it pertains to the Technical Panel review
- A calendar of the 2023 TP meeting dates has been posted to the TP webpage
- The next meeting is scheduled for December 13 and will include an education session on enabling co-located hybrid resources, a Q&A session on the MRP interim alignment batch, as well as a discussion on the Technical Panel effectiveness which is reviewed annually

<u>Transmission – Distribution</u> <u>Coordination Working Group</u>

The Transmission-Distribution
Coordination Working Group (TDWG) will work closely with LDCs and other stakeholders to inform the DER Market Vision and Design Project. This is a key focus area of IESO's Distributed Energy Resources (DER) integration activities and is what much of the near-term DER Roadmap efforts build towards. The TDWG will provide a forum for in-depth engagement on T-D coordination.

- DER Market Vision & Design Project
- DER Roadmap
- <u>IESO York Region Non Wires</u> <u>Alternatives Demonstration Project</u>
- <u>Innovation and Sector Evolution</u> <u>White Paper Series</u>

- The fifth meeting of the
 Working Group was held on
 November 9 to discuss: the
 DER Market Vision Project
 (MVP) T-D Update, draft
 conceptual T-D coordination
 protocols for dual participation
 model, and D-D coordination
 (presented by Hydro One)
- Five submissions were received following the November 9 meeting and have been posted to the engagement webpage

- feedback submissions and post a response document
- The next Working Group meeting is expected to take place in January, 2023