IESO Engagement Update December 7, 2023

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 Engagement Initiatives web page.



New Engagements and Forward-Looking Schedule

Northern Ontario Voltage Study

The IESO is initiating an engagement to share outcomes of a voltage study addressing current limitations in Northern Ontario's electricity infrastructure. Anticipating challenges with upcoming transmission projects, particularly the Waasigan and Northeast Bulk lines, the study aims for seamless integration of these projects into the existing grid. The IESO is actively assessing strategies to ensure reliability and stability amid transformative changes. This initiative focuses on enhancing the energy landscape in Northern Ontario. To participate in this engagement, please email engagement@ieso.ca

Launching: December 12, 2023



Forecasting and Planning

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

Active Engagement

Current Status

Next Steps

Annual Acquisition Report

The Annual Acquisition Report (AAR) translates planning and operational information into a series of procurement and market activities using the Resource Adequacy Framework.

Engagement Lead: **Trisha Hickson** Related Engagements:

Resource Adequacy

- An engagement webinar was held on October 20, to discuss the IESO's plan to merge the AAR into the Annual Planning Outlook (APO). The anticipated release date for the 2023 APO is February 2024
- The AAR engagement is now closed, and an engagement summary will be available in December
- A new engagement on the AAR (now integrated into the APO) will be introduced in January to further discuss evolving IESO's planning products

Bulk Planning - Central West

This engagement will seek input from stakeholders and communities on the Central-West Bulk Planning initiative. *Engagement Lead:* **Fatema Khatun**

- A webinar was held on August 16 to discuss the Central-West Bulk Planning study, including the scope, objective and timeline
- Three submissions were received following the webinar and have been posted to the engagement webpage, along with an IESO response to feedback document
- Additional webinars will be held starting in Q1 2024 to further engage on the study

Northern Ontario Voltage Study

The IESO will share outcomes of a voltage study addressing current limitations in Northern Ontario's electricity infrastructure. The IESO is actively assessing strategies to ensure reliability and stability amid transformative changes.

Engagement Lead: Fatema Khatun

- A draft engagement plan was posted to the engagement webpage on November 30
- A webinar will be held on December 12 to present the findings of the Northern Ontario Voltage Study

Active Engagement	Active	Engag	ement
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Nicoara

Current Status

Next Steps

<u>Regional Planning – Burlington</u> <u>to Nanticoke</u>

Regional electricity planning is underway in this region.

Engagement Lead: Andreea

- Engagement has begun on the development of individual Integrated Regional Resource Plans (IRRPs) for Hamilton, Brant, and Caledonia-Norfolk
- A webinar was held on September 11 to provide an overview and seek input on the draft electricity demand forecast and the engagement plans
- Three feedback submissions were received and have been posted to the engagement webpage

 Engagement will continue with respect to developing an IRRP for the region in 2024

Regional Planning — Ottawa Area Sub-Region

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz

- The final Scoping Assessment
 Outcome Report was posted in
 March 2023, recommending the
 development of an Integrated
 Regional Resource Plan (IRRP) for
 the Ottawa Area sub-region
- The report also concluded that no further coordinated regional planning is required for the Outer Ottawa East and West Sub-regions
- Engagement on the Ottawa Area sub-region IRRP will begin in Q1 2024

Regional Planning - Toronto

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz

- The final Scoping Assessment
 Outcome Report was posted in
 March 2023, recommending the
 development of an Integrated
 Regional Resource Plan (IRRP) for
 the Toronto region
- Engagement on the Toronto Region IRRP is targeted to begin in Q1 2024

<u>Regional Planning – GTA North</u> (York Region)

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz

- The final Scoping Assessment
 Outcome Report was posted on
 October 12, 2023, recommending
 the development of an Integrated
 Regional Resource Plan (IRRP) for
 the GTA North (York Region)
- Engagement on the York Region IRRP will begin in O1 2024

Current Status

Next Steps

<u>Regional Planning – Windsor-</u> <u>Essex</u>

Regional electricity planning is underway in this region.

Engagement Lead: Rouselle Gratela

- Engagement has begun on the development of an Integrated Regional Resource Plan (IRRP)
- A webinar will be held on December 12 to provide an overview and seek input on the draft electricity demand forecasts and the engagement plan

 Engagement will continue with respect to developing an IRRP for the region until Q4 2024

Transmission Losses

This engagement will review the IESO's 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

- The Transmission System Losses: Evaluation Guideline was posted in June 2023
- This engagement is closed and a summary close-out document is posted on the engagement webpage

IESO Market and Planning Data Engagement

Engagement to better understand how the IESO can provide greater access to Market and Planning data Engagement Lead: Fatema Khatun

- This engagement was announced in the IESO Bulletin on November 23, 2023. Stakeholders were invited complete questionnaire on their preference on data access and the use of data
- Feedback to questionnaire due January 15, 2024
- Public engagement session planned for Q1 of 2024

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: Trisha Hickson Related Engagements:

- Resource Adequacy
- Demand Side Vision

- An engagement webinar was held on November 22 to provide a presentation on participant performance analysis as well as a technical session to discuss the prioritization of suggested enhancements for future auctions
- Feedback on the November 22 session is due on December 8
- Engagement will continue in January 2024

Demand-Side Vision

The IESO is continuing discussions with the Demand-Side community to explore the enhancement of Demand-Side Resources in the IESO-Administered Market and programs. The initiative addresses key issues and opportunities from the Demand-Side community, planning to prioritize improvements to Demand Response participation models. *Engagement Lead:* **Trisha Hickson** *Related Engagements:*

- Enabling Resources
- Capacity Auction Enhancements

- In response to feedback received from the September engagement session, an IESO response document will be posted by November 30
- A targeted stakeholder session to discuss next steps on improvements to DR participation models will commence in Q4 2023
- Public engagement sessions will be held in Q1 2024

<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: Fatema Khatun

- This engagement was put on hold in 2018 and has now concluded
- This engagement is closed and a summary close-out document is posted on the engagement webpage
- The IESO invites interested parties to participate in the Transmitter Selection Framework Initiative below

Current Status

Next Steps

Transmitter Selection Framework

The IESO is developing a Transmitter Selection Framework (TSF) to align with the Powering Ontario's Growth report's actions and plans, with a progress report due to the Minister by Summer 2024.

Engagement Lead: Fatema Khatun, Sonia Fazari and Andreea Nicoara (communities)

Related Engagements:

N/A

A webinar was held on November 22, 2023, to provide an update on the proposed engagement plan and the planned engagements set to commence in the new year

- Following the November 22 webinar, the IESO is seeking feedback on the items discussed by December 15, 2023
- Community engagement will begin in Q1 2024
- Progress report due to the Minister by Summer 2024

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

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
- <u>Innovation and Sector Evolution</u>
 White Paper Series
- Resource Adequacy

- The work completed under the DER Market Vision and Design Project will be transitioned to the Enabling Resources Program engagement
- An engagement summary close-out document will be posted to the engagement page
- See the Enabling
 Resources Program
 engagement for further
 information

<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.

- Joint Study of DER Incentives
- 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

- An IESO-OEB response to feedback received following the May 26 joint meeting has been posted to the engagement webpage
- A joint meeting with the Ontario
 Energy Board was held on
 November 27 on the DER
 Integration Framework for
 Energy Innovation where
 updates were provided on
 cross-cutting issues and the
 work of the two organizations
 as it relates to DERs, including
 on the Joint DER Incentives
 Study. The meeting also
 included a panel on 2021 Grid
 Innovation Fund and Innovation
 Sandbox Projects
- See also the separate update for the Transmission-Distribution Coordination Working Group

- An IESO response to feedback document for the Regional Planning Process Review from the last webinar will be posted to the engagement page
- Stakeholders have until December 18, 2023, to submit feedback following the November 27 meeting
- The IESO and OEB will work to post a response to feedback document in advance of the next joint meeting, likely to occur in Q2 2024
- See also the separate update for the Transmission-Distribution Coordination Working Group

Current Status

Next Steps

Enabling Resources Program

The IESO is seeking feedback from stakeholders on the development of an integrated plan that will outline the sequencing, timing and scope of activities to be undertaken by the IESO to enable existing electricity resources to provide electricity system services in the renewed Ontario wholesale market that they cannot, or cannot fully, currently provide.

Engagement Lead: Colin Campbell Related Engagements:

- Capacity Auction
- DER Roadmap
- Hybrid Integration Project
- Innovation and Sector Evolution
 White Paper Series
- Resource Adequacy

- IESO held a webinar on October 19 to provide a status update and next steps on the Enabling Resources Program
- Four feedback submissions were received and have been posted to the engagement webpage
- A response to feedback document will be posted to the engagement page, and IESO intends to share an updated project plan in Q1 2024, which will include next steps for integrating hybrids and DERs

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.

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

- The work completed under the Hybrid Integration Project will be transitioned to the Enabling Resources Program engagement
- An engagement summary close-out document will be posted to the engagement page
- See the Enabling
 Resources Program
 engagement for further
 information

Current Status

Next Steps

Long-Term RFPs

The IESO is engaging stakeholders and communities on the development of a series of Long-Term RFPs that will seek resources to address global needs. Engagements targeted to communities and the broader public are underway.

Engagement Leads: Trisha Hickson (industry stakeholders), Sonia Fazari and Sari Gerwitz (communities)

Related Engagements:

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

- Information sessions were held in July and August 2023.
 Responses to feedback documents were posted in September 2023
- The final LT1 RFP and Contract were posted on September 29, 2023
- A webinar to begin IESO engagement on the LT2 RFP is scheduled for December 13, 2023
- Community webinars on the LT2 RFP is scheduled for Q1 2024

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 Engagements:

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

- A Resource Adequacy Update was provided in June where the IESO announced the results of a recent procurement for longterm supply. A total of 882 MW was secured for the province's planned storage fleet, while complementary processes such as the growing Capacity Auction are securing resources to respond to upcoming system needs
- Several Resource
 Adequacy initiatives
 such as the
 Procurements and
 Capacity Auction
 Enhancements have
 branched off into their
 own respective
 engagement streams
 (see related
 engagements)

Current Status

Next Steps

Small Hydro Program

The IESO is engaging with the Small Hydro Community on the development and implementation of a Small Hydro Program (SHP) to provide new contracts for existing hydroelectric facilities with installed capacities of 10MW and below. The program aims to deliver value for ratepayers while providing a reasonable revenue stream for facilities to continue operating.

Engagement Lead: Trisha Hickson Related Engagements:

• Resource Adequacy

An engagement webinar was held on November 21, to prepare the hydro community for the launch of the Small Hydro Program Engagement on the Small Hydro Program is complete and an engagement summary will be posted in January 2024

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

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

- At the June 2022 Technical
 Panel meeting, Panel members voted unanimously to recommend the proposed market rule amendments to the IESO Board
- ORA changes (CT 206, 208 and 210) went live on May 1, 2023 in alignment with the Replacement of the Settlement System (RSS) go-live
- Stakeholders will be informed when the next implementation date is confirmed
- This engagement has now concluded and a final engagement summary report will be posted to the engagement webpage

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: Cynthia Sidalak Related Engagements:

- Resource Adequacy
- Enabling Resources
- DER Market Vision & Design Project
- Hybrid Integration
- The Implementation Working Group meeting was held on December 6 to provide members with an update on the MRP changes being made on the IESO Reports and to discuss testing activities. An engagement webinar is being held on December 15 to provide an update on the MRP changes being made to the IESO, updates to the Market Rules and Market Manuals relating to Market Power Mitigation, and settlement design updates, calculation examples, and a summary of feedback received from stakeholders following the September 2023 engagement webinar
- The first phase of Market
 Participant testing,
 Connectivity Testing, is
 scheduled to start in late
 January 2024. A kick-off
 meeting will be scheduled
 prior to the start of
 Connectivity Testing to
 provide an overview of the
 test phase, its objectives, a
 high-level description of the
 test cases that will be
 executed during this period,
 and the test schedule

Current Status

Next Steps

Transmission Rights Market Enhancement and Platform Refresh

The IESO is proposing enhancements to the Transmission Rights (TR) market. The IESO completed a Transmission Rights Market Review in June 2021 that identified certain enhancements, or high-value opportunities, that will improve the efficiency, value and function of the TR market today and in the future.

 Following the November 15, 2023 engagement, feedback was received from one stakeholder and posted on the engagement webpage Further engagement on this initiative will be determined following IESO Technical Panel education and review

Engagement Lead: Trisha Hickson

IESO Market Rule Amendments, Chapter 3, Confidentiality, Dispute Resolution and Enforcement

The Market Assessment and Compliance Division (MACD) of the IESO is proposing amendments to Chapter 3 of the Market Rules. The purpose of these proposed changes is to modernize and clarify rules related to some of MACD's enforcement processes, including confidentiality and how it handles disputes under the IESO Dispute Resolution Process.

Engagement Lead: Trisha Hickson

- An engagement was held on November 21 to discuss the proposed market rule amendments
- Stakeholder feedback was due on December 6. Feedback submissions received will be posted on the engagement webpage
- Next steps for this engagement will be communicated in January 2024

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

Next Steps

Expanding Third Party Access to the Smart Metering Data

The Smart Metering Entity (SME) has been directed by the Ontario Energy Board to undertake an assessment to expand third-party access to smart meter data. The assessment will evaluate the opportunity to include additional organizations beyond the Canadian Government entities and may address other opportunities for data access expansion.

Engagement Lead: Fatema Khatun Related Engagements:

N/A

- Targeted sessions were held on November 27, 28 and 30, 2023 with stakeholders to Continue conversations to gain insight and gather feedback on expanding third party access
- Feedback from the targeted sessions is due by
 December 18, 19 and 21, 2023
- The final report will be submitted to the Ontario Energy Board by April 30, 2024

Future Clean Electricity Fund

Proceeds from the sale of IESO-owned Clean Energy Credits on the Ontario's Clean Energy Credit Registry will be directed to Ontario's Future Clean Electricity Fund. The IESO has been tasked by the Ministry with developing insights and recommendations for a Future Clean Electricity Fund (FCEF).

Engagement Leads: Fatema Khatun (industry stakeholders), Sonia Fazari and Andreea Nicoara (communities)

Related Engagements:

Clean Energy Credits

- Public engagement webinars were completed with Generators, Distributors and Large Load Customers.
- Preliminary discussions were had about the Fund at the First Nations Energy Symposium in November with further follow up in Q4 2023
- The IESO held outreach meetings in October and November with municipal stakeholders to understand insights and recommendations to develop the Fund
- 13 feedback submissions
 were received from
 stakeholders and posted on
 the engagement webpage.
 The IESO will review the
 feedback and post a
 response to feedback
 document on the
 engagement webpage
- The IESO will gather feedback to draft recommendations and report back to the Ministry of Energy by December 31, 2023

Current Status

Next Steps

Hydrogen Interruptible Rate Pilot

The Minister of Energy has asked the IESO to submit a report by September 15, 2023, outlining a plan for the Hydrogen Interruptible Rate Pilot tailored specifically for hydrogen producers and developers in Ontario.

Engagement Lead: Fatema Khatun Related Engagements:

• Interruptible Rate Pilot

- The IESO held meetings in July and August with hydrogen developer organizations that expressed interest in the pilot and solicit feedback on pilot design features that would support participation and leverage the flexibility of electrolyzer-based hydrogen production facilities
- on October 4, the IESO provided an update that the submission of the plan for the hydrogen interruptible rate pilot to the Ministry of Energy has been postponed until there is further clarity on the federal government's Investment Tax Credit (ITC) related to clean hydrogen production.
- An updated timeline will be provided once further details on the ITC are available

IESO York Region Non-Wires Alternatives Demonstration Project

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.

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

- An engagement webinar was held on July 27 where the Electric Power Research Institute (EPRI) presented the draft findings of the DER Scenario & Modelling Study as it relates to transmission-distribution coordination in the context of the York Region Non-Wires Alternatives Demonstration
- Three feedback submissions were received following the July 27 webinar and have been posted to the engagement webpage

- The IESO will review any submitted feedback and incorporated, as appropriate, into the final DER Scenarios and Modelling Study report
- An Evaluation Report including lessons learned will be published in Q1 2024, with an accompanying engagement webinar to follow

Current Status

Next Steps

<u>Innovation and Sector Evolution</u> 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 Engagements:

- DER Potential Study
- DER Roadmap
- <u>IESO York Region Non-Wires</u>
 <u>Alternatives Demonstration Project</u>
- 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 next steps on this engagement for the latter part of 2023 and will provide an update

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.

- Pathways to Decarbonization
- The first group of successful applicants was <u>announced</u> in October 2023, and the second <u>announced</u> in November 2023
- This engagement has now concluded and a final engagement summary report will be posted to the engagement webpage

Current Status

Next Steps

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 Engagements:

- DER Potential Study
- Low-Carbon Hydrogen Strategy
- Resource Adequacy

The Ministry of Energy released **Powering Ontario's Growth** in July. The report was developed based on the expertise of the IESO and the analysis provided in the Pathways to **Decarbonization** study and the Ministry's subsequent consultation. The report was accompanied by a letter to the IESO outlining some of the immediate actions the Minister would like the IESO to take, which includes several reportbacks and timelines

 The IESO will begin engagement as required on the actions identified in the Minister's letter for the Powering Ontario's Growth report

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

Group Current Status Next Steps

<u>Strategic 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: Colin Campbell

- SAC held its third public meeting of 2023 on November 8 which included introductory remarks by Lesley Gallinger, IESO President and CEO, as well as a conversation to share perspectives from the IESO's seventh annual First Nations Energy Symposium
- Following a brief discussion on several business updates, three Working Groups presented their updated Challenge Statements for discussion

- SAC will report back to IESO Board and ELT in Q4, 2023
- The 2024 public meeting schedule will be announced in Q4 2023

Technical Panel (TP)

The Technical Panel's mandate is to review amendments to the Market Rules for Ontario's electricity market, and provide recommendations to the IESO Board of Directors.

Engagement Lead: Trisha Hickson

- The Technical Panel met on
 December 5. The agenda
 included one education item on
 the Transmission Rights Market
 Enhancements and Platform
 Refresh
- The next Technical Panel meeting is scheduled for January 16, 2024

<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>
- Innovation and Sector Evolution
 White Paper Series

- The TDWG meeting on
 October 27 included walk
 throughs of the statement of
 work documents for each
 deliverable
- Two feedback submissions were received following the October 27 webinar and have been posted to the engagement webpage
- The next TDWG meetings will take place on December 8 and 14, 2023