IESO Engagement Update – April 18, 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 <a href="Engagement Ingagement Inga

Forecasting & Resource Acquisition Sector Evolution Operations

New Engagements and Forward Looking Schedule

Regional Electricity Planning – Windsor-Essex

Regional electricity planning is underway for the Windsor-Essex region. The IESO has launched a new engagement initiative to ensure communities and stakeholders are aware of electricity planning activities and to provide opportunities for input. Those interested in participating in this engagement can register with IESO engagement at engagement@ieso.ca.

Launching: April 19, 2023

Forecasting and Planning

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

Active Engagement

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 Active Engagements:

Resource Adequacy

Current Status

- A webinar was held on February 23 to provide an overview of key topic areas of the 2023 AAR and to seek input on the future participation of existing resources
- Thirteen submissions were received following the webinar and have been posted to the engagement webpage

Next Steps

- The IESO expects to post a response to feedback in April
- The need for an additional engagement session will be determined



Current Status

Next Steps

<u>Regional Planning – Burlington</u> 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 in December
 recommending the development of
 Integrated Regional Resource Plans
 (IRRPs) for the Hamilton, Brant and
 Caledonia-Norfolk sub-regions
- Engagement has begun on the development of the IRRPs and individual updates will be provided separately for each sub-region in future updates

Regional Planning - North & East of Sudbury

Regional electricity planning is complete in this region.

Engagement Lead: Rouselle Gratela

Related Active Engagements:

N/A

- The 2023 North & East of Sudbury
 Integrated Regional Resoure Plan
 (IRRP) was posted on April 13 with
 an appendices and data tables,
 presenting the electricity demand
 and supply conditions for the next 20
 years and the recommended plan
- An IESO response to feedback document was also posted

 This engagement has now concluded

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

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz

Related Active Engagements:

N/A

- The final Scoping Assessment Outcome Report was posted in March, along with the IESO's response to feedback from the February webinar
- The report concludes that an Integrated Regional Resource Plan (IRRP) be undertaken for the Ottawa Area sub-region, and that no further coordinated regional planning is required for the Outer Ottawa East and West Sub-regions

 Engagement on the development of the Ottawa Area subregion IRRP will begin in Q2, 2023

Regional Planning - Toronto

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz

Related Active Engagements:

N/A

- The final Scoping Assessment
 Outcome Report was posted in
 March, along with the IESO's
 response to feedback from the
 February webinar, including a
 response to supplementary feedback
- The report concludes that an Integrated Regional Resource Plan (IRRP) be undertaken for the Toronto region

 Engagement on the development of the Toronto Region IRRP will begin in Q2, 2023

Current Status

Next Steps

Regional Planning – Windsor-Essex **new*

Regional electricity planning is underway in this region.

Engagement Lead: Rouselle Gratela Related Active Engagements:

N/A

- Engagement has begun on the third cycle of regional planning in the Windsor-Essex planning region
- The draft Windsor-Essex Scoping Assessment Outcome Report was posted on April 12 for comment
- The report concludes that an Integrated Regional Resource Plan (IRRP) be undertaken for the Windsor-Essex region
- A webinar will be held on April 19 to seek input on the draft report
- Feedback is due May 3
- The final Scoping
 Assessment Outcome
 Report will be posted
 by May 17

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 Q2, 2023
- 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: Trisha Hickson Related Active Engagements:

Resource Adequacy

- A webinar was held on March 30, to discuss draft market rule and manual amendments for the completed design enhancements included in Stream 1
- One submission was received in response to the meeting and has been posted to the engagement webpage
- A response to feedback from the April session will be posted in May
- A webinar will be held on April 26 to review feedback on the Stream 1 draft Market Rule and Market Manual amendments and present the final design of a Performance Adjustment Factor in capacity qualification, along with details on implementation steps for Streams 1 and 2 of the 2023 Capacity Auction Enhancements

<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.

 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> <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.

Engagement Lead: Colin Campbell Related Active Engagements:

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

- On December 29, the IESO published recommendations for enhanced DER models
- A webinar was held on January 25 to review the results of the enhanced model study and recommendations from the Distributed Energy Resources Market Vision and Design Project report
- Two feedback submissions were received and have been posted to the engagement webpage

- An IESO response to feedback document will be posted
- The IESO is aiming to finalize the Foundational and Enhanced Model proposals in Q2, 2023

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
- Twelve feedback submissions were received and have been posted to the engagement webpage
- An IESO response to feedback document, with support of the project consultants in responding to technical questions, has been posted

- The findings of the DER
 Potential Study will be
 used in the ongoing DER
 Roadmap work
- A final engagement summary will be posted to the engagement webpage in Q2, 2023

<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.

Engagement Lead: Colin Campbell Related Active Engagements:

- 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
- Six feedback submissions were received and have been posted to the engagement webpage
- See also the separate update for the Transmission-Distribution Coordination Working Group

- An IESO response to feedback document for the RPPR August webinar will be posted to the engagement page
- An IESO response to feedback document following the November meeting will be posted
- The next joint meeting with the Ontario Energy Board will take place on May 26, 2023
- See also the separate update for the Transmission-Distribution Coordination Working Group

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
- Innovation and Sector Evolution White Paper Series

- A webinar was held on January 26 to review the results of the enhanced model study and recommendations from the Hybrid Design Vision
- Three feedback submissions were received and have been posted to the engagement webpage
- At the February Technical
 Panel meeting, the enabling
 co-located hybrid model
 market rule amendments
 were voted to recommend
 to the IESO Board for
 approval

- An IESO response to feedback document following the January meeting will be posted
- 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 Pengual Program (MF)
- <u>Market Renewal Program (MRP)</u>
 Implementation
- A webinar was held on March 28 to provide an update on the upcoming LT1 RFP, including procurement timelines, sequencing between the E-LT1 RFP and LT1 RFP, and areas of design on which the IESO will be seeking feedback
- Twenty-nine submissions were received following the webinar and have been posted to the engagement webpage

- An IESO response to feedback document following the March meeting will be posted
- On May 3, 2023 the IESO
 will be holding two LT1 RFP
 Technical Meetings on the
 deliverability process, the
 connection assessment and
 approval process and the
 Hydro One connection
 process
- On May 4, a webinar will be held to provide a feedback summary with the IESO responses, a presentation by the Ministry of Energy on the Duty to Consult provisions, and other items where feedback is being sought

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

 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 Q2, 2023

<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, the IESO implemented the Reliable Integration Fee for activities the IESO undertakes to reliably integrate facilities into the IESOcontrolled grid

A final engagement summary will be posted to the engagement webpage in Q2, 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: Karlyn Mibus Related Active Engagements:

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

- The Implementation Working
 Group met on March 1, to
 provide updates on participant
 readiness planning, and address
 outstanding issues and action
 items; meeting materials and a
 discussion summary are posted
- on March 30, the IESO provided an update to stakeholders on the Market Power Mitigation framework, including incremental updates to the market rules, market manuals, workbooks and other documentation
- Feedback on the incremental updates to the Market Power Mitigation amendments is due by April 21
- The IESO will post responses to stakeholder feedback on the Market Settlement, Metering and Billing market rules and market manuals in late April

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 in October 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 guide 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

Next Steps

concluded

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 Ontario Clean Energy
 Credits Registry is now live
- An engagement summary will be posted on the CEC engagement webpage

This engagement has now

<u>Innovation and Sector Evolution</u> <u>White Papers</u>

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</u>
 White Papers

- The Final Year 2
 Demonstration Program
 Rules and Contracts were
 posted on August 25 with
 the opening of the Initial
 Year 2 registration
- On October 20-21, pre- and post-auction reports were posted for Year 2
- An Evaluation Report including lessons learned will be published in Q2, 2023; 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.

Engagement Lead: Colin Campbell Related Active Engagements:

- <u>Industrial Conservation Initiative</u>
 (ICI) Update
- <u>Distributed Energy Resources</u> Survey

- The final Pilot Rules and Contract were posted on March 13, 2023
- The application window was open from March 13 to March 31, 2023
- The Pilot is expected to launch on July 1, 2023

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: Colin Campbell Related Active Engagements:

• Pathways to Decarbonization

- A webinar was held on March 30 to present a summary of stakeholder feedback, the final Hydrogen Innovation Fund program documents and announce the program application period
- Proposals to the <u>Hydrogen</u> <u>Innovation Fund</u> must be submitted between April 3 and May 5, 2023

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 Active Engagements:

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

- The IESO released the Pathways to Decarbonization study on December 15, 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
- On February 13, the
 Ministry of Energy posted a
 consultation on the
 Environmental Registry of
 Ontario seeking feedback
 on the findings of the P2D
 study and in particular the
 IESO's "no-regret"
 recommendations
- The comment period is open for 90 days from February 13 to May 14, 2023

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

- The SAC presented its 2022
 consolidated Challenge
 Statements to the IESO Board
 and Executive in December and
 had an opportunity in February
 2023 to discuss the document
 and its impacts on the broader
 energy sector
- The IESO issued a new call for nominations for SAC members on March 16 with submissions due by April 13
- SAC member nomination submissions are currently being reviewed by the IESO
- The next SAC meeting will take place on May 10

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

- At the April 18 Technical Panel meeting, members voted to provisionally recommend market rule amendments related to the Market Renewal Program Interim Alignment Batch to the IESO Board
- Educational presentations were provided on the MRP Settlements Batch and the Capacity Auction

 The next meeting will take place on May 16

<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.
Engagement Lead: Colin Campbell

- Related Active Engagements: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 sixth meeting of the Working Group was held on February 27 to discuss: conceptual T-D coordination protocol for a total DSO model, transmission and distribution electricity planning in Ottawa, and, a distributor's perspective on the protocol for the Dual Participation model
- Four feedback submissions were received following the meeting and have been posted to the engagement webpage

- The IESO is reviewing feedback submissions
- is expected to take place in Q2, 2023 and will include a presentation on LDC/DSO functions under the Dual Participation and Total DSO models