IESO Engagement Update – July 12, 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.



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: • Formalizing the Integrated Bulk System Planning Process • Regional Planning – Ottawa Area Sub-Region	 Webinars were held on April 13 and 14 to provide an update and seek input on the Gatineau transmission corridor area Five feedback submissions were received and have been posted to the engagement webpage One-on-one outreach discussions with municipalities are underway 	 An IESO response to feedback document will be posted in July A webinar will be held on August 11 to review the feedback received and present draft recommendations The final study is expected to be posted in Q3



Active Engagement	Current Status	Next Steps
 Bulk Planning – Northeast Ontario A bulk planning study is underway for Northeast Ontario to address emerging needs being driven by strong economic growth and decarbonization initiatives. Engagement Lead: Rouselle Gratela Related Active Engagements: Formalizing the Integrated Bulk System Planning Process Regional Planning – North & East of Sudbury 	 A webinar was held on April 26 to seek feedback on key considerations for the scope, needs and potential solutions to meet the future electricity needs of Northeast Ontario Seven feedback submissions were received related to the potential transmission reinforcements, non- wires alternatives and consideration of other major prospective developments and areas of needs; the submissions have been posted to the engagement webpage 	 An IESO response to feedback document will be posted in July A webinar will be held in Q3 to provide an overview of the options analysis and seek input on draft recommendations The final study is expected to be posted in Q3
 Regional Planning – Niagara Regional electricity planning is underway in this region. Engagement Lead: Rouselle Gratela Related Active Engagements: Formalizing the Integrated Bulk System Planning Process 	 A second public webinar was held on April 28 to outline the detailed needs and seek input on the range of potential solutions to be screened Load profiles for the Beamsville Transformer Station (Town of Lincoln) and Crowland Transformer Station (City of Welland) have been posted to the engagement webpage 	• Further outreach and engagement will be undertaken in Q3 to inform the draft recommendations
Regional Planning – North & Eastof SudburyRegional electricity planning isunderway in this region.Engagement Lead: Rouselle GratelaRelated Active Engagements:• Formalizing the Integrated Bulk System Planning Process• Bulk Planning – Northeast Ontario	 A webinar was held on March 31 to seek input on the draft electricity demand forecast and engagement plan One feedback submission was received and has been posted to the engagement page, along with the IESO's response to feedback document The IESO has posted a detailed electricity demand forecast to the engagement webpage 	 Further outreach and engagement to be undertaken in Q3 to inform the detailed study of needs and potential options

Active Engagement	Current Status	Next Steps
Regional Planning – NorthwestRegional electricity planning isunderway in this region.Engagement Lead: Susan HarrisonRelated Active Engagements:• Formalizing the Integrated Bulk System Planning Process• Resource Adequacy	 A webinar was held on April 25 to provide an overview of the demand forecast and seek input on options to meet identified needs for this region; an update was also provided on the Waasigan Transmission Project Eight feedback submissions were received and have been posted to the engagement webpage 	 An IESO response to feedback document will be posted Further engagement and outreach will be undertaken in Q3
Regional Planning – Ottawa AreaSub-RegionRegional electricity planning isunderway in this region.Engagement Lead: Sari GerwitzRelated Active Engagements:• Bulk Planning – East Ontario• Formalizing the Integrated Bulk System Planning Process• Gas Phase-Out Impact Assessment	 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 	Communications and outreach are targeted for Q3 2022
Regional Planning – RenfrewRegional electricity planning isunderway in this region.Engagement Lead: Sari GerwitzRelated Active Engagements:• Bulk Planning – East Ontario• Formalizing the Integrated Bulk System Planning Process	 Further outreach and engagement review the size and timing of potential growth in the area to inform the development of options On May 20, an electricity demand forecast was posted for the Renfrew Region 	 A webinar will be held on July 26 to seek input on the options under consideration Feedback on the webinar materials is due by August 16
Transmission LossesThis engagement will review IESO andHydro One's practices on howtransmission losses are considered inplanning and operation of the system,a comparison of these practices tothose used in other jurisdictions, andseek stakeholder feedback on potentialimprovements to these practices.Engagement Lead: Colin CampbellRelated Active Engagements:• Formalizing the Integrated BulkSystem Planning Process	 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 Q3 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
Development of an IESOCompetitive TransmissionProcurement ProcessThe IESO is seeking feedback to aid in the development of a competitive transmission procurement process.Engagement Lead: TBD Related Active Engagements:• Formalizing the Integrated Bulk System Planning Process	This engagement was put on hold and IESO is currently determining the next steps associated with this initiative	
Distributed Energy Resources (DER)Market Vision and Design ProjectThe IESO is seeking feedback fromstakeholders on how to cost-effectivelyenhance the value DERs can provide toOntario's electricity system by expandingparticipation in the wholesale markets.Engagement Lead: Colin CampbellRelated Active Engagements:DER Potential StudyDER RoadmapEnabling Resources ProgramHybrid Integration ProjectInnovation and Sector EvolutionWhite Paper SeriesResource Adequacy	 A webinar was held on June 22 to discuss the stakeholder feedback received following the January meeting, present criteria by which options for answering the Phase I questions will be assessed, and present the initial set of options for the Foundational model 	 Feedback on the June webinar is due by July 14 Submissions will be posted along with an IESO response to feedback document

Active Engagement Distributed Energy Resources (DER) 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. <i>Engagement Lead:</i> Colin Campbell <i>Related Active Engagements:</i> DER Market Vision & Design Project DER Roadmap Enabling Resources Program Hybrid Integration Project Innovation and Sector Evolution White Paper Series Resource Adequacy	 A webinar was held on June 22 where the IESO and the consultant presented the final results of the province-wide Distributed Energy Resources Potential Study, along with insights, recommendations, and next steps on how the results will be utilized 	 Next Steps The IESO will publish the completed report to the IESO website in July Stakeholders will have four weeks following the publication of the full report to review and provide feedback
Distributed Energy Resources (DER) 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 IESO York Region Non-Wires Alternatives Demonstration Project Resource Adequacy	 The <u>DER Roadmap</u> was posted in December, 2021 and a joint meeting held with the Ontario Energy Board (OEB) held on April 13 with an updated list, action items, and progress updates on cross-cutting issues Two feedback submissions were received and have been posted to the engagement webpage The third meeting of the Transmission-Distribution Working Group took place on June 29 (see separate engagement update) 	 An IESO response to feedback document will be posted The next Transmission- Distribution Working Group meeting is expected to be held in August/September (see separate engagement update)

Active Engagement	Current Status	Next Steps
Hybrid Integration ProjectThe IESO is seeking feedback on thedevelopment of participation model(s) toenable hybrid resources in the IESO-administered markets and have thecapability to support Ontario's futuresystem needs. The changes will beimplemented after the implementation ofthe Market Renewal Project.Engagement Lead: Colin CampbellRelated Active Engagements:DER Market Vision & Design ProjectDER Potential StudyDER RoadmapEnabling Resources ProgramInnovation and Sector Evolution White Paper Series	 An IESO response to feedback document was posted following the April 22 webinar On June 27, the IESO published the draft design document "Enabling Foundational Hybrid Facility Models" for stakeholder review The document captures the key concepts and decisions that will enable hybrid facilities to participate in the IESO- administered markets to support Ontario's future system needs 	 Stakeholders may provide feedback to help the IESO ensure the design document reflects the decisions that were identified during stakeholder engagement Feedback on the draft design document is due by July 22
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	 The final LT1 RFQ was published on June 3 A webinar was held on June 9 to discuss key design considerations for the upcoming LT1 RFP and Contract, and to provide an overview of additional procurements Thirty-two submissions were received following the June webinar and have been posted to the engagement webpage 	 An IESO response to feedback document will be posted The IESO will be reporting back to the government on feedback received and design considerations in July

Active Engagement

Current Status

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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 costeffectively while recognizing the unique needs of different resources. *Engagement Lead:* **Jason Grbavac**

Engagement Lead: Jason Grbava

Related Active Engagements:

- <u>DER Market Vision & Design Project</u>
- DER Potential Study
- DER Roadmap
- Enabling Resources Program
- Formalizing the Integrated Bulk
 System Planning Process
- Long-Term RFP

- A webinar was held for the small hydro program on June 22 to provide an overview of the feedback received from the previous engagement meetings and direct facility discussions, including the evolved design considerations
 - At the July 12 Technical Panel meeting, members voted to recommend the rule amendment proposal associated with Enabling Generator-Backed Imports for the 2022 Capacity Auction to the IESO Board of Directors
- Feedback on June 22 small hydro webinar is due by July 14
- Enhancements to future Capacity Auctions will be engaged on in Q3 and Q4
- The IESO Board of Directors will review the proposed market rule amendments for Enabling Generator-Backed Imports at their next meeting

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 the July Technical Panel meeting, members voted to recommend the proposed market rule amendments to the IESO Board of Directors	The IESO Board of Directors will review the proposed market rule amendments at their next meeting
Cost Recovery for Integrating System Changes 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. <i>Engagement Lead:</i> Jason Grbavac <i>Related Active Engagements:</i> • N/A	 An IESO response to feedback was posted in September based on the feedback received from the July 2021 webinar 	 An update on the next steps for this engagement will be provided in August
Improving Accessibility of Operating ReserveOperating ReserveThe 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	The IESO Board of Directors will review the proposed market rule amendments at their next meeting

Active Engagement	Current Status	Next Steps
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. <i>Engagement Lead:</i> Declan Doyle <i>Related Active Engagements:</i> • <u>Resource Adequacy</u> • <u>Enabling Resources</u> • <u>DER Market Vision & Design Project</u> • <u>Hybrid Integration</u>	 The IESO has responded to comments on the Calculation Engine batch of market rules, and posted the red-lined updates to those documents The IESO discussed with stakeholders at the previous engagement discussion some practical implementation updates relating to Thermal State transitions, and the Transmission Right Market transitional design, and has also posted some background information on Constraint Violation Pricing for Dispatchable Hydroelectric Resources 	 A webinar will be held on July 21 to provide and update on further amendments to the Market Power Mitigation Market Manuals, as well as provide an update on RSS Implementation activities

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
 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 	 A webinar was held on April 22 to inform stakeholders of the mid-term review process and approach, seek input on CDM trends, program gaps and opportunities Five feedback submissions were received and have been posted to the engagement webpage, along with the IESO response to feedback document 	 The next engagement session will take place on July 19 and will present preliminary findings from the CDM Mid-Term Review related to the customer needs review, program needs review, and competitive mechanisms review for stakeholder feedback
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	 A webinar was held on April 21 to discuss feedback received to date, registry features & functionality, product offering options and next steps Thirteen submissions were received and have been posted to the engagement webpage The IESO also hosted five technical sessions focused on specific areas of design to collect more detailed feedback 	 An IESO response to feedback document will be posted by August The next engagement session is scheduled for Q3 2022

N/A •

Active Engagement	Current Status	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. <i>Engagement Lead:</i> Colin Campbell <i>Related Active Engagements:</i> • <u>DER Potential Study</u> • <u>DER Roadmap</u> • <u>IESO York Region Non-Wires</u> <u>Alternatives Demonstration Project</u>	 A webinar was held on February 23 where the IESO began discussions on the next white paper in the series: Applications of Artificial Intelligence (AI), Machine Learning and other Advanced Technology in the Electricity Sector The IESO sought feedback on key considerations to inform the future strategy of this technology and to understand market participant goals Responses to the AI Whitepaper Survey were due by March 31 	The IESO is currently reviewing the AI Whitepaper Survey responses
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. Engagement Lead: Colin Campbell Related Active Engagements: DER Market Vision & Design Project DER Potential Study DER Roadmap Innovation and Sector Evolution 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 by Q4 2022; this is the last major milestone for this engagement

Active Engagement	Current Status	Next Steps
Pathways to DecarbonizationThe IESO will inform stakeholders onthe study approach and providetransparency around the assumptionsthat will be used in the analysis of theMinistry's request that the IESOevaluate a moratorium on theprocurement of new natural gasgenerating stations in this decade(reliability, cost, environmentalconsiderations) and develop anachievable pathway to phase outnatural gas generation and achieve zeroemissions in the electricity sector.Engagement Lead: Trisha HicksonRelated Active Engagements:2021 Annual Planning Outlook2022 Annual Acquisition ReportResource AdequacyDER Potential Study	The IESO intends to post its response to feedback received on the study assumptions by August	Next steps on the study and engagement plans to follow in Q3/Q4

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

Group	Current Status	Next Steps
Stakeholder Advisory Committee (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 met on July 6 to discuss several business updates, the IESO corporate strategy and a challenge statement related to maximizing existing resources 	 The next public SAC meeting is targeted for September and will be communicated shortly The final two SAC challenge statements will be discussed at the next public SAC meeting
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. <i>Engagement Lead:</i> Agatha Pyrka	 At the July meeting, members voted to recommend market rule amendment proposals on two items to the IESO Board of Directors - Adjustments to Intertie Flow Limits, and 2022 Capacity Auction enhancements related to enabling generator-backed imports as well as administrative updates The July meeting also included an education item on the MRP Calculation Engine batch 	No meeting is scheduled for August

Group

Current Status

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Next Steps

<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 <u>DER</u> <u>Market Vision and Design Project</u>. This is a key focus area of IESO's Distributed Energy Resources (DER) integration activities and is what much of the near-term <u>DER Roadmap</u> 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</u> <u>Project</u>
- <u>Innovation and Sector Evolution</u>
 <u>White Paper Series</u>

- The third meeting of the Transmission-Distribution Coordination Working Group was held on June 29 and focused on IESO market dispatch data submission and outage request submission processes as background for the TDWG members to support the development of the conceptual coordination protocols
- Feedback on the June meeting materials is due by July 20
- The next Working Group meeting is expected to be held in August/September and will focus on the Joint Utilities of New York's draft DSP Communication and Coordination Manual as well as draft "cross-participation" rules for energy and reserve as part of distribution services and the wholesale market