IESO Engagement Update – March 14, 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** <u>Engagement Initiatives</u> webpage.

New Engagements and Forward-Looking Schedule



North & East of Sudbury Regional Electricity Planning

Regional electricity planning in the North & East of Sudbury region is underway. This engagement initiative will provide interested parties with an opportunity to offer input for consideration into the development of an Integrated Regional Resource Plan (IRRP), the first plan for this area. Those interested in participating directly in this engagement can register at <u>engagement@ieso.ca</u>.

Launching: March 31, 2022

Forecasting and Planning

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

Active Engagement	Current Status	Next Steps
Formalizing the Integrated BulkSystem Planning ProcessThe IESO is seeking feedback on thedesign of a formal, integrated bulksystem planning process.Engagement Lead: Colin CampbellRelated Active Engagements:•Development of an IESO Competitive Transmission Procurement Process•Resource Adequacy•Transmission Losses	 On October 19, the IESO held a webinar to present the final highlevel design and process detail A progress update was also provided on the regional planning process review engagement, which was completed in May 2021 A response to feedback document was posted on January 11 	• The formalized Bulk System Planning Process is planned for implementation at the start of 2022



Active Engagement	Current Status	Next Steps
Gas Phase-Out Impact Assessment The future of gas generation in Ontario has become a focus of discussion for a number of municipalities, raising questions and concerns from stakeholders about the challenges and opportunities these discussions have raised. This engagement will allow stakeholders to provide feedback on the scope of an assessment that outlines the implications of phasing out natural gas generation. Engagement Lead: Jordan Penic Related Active Engagements: • Pathways to Decarbonization	Engagement on the Gas Phase- Out Impact Assessment is complete	This engagement has concluded
Regional Planning – Barrie/ InnisfilRegional electricity planning is underway in this sub-region.Engagement Lead: Sari Gerwitz Related Active Engagements:• DER Roadmap• Formalizing the Integrated Bulk System Planning Process• Regional Planning – South Georgian Bay/Muskoka	 One feedback submission was received following the December 9 webinar and has been posted, along with the IESO's response to feedback An engagement webinar to seek input on the proposed recommendations will be scheduled for April 6 	The final Integrated Regional Resource Plan (IRRP) for this area will be posted in May 2022
Regional Planning – NiagaraRegional electricity planning isunderway in this region.Engagement Lead: Rouselle GratelaRelated Active Engagements:• Formalizing the Integrated BulkSystem Planning Process	 Two feedback submissions were received from municipalities following the February 3 webinar to ensure major local developments were considered in the electricity demand forecast The submissions and IESO's response to feedback has been posted along with the detailed electricity demand forecast 	• Further outreach and engagement on the defined needs and potential options will take place in Q2

Active Engagement	Current Status	Next Steps
Regional Planning – North & Eastof Sudbury *newRegional electricity planning isunderway in this region.Engagement Lead: Rouselle GratelaRelated Active Engagements:• Formalizing the Integrated Bulk System Planning Process	• Following publication of the final scoping assessment outcome report, the IESO has launched an engagement to inform the development of an Integrated Regional Resource Plan (IRRP) for this region	 The first webinar for the development of the IRRP will be held on March 31 to seek input on the draft electricity demand forecast and engagement plan Feedback on the webinar materials is due by May 2
Regional Planning – NorthwestRegional electricity planning isunderway in this region.Engagement Lead: Susan HarrisonRelated Active Engagements:• Formalizing the Integrated Bulk System Planning Process• Resource Adequacy	• Three targeted discussions concluded with communities and stakeholders in November 2021 to discuss electricity needs for the region and any emerging local initiatives that should be considered in the planning work	 A webinar will be held on April 25 to provide an overview of the demand forecast and seek input on options to meet identified needs for this region Feedback will be due by May 20; IESO will respond to feedback in June
Regional Planning – Ottawa AreaSub-RegionRegional electricity planning isunderway in this region.Engagement Lead: Sari GerwitzRelated Active Engagements:• Formalizing the Integrated Bulk System Planning Process• Gas Phase-Out Impact Assessment• Regional Planning – Peterborough to Kingston	 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 Q2 2022
Regional Planning – ParrySound/MuskokaRegional electricity planning isunderway in this sub-region.Engagement Lead: Sari GerwitzRelated Active Engagements:DER RoadmapFormalizing the Integrated Bulk System Planning ProcessRegional Planning – South Georgian Bay/Muskoka	 One feedback submission was received following the December 8 webinar and has been posted, along with the IESO's response to feedback An engagement webinar to seek input on the proposed recommendations will be scheduled for April 7 	The final Integrated Regional Resource Plan (IRRP) for this area will be posted in May 2022

Active Engagement	Current Status	Next Steps
Regional Planning – RenfrewRegional electricity planning isunderway in this region.Engagement Lead: Sari GerwitzRelated Active Engagements:• Formalizing the Integrated Bulk System Planning Process	 One feedback submission was received following the February 9 webinar to seek input on the draft electricity demand forecast and engagement plan for this area The IESO's response to feedback document has been posted 	• Further outreach and engagement will take place in Q2
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 submission were received and the IESO is developing a response to feedback 	 A response to stakeholder feedback will be provided in Q2 and a webinar will be held, as required Changes will be made to the guideline document, the IESO will post the fina and close 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	 An engagement webinar was held on January 26 where the IESO provided the feedback received and timelines and deliverables for the project The meeting also included a presentation from the Electric Power Research Institute (EPRI) on how U.S. jurisdictions are complying with FERC Order 2222 Two feedback submissions were received following the webinar 	 The IESO is currently reviewing the submissions and will respond to this feedback Through Q2, the IESO will establish the criteria to determine foundational versus enhanced models, and develop the initial set of options for the Phase 1 questions

Active Engagement **Current Status Next Steps Distributed Energy Resources (DER)** An engagement webinar was The IESO is currently **Potential Study** held on November 23 to reviewing the To help inform our path forward in present the draft Detailed submissions and will enabling DERs, the IESO has Project Plan and describe the respond to this feedback commissioned a DER Potential Study. key components of the study, Study results are The primary objectives of the study are including inputs, methodology, expected to be to determine the types and volumes of scenarios and the underlying presented in June, 2022 DERs that exist and can be expected to assumptions; a summary of emerge in Ontario over a 10-year feedback from the September timeframe, as well as identify the webinar was also presented, potential for these resources to provide along with the IESO's responses wholesale electricity services. Four feedback submissions were received and have been Engagement Lead: Colin Campbell Related Active Engagements: posted to the engagement **DER Market Vision & Design Project** webpage • **DER Roadmap** • **Enabling Resources Program** Hybrid Integration Project Innovation and Sector Evolution White Paper Series **Resource Adequacy** • **Distributed Energy Resources (DER)** The DER Roadmap was The IESO and Ontario • ٠ Roadmap posted in December, 2021 Energy Board (OEB) will The IESO is seeking feedback on the The first meeting of the hold another joint development of a roadmap to set out Transmission-Distribution engagement meeting on approaches and expected timing for Working Group took place on April 13 with an updated enhancing DER participation in the IESO-January 31, 2022 (see list, action items, and administered markets for the separate engagement update) progress updates on products/services they are technically cross-cutting issues capable of providing. Engagement Lead: Colin Campbell Related Active Engagements:

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

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Active Engagement

Current Status

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Enabling Resources Program

The IESO is seeking feedback 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 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 Active Engagements:

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

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

- An engagement meeting was held on December 16 to present and discuss the Enabling Resources Work Plan outlining the timing and scope of work it will undertake to further integrate emerging resources in the IESO-Administered Markets, including hybrid generation-storage, storage and Distributed Energy Resources
- The IESO will post an engagement summary report to conclude this engagement

Next Steps

- A webinar was held on February 24 to discuss stakeholder feedback received following the January meeting, and present the draft foundational designs
- Feedback following the February 24 webinar is due by March 17
- The next webinar will take place in April to discuss feedback from the February meeting, and to review the final design with stakeholders, in advance of the Long-Term RFQ/RFP deadlines, followed by publishing of the design document in Q2 2022

Active Engagement

Current Status

Next Steps

Active Engagement	Current Status	Next Steps
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. <i>Engagement Lead:</i> Colin Campbell <i>Related Active Engagements:</i> • <u>Resource Adequacy</u> • <u>Hybrid Integration Project</u> • <u>Market Renewal Program (MRP)</u> <u>Implementation</u>	 Eighteen submissions were received following the February 8 webinar to review the draft Long-Term Request for Qualifications (RFQ) and discuss the LT RFP design On February 16, the IESO posted a LT1 Request for Proposals (RFP) confidential questionnaire to supplement the existing feedback form; questionnaire responses were due by March 2 An engagement webinar was held on March 10 to review the LT1 RFP design considerations and discuss the Draft LT1 RFQ 	 Feedback following the March 10 webinar is due by March 17 Feedback on the draft LT1 RFQ is due by March 31 The final LT1 RFQ will be published by June 30
Resource AdequacyThe IESO is engaging stakeholders tofurther develop a long-term competitivestrategy to meet Ontario's resourceadequacy needs reliably and cost-effectively while recognizing the uniqueneeds of different resources.Engagement Lead: Jason GrbavacRelated Active Engagements:DER Market Vision & Design ProjectDER Potential StudyDER RoadmapEnabling Resources ProgramFormalizing the Integrated BulkSystem Planning ProcessLong-Term RFP	 A reminder that engagement on the LT RFP will be conducted in a dedicated LT RFP engagement (see separate engagement update) A webinar was held on February 24 on the 2022 Capacity Auction enhancements including the final design document supported by a guidance document (to identify changes from draft to final) and an update on the implementation phase of the 2022 Capacity Auction enhancements A Capacity Auction - Additional Q&A session was held March 4 	• Feedback on the February 24 webinar materials, including proposed Market Rule amendments and draft Market Manuals for the 2022 Capacity Auction are due by March 17

Operations

Engagements to ensure that Ontario's electricity resources are operating reliably within the IESOadministered 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. <i>Engagement Lead:</i> Jason Grbavac <i>Related Active Engagements:</i> • N/A	 A webinar was held on November 22 to provide stakeholders with an opportunity to comment on the proposed clarification to the market rules Three submissions were received and posted to the webpage along with the IESO response to feedback document 	 At the February Technical Panel meeting, members voted to post for broader stakeholder feedback The corresponding proposed rule amendment (MR-00468) is scheduled to go back before TP on April 19 for a vote to recommend to the IESO Board At the February meeting, Technical Panel members asked if MACD could respond to questions in a letter by March 30 to support this rule amendment review
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 on September 30 based on the feedback received from the July 2021 webinar 	The IESO is determining if an additional engagement session is required for this initiative

• N/A

Active Engagement	Current Status	Next Steps
Improving Accessibility of Operating 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 July 27 Technical Panel meeting, members voted in favour of posting the Improving Accessibility of Operating Reserve proposed market rule amendment for broader stakeholder comment Feedback on the proposed market rule amendment was due by August 12 	• A webinar will be held on March 25 to provide an overview of an Operating Reserve issue that the IESC is experiencing and discuss changes to previously proposed solutions and associated modifications to the Market Rules
Improving Awareness of SystemOperating ConditionsThe IESO informs stakeholders ofsystem operating conditions throughadvisory notices and operating states.This engagement will review what theIESO communicates to stakeholdersthrough these channels with the goalbeing to improve awareness of systemoperating conditions.Engagement Lead: Trisha HicksonRelated Active Engagements:• N/A	 One feedback submission was received following the January 27 webinar, which included proposed changes to the Market Rules and Market Manuals, and has been posted to the webpage 	 The IESO is reviewing this feedback and will post a response to feedback document No further engagements are planned at this time
Market Renewal Program (MRP)ImplementationThe Implementation phase of theMarket Renewal Program will begin bycodifying the design into the MarketRules and Market Manuals, and thenproceed onto creating tools, testing,training and readiness for bringing therenewed market to life.Engagement Lead: Declan DoyleRelated Active Engagements:Resource AdequacyEnabling ResourcesDER Market Vision & Design ProjectHybrid Integration	 The IESO published the Calculation Engine batch of market rules for stakeholder review, with comments or questions are due by April 15 The Replacement of Settlement System (RSS) Market Rules and Manuals, and the RSS Implementation Plan are available for stakeholder review and comment, with feedback due by March 17 	• The March 24 webinar will provide a quarterly update on solutions for practical issues that arise when implementing Market Renewal, including timing of inputs into Day-Ahead Market, and thermal state parameters

Active Engagement	Current Status	Next Steps
Updates to IESO Monitoring Requirements: Phasor Data The IESO is seeking feedback on proposed updates to Appendices 4.15/ 4.16 to enable generators and transmitters to install phasor technology infrastructure and provide phasor data to the IESO. Engagement Lead: Colin Campbell Related Active Engagements: N/A	• A webinar was held on February 23 to provide updates on Market Rules developments, including salient updates in the Market Manual and a revised timeline for Market Rules enforcement	 The Technical Panel vote to post is expected to take place on March 22, with the Market Rules expected to be implemented in Q2 Facilities will then be required to begin providing data on or before December 31, 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
Clean Energy CreditsThe Ministry of Energy has asked theIESO to assess options for theestablishment and ongoing operationand management of a registry tosupport the creation and/or recognition,trading and valuation, and theretirement of renewable and cleanenergy credits (CECs) within theprovince.Engagement Lead: Trisha HicksonRelated Active Engagements:• N/A	 A webinar was held on February 24 to provide an overview of clean energy credit (CEC) markets and key concepts and to host a discussion on stakeholder clean energy goals to identify initial key considerations for CEC design options in Ontario An overview was also provided of the government ask to the IESO to examine the development of a voluntary CEC market in the province 	 Feedback on the February 24 webinar is due by March 17 The feedback, and the IESO's response to feedback document will be posted to the webpage
Industrial Energy Efficiency Program The 2021-2024 Conservation Demand Management (CDM) Framework will include a new customer focused program in 2022 for large transmission and distribution connected industrial consumers. The program is anticipated to enable large industrial consumers to specify funding needed to meet capital hurdles, or other business case requirements for large complex projects. Engagement Lead: Trisha Hickson Related Active Engagements:	 A webinar was held on February 23 to present the draft final program documents, including key contract terms regarding project and participant eligibility, incentive payments, and project evaluation criteria Two submissions were received following the February 23 webinar and have been posted to the webpage 	 The IESO is reviewing the feedback and will post a response to feedback document in April There are no further engagements planned for the launch of this program The program is launching in two stages with the first in Q2 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. 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 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 is seeking feedback on key considerations to inform the future strategy of this technology and to understand market participant goals 	 A survey is being conducted to help inform the AI White Paper Survey responses are due by March 18
IESO York Region Non-WiresAlternatives Demonstration ProjectThe IESO, with support from NaturalResources Canada, is undertaking ademonstration in York Region to exploremarket-based approaches to secureenergy and capacity services fromDistributed Energy Resources (DERs)for local needs.Engagement Lead: Colin CampbellRelated Active Engagements:DER Market Vision & Design ProjectDER Potential StudyDER RoadmapInnovation 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

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:

- <u>Clean Energy Credits</u>
- <u>2021 Annual Planning Outlook</u>
 2021 Annual Acquisition Report
- <u>Resource Adequacy</u>
- DER Potential Study

- A webinar was held on February 24 to provide background on the Ministry's request and an update on the approach to inform the development of achievable pathways to decarbonization in the electricity sector and inform on the study approach
- A preliminary assumptions document was posted for feedback with submissions due by March 16

Next Steps

- The IESO will review the feedback submissions and post a response to feedback in April
- A webinar will be held on March 24 to discuss the IESO's approach to its Operability Assessment as part of the pathways to decarbonization study

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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: Jordan Penic	 SAC met on March 9 to discuss: Pathways to decarbonization Urgency and timing of needs Business updates A meeting recording is available on the SAC web page and meeting notes will be posted shortly 	• The next public SAC meetings will take place on June 29 and August 3
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	 On the Market Power Mitigation batch under MRP, the item is scheduled to undergo the vote for provisional recommendation to the IESO Board; the February meeting focussed on a discussion on the various scenario's that were requested by Technical Panel members The Adjustments to Intertie Flow Limits item was voted on by panel members to post for broader stakeholder feedback Technical Panel members were introduced to two new items: Replacement of the IESO Settlement System (RSS), and Improving Awareness of System Operating Conditions 	• A full schedule is expected in April - votes to recommend to the IESO Board is expected for Updates to Synchrophasor Monitoring Requirements and Adjustments to Intertie Flow Limits, while votes to post for broader stakeholder comment is expected for Replacement of the IESO Settlement System, Enhancements to the 2022 Capacity Auction, and Improving Awareness of System Operating Conditions

Current Status

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Next Steps

Group

<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 Market</u> <u>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</u> <u>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 Project</u>
- Innovation and Sector Evolution
 White Paper Series

- The first Working Group meeting was held on January 31, where the IESO provided an introduction to the TDWG, reviewed the Terms of Reference, and discussed the objectives for the Working Group
- Meeting notes for the January 31 meeting have been posted to the webpage
- The next Working Group meeting will be planned for Q2, 2022