IESO Engagement Update – May 17, 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

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

Current Status

- Webinars were held on April 13 and 14 to provide an update and seek input on the Gatineau transmission corridor area
- Four feedback submissions were received by May 5 and have been posted to the engagement webpage
- One-on-one outreach discussions with municipalities are underway

Next Steps

- An IESO response to feedback document will be posted at the end of May
- A webinar will be held in Q3 to review the feedback received and present draft recommendations
- The final study will be posted in Q3



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
- Feedback is due by May 17 and will be posted to the engagement webpage
- An IESO response to feedback document will be posted in mid-June
- A webinar will be held in Q3 to provide an overview of the options analysis and seek input on draft recommendations
- The final study will be posted in Q2

Formalizing the Integrated Bulk **System Planning Process**

The IESO is seeking feedback on the design of a formal, integrated bulk system planning process.

Engagement Lead: Colin Campbell Related Active Engagements:

- Development of an IESO **Competitive Transmission** Procurement Process
- Resource Adequacy
- Transmission Losses

- In late 2021, the IESO held a webinar to present the final highlevel design and process detail and provided a progress update on the regional planning process review engagement completed in May 2021
- A response to feedback document was posted earlier in the year
- The formalized Bulk System Planning Process is being implemented as of the beginning of 2022

The IESO will post an engagement summary report to conclude this engagement

Regional Planning - Barrie/ <u>Innisfil</u>

Regional 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
- A webinar was held on April 6 to provide an update on the development of the Integrated Regional Resource Plan (IRRP) and to discuss and seek feedback on proposed recommendations to meet local needs
- Feedback on this webinar was due by May 3, and no additional feedback was received
- The final Integrated Regional Resource Plan (IRRP) for this area will be posted by the end of May

Current Status

Next Steps

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
- Feedback on the April 28 webinar is due by May 19
- Further engagement to be undertaken in Q3

Regional Planning – North & East of Sudbury

Regional electricity planning is underway in this region.

Engagement Lead: Rouselle Gratela Related 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
- engagement to be undertaken in Q3 to inform the detailed study of needs and potential options

Regional Planning – Northwest

Regional electricity planning is underway in this region.

Engagement Lead: Susan Harrison

Related 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
- In addition, an update was provided on the Waasigan Transmission Project
- Feedback was due by May 16 and will be posted to the engagement webpage
- An IESO response to feedback document will also be posted

Regional Planning – Ottawa Area Sub-Region

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz
Related 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 20year IRRP outlook
- Communications and outreach are targeted for Q2 2022

Current Status

Next Steps

Regional Planning - Parry Sound/Muskoka

Regional 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
- A webinar was held on April 12 to provide an overview of the IRRP and recommendations, including details on the evaluation of alternatives
- Feedback on this webinar was due by May 3, and no additional feedback was received
- The final Integrated
 Regional Resource Plan
 (IRRP) for this area will be
 posted by the end of May

Regional Planning – Renfrew

Regional electricity planning is underway in this region.

Engagement Lead: Sari Gerwitz
Related Active Engagements:

- Bulk Planning East Ontario
- Formalizing the Integrated Bulk System Planning Process

 Further outreach and engagement is taking place to review the size and timing of growth in the area to inform the development of options

 A webinar will be held in June to review the options under consideration

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:

 Formalizing the Integrated Bulk System Planning Process

- 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 and a webinar will be held, as required
- Changes will be made to the guideline document, the IESO will post the final 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 IESO Competitive Transmission Procurement Process

The 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

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

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

- Related Active Engagements:DER Potential Study
- DER Roadmap
- Enabling Resources Program
- Hybrid Integration Project
- <u>Innovation and Sector Evolution</u>
 White Paper Series
- Resource 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 and have been posted to the engagement webpage

- An IESO response to feedback document will be posted
- 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

<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
- <u>Enabling Resources Program</u>
- <u>Hybrid Integration Project</u>
- <u>Innovation and Sector Evolution</u> White Paper Series
- Resource Adequacy

- An engagement webinar was held on November 23 to present the draft Detailed Project Plan and describe the key components of the study, including inputs, methodology, scenarios and the underlying assumptions; a summary of feedback from the September webinar was also presented, along with the IESO's responses
- Four feedback submissions were received and have been posted to the engagement webpage

- An IESO response to feedback document will be posted
- Study results are expected to be presented in June, 2022

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

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
- Board (OEB) held another joint engagement meeting 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

- An IESO response to feedback document will be posted
- The second meeting of the Transmission-Distribution Working Group took place on May 16 (see separate engagement update)

Current Status

Next Steps

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
- Resource Adequacy

- 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 in June

Hybrid Integration Project

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

Engagement Lead: Colin Campbell Related Active Engagements:

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

- Four feedback submissions were received following the February 24 webinar and they have been posted to the engagement webpage along with the IESO response to feedback document
- 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
- Feedback on the April webinar was due by May 13
- An IESO response to feedback document will be posted

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
- <u>Market Renewal Program (MRP)</u>
 Implementation
- A webinar was held on April 20 to provide an update on key activities under the Long-Term RFP including a summary of feedback received from the March 10 webinar
- Additional information was posted on April 22 including version 2 of the draft LT1 RFQ
- Sixteen submissions were received on version 2 of the draft LT1 RFQ, and have been posted
- Fifteen submissions were also received on the additional procurement mechanisms as well as on proposed revenue streams, and have been posted

- The IESO is currently reviewing the feedback
- be held on June 9 to discuss key design considerations for the upcoming LT1 RFP and Contract, and to provide an overview of additional procurements, namely the Expedited procurement, the Same Technology Expansions and Uprates process and the Forward Capacity Auction
- The final LT1 RFQ will be published in early June

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
- Formalizing the Integrated Bulk System Planning Process
- Long-Term RFP

- Enhancements to the 2022
 Capacity Auction in December are currently under review by the Technical Panel (TP) with an opportunity for further stakeholder comment
- Enhancements to future auctions will be engaged on in Q3 and Q4 2022
- Feedback on the webinar held on April 20 for the hydroelectric program development and assessment – small hydro was due by May 13
- Capacity Auction, which require amendments to existing IESO Market Rules, are available for stakeholder comment until May 31 and will be reviewed again by the IESO Technical Panel in June to determine if the proposed rule amendment should be recommended to the IESO Board of Directors
- Feedback received on Small Hydro will inform the July 1, 2022, report to the Ministry of Energy on the final design, timelines, and summary of discussions with stakeholders

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

- IESO Market Rule amendments for the Adjustments to Intertie Flow Limits are required and are currently being reviewed by the IESO Technical Panel
- The proposed rule amendment (MR-00468) was posted for stakeholder comment until May 2 and is scheduled to go back before Technical Panel in June for a vote to recommend to the IESO Board

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

- 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

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

- A webinar was held on March 25 to provide an overview of an Operating Reserve issue that the IESO is experiencing and discuss changes to previously proposed solutions and associated modifications to the Market Rules
- Two feedback submissions were received and have been posted to the engagement page

 An IESO response to feedback document will be posted

Improving Awareness of System Operating Conditions

The IESO informs stakeholders of system operating conditions through advisory notices and operating states. This engagement will review what the IESO communicates to stakeholders through these channels with the goal being to improve awareness of system operating conditions.

Engagement Lead: Trisha Hickson Related Active Engagements:

- The IESO has posted a response to feedback received in Q1 and has been facilitating a review of the proposed rule amendment via the Technical Panel process.
- to recommend the proposed market rule amendment MR-00470-R00 to the IESO Board of Directors with a proposed effective date of June 27, 2022
- These amendments will be applicable for the December 2022 preauction and obligation periods
- The IESO will post an engagement summary report to conclude this engagement in June

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.

Engagement Lead: Declan Doyle Related Active Engagements:

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

- The IESO received comments on the Calculation Engine batch of market rules, and is in the process of responding
- The IESO hosted an informative session on the design of Economic Operating Point in the renewed market, and the materials and recording are posted for review
- The next webinar will take place in June to discuss the practical changes proposed to navigate specific challenges when implementing the design

<u>Updates to IESO Monitoring</u> <u>Requirements: Phasor Data</u>

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:

- 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
- On March 22 the Technical Panel passed the vote and the proposed market rule amendments are now posted for stakeholder feedback
- The IESO will post an engagement summary report to conclude this engagement in June

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
- An IESO response to feedback document will be posted prior to the June Engagement Days

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:

- 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 prior to the June Engagement Days

Current Status

Next Steps

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:

N/A

- Two submissions were received following the February 23 webinar and have been posted to the webpage along with IESO's response to feedback document
- There are no further engagements planned for the launch of this program and an engagement closing summary will be posted prior to the June Engagement Days
- The program is launching in two stages with the first in Q2 2022

<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 Active Engagements:

- DER Potential Study
- DER Roadmap
- <u>IESO York Region Non-Wires</u> 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 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

Current Status

Next Steps

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

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:

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

- Fifty submissions were
 received in response to the
 February 24 webinar, including
 the preliminary assumptions to
 be used in the development of
 the pathways study; the
 submissions have been posted
 to the engagement webpage
- A webinar was held on March 24 to discuss the IESO's approach to its Operability Assessment as part of the pathways to decarbonization study
- The IESO is aiming to post its response to feedback on the study assumptions, by the end of June
- Next steps on the study and engagement plans to follow in O2/O3
- A webinar may potentially be held in June to present the feedback received and the revised assumptions

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**

- A call for nominations was issued on March 17 to find a member to represent the Ontario's community constituency, specifically targeting a municipal representative
- The next two public SAC meetings are scheduled for July 6 and August 31

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

- In April, votes to post for broader stakeholder comment passed for the Replacement of the IESO Settlement System, Enhancements to the 2022 Capacity Auction, and Improving Awareness of System Operating Conditions items
- Also in April, the vote to recommend to the IESO Board passed unanimously for the Updates to Synchrophasor Monitoring Requirements item
- The May meeting included votes for recommendation to the IESO Board for: Replacement of the IESO Settlement System, and Improving Awareness of System Operating Conditions, both of which have been carried forward
- The May meeting also included a vote to post the revised capacity auction market rule amendments for broader stakeholder comment

- Comments are due May 31 for the revised capacity auction market rule amendments
- The June meeting is expected to have three vote to recommend items to the IESO Board: Enhancements to the 2022 Capacity Auction, Adjustments to Intertie Flow Limits and Improving Accessibility of Operating Reserve
- The June meeting will also contain an education item on the Market Renewal Project Calculation Engines Batch

<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 to add Colin Campbell

Engagement Lead: Colin Campbell

Related Active Engagements:

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

- The first Working Group meeting was held in January, 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 meeting have been posted to the webpage
- The second Working
 Group meeting took place
 on May 16