Stakeholder Feedback and IESO Response

Enabling Resources Program (ERP) Distributed Energy Resources (DER) Integration Project

Following the July 21, 2026, DER Integration Project engagement session, the IESO invited participants to provide comments and feedback on the materials presented and responses to questions included in the feedback form.

Following the session, the IESO received written feedback from:

- Electricity Distributors Association
- Energy Storage Canada
- Hydro Ottawa Limited

The presentation materials and feedback submissions received have been posted on the ERP DER Integration Project engagement webpage.

Please reference the material for specific feedback as the below information provides excerpts and/or a summary only.

If you have any questions or concerns, please contact engagement@ieso.ca.

DER Project Overview

Stakeholder Feedback	IESO Response
Was the DER Project Overview helpful in communicating the scope and approach of the project? Across stakeholders, the DER Project Overview was generally viewed as helpful and effective in explaining the project's scope, objectives, and overall approach, particularly in illustrating the relationship between operational visibility, transmission-distribution coordination, and future DER participation models. Stakeholders expressed support for the foundational approach being taken and welcomed the recognition of the important role of distribution system operators and coordination mechanisms. At the same time, stakeholders identified several areas where additional clarity would strengthen the overview: • **DER scope definition:** Greater specificity is needed around which DER types, participation models, and use cases (e.g. DERs serving customer needs, DERs outside Local Distribution Company (LDC) or IESO control) as well as how key terms and concepts are defined. • **Relationship to other initiatives:** Stakeholders requested clearer connections between this project and previous or ongoing programs, market design efforts, procurements, and grid modernization initiatives. **Roles and coordination:** Stakeholders emphasized the importance of clearly defining responsibilities, decision-making authority, and coordination mechanisms between bulk system and Distribution System Operators, i.e. LDCs adopting the Distribution System Operator (DSO) role, as DER adoption grows. What is the difference between these two design modules: "Market	The IESO acknowledges requests for additional clarity on project scope, DER classifications, key terminology, relationships to other initiatives, and future-state objectives. • **DER scope definition:** The project's Market Integration and DER Data Sharing design streams are focused on near-term (5-10 years) outcomes as described on slides 8 through 14 of the July 21 engagement. The use of "Dx-connected resources" on slide 12 broadly refers to evolving IESO's bulk system modeling of resources sited in the distribution system, beyond those enabled under the DER/A Participation Model. Specific details related to the Market Integration scope will be shared at the next engagement session including key concepts and definitions, and a status update on the DER/A participation model. • **Relationship to other initiatives: The** DER Project will continue to highlight connections between this work and other initiatives in-flight across the IESO that are relevant and directly related. Also, in addition to this information being included **in** public engagement sessions, the DER Project continues to engage in Outreach either 1:1 or in smaller group settings to help make these linkages. Please also refer to the previous engagement's feedback response for more information on alignment with other IESO initiatives, including the Transmission-Distribution Working Group (TDWG). • **Roles and coordination:** The DER Integration Project broadly classifies controllable DERs into (1) those which receive *dispatch instructions* as defined in chapter 11 of the IESO market rules, and (2) system-activated (i.e. those which are controlled by means other than *dispatch instructions* by the IESO or LDCs). • "Market Operational Coordination (Tx-Dx)" applies specifically to DERs which receive *dispatch instructions* per (1) above. These

Operational Coordination or Transmission-Distribution (Tx-Dx)" and "IESO-LDC Operational Visibility"?	resources were not addressed at the July 21 engagement presentation. • The July 21 engagement was focused on "Bi-directional Operational Visibility" that applies specifically to the system-activated DERs per (2) above and are referenced on slides 17 and 27.

IESO-to-LDC Operational Visibility

Stakeholder Feedback	IESO Response
What level of visibility at the Tx-Dx interface would LDCs need over Dx-consumers forming Virtual Hourly Demand Response (HDR) resources; station- or bus-level? • **Station-level visibility was broadly viewed as a reasonable baseline.** Stakeholders suggested station-level information would provide meaningful situational awareness and improve understanding of how DER activity may affect local and bulk-system conditions. • **Additional granularity may be required in some circumstances.** Stakeholders noted that bus-level, feeder-level, or even resource-specific visibility may be necessary in areas with high DER penetration, active local system constraints, complex network configurations, or where precise operational management is required. LDCs ultimately need customer-level visibility for Virtual HDR resources. • **Visibility should support accurate system modelling and reliability coordination.** Stakeholders highlighted the importance of understanding where resources are physically connected and activated so that DER activity can be appropriately reflected in operational decision-making and system models.	Thank you for your feedback. The IESO will use stakeholder input to inform IESO-to-LDC operational visibility requirements and evaluate solutions that balance operational needs, scalability, and implementation considerations. As presented in the July 21 engagement, the IESO's existing bulk system modeling of DERs is a limiting factor for IESO-to-LDC operational visibility. At our next engagement, the IESO will provide an update to stakeholders with proposed approaches to (1) share relevant registration information related to system-activated DERs, and (2) map IESO-controlled DERs to relevant Tx-Dx interfaces.

• **A scalable and practical approach is important.** Stakeholders recognized that the level of detail provided should balance operational value with implementation complexity, potentially using materiality-based thresholds or focusing higher granularity where operational risks warrant it.	
Do LDCs currently have the capability to support the IESO map the IESO-controlled DERs in their distribution systems to relevant Tx-Dx interfaces? Stakeholders generally indicated that mapping IESO-controlled DERs to relevant Tx-Dx interfaces is achievable today, although capabilities, data requirements, and implementation complexity vary across organizations. • **Existing capability generally exists.** LDCs can typically associate DERs with relevant Tx-Dx interfaces using existing system information and geographic or electrical mapping approaches. • **Accurate mapping depends on the availability of appropriate DER information.** Stakeholders emphasized the importance of receiving sufficient information regarding resource location and connectivity to support reliable mapping and bulk-system modelling. • **Distribution system complexity creates challenges.** Stakeholders noted that network reconfigurations, feeders that can be supplied from multiple stations, embedded distribution arrangements, and changing operating conditions may complicate mapping and require additional consideration in the design. • **The level of information exchanged should align with the intended purpose.** A stakeholder suggested that tx-station level association may be sufficient for bulk-system modelling,	Thank you for the feedback. The IESO is seeking to understand LDCs' current capabilities and implementation considerations to support accurate, baseline representations of DERs in bulk-system models, which provide mutual benefit to the IESO and LDCs while minimizing unnecessary administrative burden. The IESO will engage directly with LDCs to better understand the static data they need from the IESO and appropriately balance mapping & modeling methodologies.

while another indicated that more granular resource information may be necessary to support local operational needs and validate mappings. • **Implementation approaches should balance accuracy and administrative burden.** Stakeholders encouraged practical solutions that improve modelling accuracy while minimizing unnecessary data sharing requirements and ongoing administrative effort.	
Do DER providers have concerns if required to provide consent for the IESO to share confidential reports with host LDCs for the purposes of local situational awareness, such as Virtual HDR standby & activation notices for Capacity Auction participants? Stakeholders generally supported information sharing to enable local situational awareness and reliability, while emphasizing the need for appropriate confidentiality protections, privacy safeguards, data-sharing requirements being proportional to operational needs, and consideration of administrative impacts associated with consent management, information access, or reporting processes.	The IESO agrees that information sharing should be guided by clear governance principles, including defined access controls, appropriate use of information, and proportionate data-sharing requirements. The IESO also acknowledges stakeholder interest in minimizing administrative burden and ensuring that information exchanged is aligned with operational needs. The IESO's DER data sharing requirements will strive to share aggregated and/or anonymized information. Where the exchange of confidential data may be needed, the IESO will clearly identify how this data will be used and follow/update the IESO's organizational data governance, market rules/manuals and privacy policies.

LDC-to-IESO Operational Visibility

Stakeholder Feedback	IESO Response
What are LDCs perspectives on the need for materiality thresholds to notify the IESO of local DER activity related to local NWS deployments? • Stakeholders agreed that materiality thresholds are appropriate to focus reporting on DER activities that could have a meaningful impact on bulk-system operations and reliability. • Stakeholders requested greater clarity on the rationale, assumptions, and precedents used to establish the proposed threshold values. Stakeholders sought clarification on factors such as whether thresholds are based on nameplate capacity, contracted capacity, forecasted output, activation levels, voltage class, geographic area, or operating conditions.	Thank you for the feedback. The IESO appreciates stakeholder support for a materiality-based LDC-to-IESO operational visibility framework. The proposed operational visibility thresholds are intended to IESO operators with situational awareness of LDC-controlled DER activity that may have a material reliability impact on bulk-system operations. The proposed materiality thresholds for LDC-to-IESO operational visibility are to be assessed against an anticipated activation. Thresholds are adapted from the IESO's compliance deadband thresholds and recommendations within the IESO's current Connection Assessment and Approval process.

Do LDCs with local DR programs currently have the capability to provide standby and activation notifications following timelines similar to those used for the IESO's HDR notifications? Refer to slide 28 for an overview of HDR timelines or slide 21 for a visual reference. • Most existing programs appear capable of supporting similar notification timelines. Flexibility should be maintained as local DR programs and system needs evolve. • Additional clarity is needed regarding notification requirements, including the treatment of outages and whether both standby and activation notifications would be required. • Guidance may be helpful for emerging or pilot-scale storage-enabled DR programs that may have different operational characteristics.	The IESO recognizes the importance of maintaining flexibility as local DR programs evolve and will consider stakeholder feedback regarding notification requirements, implementation considerations, and opportunities to provide additional clarity. The LDC-to-IESO operational visibility notification requirements would apply when anticipated activity exceeds a materiality threshold. For clarity, any anticipated activation below a materiality threshold would not require a notification; this includes any changes in anticipated activity following a cancellation, outage or reduced activation. Similarly, a standby notification without an anticipated activation amount would not require the IESO to be notified. The IESO is interested in NWS activity which may have a material bulk system impact. The IESO welcomes additional information of pilot-scale and/or NWS deployments with different operational characteristics than those currently considered.
Can LDCs with other types of NWS deployments (e.g. an LDC controlled BESS) provide notification of anticipated activity within the IESO-Administered Markets' data submission windows? Refer to 28 slide for an overview of IESO market data submission timelines. • Existing market submission timelines may provide a practical starting point for notifications.	Thank you for the feedback. Stakeholder feedback will be used to inform the detailed design of notification processes as this work progresses. LDC-to-IESO operational visibility requirements only apply to locally operated storage resources and other NWS deployments that do not participate in the IESO's wholesale markets. Operational visibility enhances IESO operators' situational awareness of upcoming system conditions to prepare and operate the bulk system in real-time – allowing adjustments

• Clarification is needed on how locally operated storage resources and NWS deployments would be treated relative to market-participating storage and how the IESO will avoid double-counting a resource serving both the local distribution system and bulk system. It is expected that the LDC/DSO will optimize these assets to solve local constraints before supporting the bulk system. • Notification requirements should accommodate different types of NWS deployments and operational practices. • Can the IESO clarify what it means by "advanced notice" and specified what data is required within the DAM and RTM windows?	to demand forecasting and/or dispatch of bulk system resources. IESO operators are not seeking to directly impact individual resources. Advanced notice refers to notification of NWS activity during the Day-Ahead Market and Real-Time Market windows (refer to slide 28 of the July 21 engagement materials). Advanced notice would include information related to the anticipated activation amount (MW), the Tx-Dx interface(s) impacted, and the anticipated timing and duration of the activation.
In the near-term, do LDCs have a preference for either of the interim notification mechanisms under consideration? Namely, notification based on email and phone call vs. a tool-based mechanism. • Email and phone notifications were viewed as a practical interim approach for near-term implementation. Phone notifications may be more appropriate for same-day or urgent events, while email may be suitable for next-day notifications. • Stakeholders emphasized the importance of planning for a future tool-based solution as DER activity and notification volumes increase. Future solutions should be scalable and capable of integrating with existing operational systems and processes.	Thank you for the feedback. The IESO will consider stakeholder feedback as it evaluates near-term notification mechanisms and will provide an update at our next engagement.
How often do LDCs with existing, planned or contemplated NWS deployments anticipate exceeding the proposed materiality thresholds to notify the IESO within the next 5 years? How is this anticipated to change within the next 10 years? • Threshold exceedances are expected to be relatively infrequent in the near term.	The IESO recognizes the importance of designing notification mechanisms and processes that can scale with future NWS deployments and will continue to engage directly with LDCs to understand their near-term needs and estimates for their NWS deployments.

• Notification mechanisms should be designed to scale with future growth in DER activity.	
In the near-term, are LDCs considering other NWS which do not fit within the proposed materiality thresholds, notification timelines, and interim notification mechanisms? Future NWS deployments may include resource types/operating models that are not fully captured by the proposed LDC-to-IESO operational visibility design, such as NWS deployments which are not system-activated (e.g. energy efficiency programs). Ongoing engagement will be important to identify new NWS use cases and ensure the requirements are adaptable as deployments increase.	Thank you for your feedback. LDC-to-IESO operational visibility requirements are applicable only to system-activated NWSs. The IESO will continue to engage with stakeholders and directly with LDCs to better understand their near-term system-activated NWS deployments.

General Feedback

Stakeholder Feedback	IESO Response
• Stakeholders emphasized the importance of ensuring that market participation models, operational coordination frameworks, and data-sharing requirements evolve together. Feedback highlighted the need for alignment across initiatives and OEB efforts. • Stakeholders requested continued engagement as design work progresses and highlighted the value of clear guidance, examples, and transparency regarding future design decisions. Stakeholders also encouraged ongoing dialogue with LDCs, DER providers, and other MPs to ensure operational requirements do not create unintended barriers to participation	Thank you for the feedback. • The DER Integration Project is taking a holistic approach by focusing on dispatchable DER/As through the Market Integration design stream while also capturing the remaining system-activated DERs in the DER Data Sharing design. • The project intentionally focuses on integrating dispatchable DER/As into the existing wholesale market framework and adapting the IESO's existing mechanisms for DER data sharing to avoid misalignment with broader sector developments. The project's incremental, low-regret actions are intended to ready the IESO's tools, systems, and processes in the near-term while maintaining flexibility to align with evolving regulatory policy and LDC capabilities. • The IESO continues to collaborate with the OEB and are anticipating future support for upcoming OEB activities where appropriate.