MARCH 21, 2024 Market and Planning Data Engagement **Market and Planning Team**



Today's Discussion

- Communicate the key takeaways from the ISO Markets and Planning Data Jurisdictional Review.
- Address the feedback received from the Engagement Questionnaire and present the current availability status of Markets and Planning data.
- Present the final steps on this initiative.
 - These insights will guide the IESO's future work on data availability and other related initiatives.



Agenda

- 1. Introduction and background of the engagement
- Review activities to date
- Key takeaways from the Jurisdictional Review
- 4. Questionnaire responses and data availability status
- 5. Next Steps



Introduction and Background

- With the settlement agreement for the IESO's 2023-2025 Revenue Requirement Submission <u>EB-2022-0318</u>, the IESO committed to initiate a stakeholder engagement to consider how best it can provide greater access to planning and market data.
- The completed jurisdictional scan (<u>ISO Markets and Planning Data Jurisdictional Review for IESO by PA Consulting</u>) has been used as a starting point.



Engagement Activities To Date

- Launch of Market and Planning Data Engagement on IESO website, including questionnaire for input, and via IESO weekly bulletin newsletter (November 2023).
- Receipt of input from stakeholders (December 2023 January 2024).
- IESO assessment of jurisdictional review and engagement questionnaire responses (February - March 2024).



Jurisdictional Review – Key Takeaways

IESO publishes similar information as other ISOs for market clearing prices, historical & forecast generation and demand, system impact studies and public data requests

IESO makes unit generation data available, unlike other ISOs, which publish only aggregated generation data IESO does not publish energy offers & bids data, and provides less detail for transmission planning and reliability assessments

IESO does not publish a formal process for requesting confidential data or the associated costs



Engagement Questionnaire – Key Takeaways

The IESO has received eight formal feedback submissions, now available on the IESO stakeholder engagement <u>webpage</u>.

Feedback highlights include:

- Granular data is crucial for well-informed project siting and competitive participation in procurements.
- Commercially sensitive data should be protected, subject to market efficiency principles such as transparency and accessibility.
- Clear information on data accessibility is needed as the renewed market goes live.



The IESO's Approach to Feedback Analysis

Questionnaire comments and data requests have been reviewed and categorized into groupings:

DATA CATEGORY	DETAILS
ALREADY PUBLICLY AVAILABLE	The IESO already publishes certain data that was requested. Links to be provided.
NOT CURRENTLY AVAILABLE (MAY BE MADE PUBLIC IN THE FUTURE)	Certain data is not currently available for ready publishing. Upon the completion of initiatives such as MRP and ERP, and as the IESO planning products evolve, it is possible data will be made publicly available or may be made available with limitations or conditions; MRP data will be available in 2025 when the market is launched.
COMMERCIALLY SENSITIVE OR CONFIDENTIAL OR THE IESO DOES NOT OWN	The IESO holds data that may be commercially sensitive or is currently categorized as confidential for physical and/or cybersecurity reasons. In general, this information will not be published.
IESO DOES NOT CURRENTLY HAVE	There is certain data that the IESO does not currently have.



Data Examples

DATA CATEGORY	MARKET DATA EXAMPLES	PLANNING DATA EXAMPLES
ALREADY PUBLICLY AVAILABLE	 Generation Output data* Hourly supply by fuel type report Security constraint report Historic system losses Historical zonal 8760 (hourly) demand 	 Hourly demand forecast, by zone (with APO) Demand forecast at regional/sub-regional and/or transmission station level (typical for regional planning forecasts) Planned transmission projects and expected in-service dates (published in APO) Heat pump info (third party)
NOT CURRENTLY AVAILABLE (MAY BE MADE PUBLIC IN THE FUTURE)	 LMP Congestion Component will be published with MRP Emissions data (hourly) 	 System congestion information and transmission deliverability guidance data (data specific to each procurement will be published as part of the procurements) Emissions forecast (previously published in the APO)
COMMERCIALLY SENSITIVE OR CONFIDENTIAL OR THE IESO DOES NOT OWN	Bid and Offer dataTR awardsEmbedded Generation data	Comprehensive transmission maps showing transmission elements (some maps are already produced with planning products, but subject to certain restrictions)
IESO DOES NOT HAVE	EV chargingLosses by generation type	 Hourly consumption at LDC feeder level (distributor data) EV charging / charger counts

^{*}Some data availability is subject to formatting constraints.



Summary of Questionnaire Comments

Already Publicly Available			Not Currently Available (May Be Publicly Available in the Future)		Commercially Sensitive or Confidential or the IESO Does Not Own		IESO Does Not Currently Have			
Generator Output and Capability Single File	APPrO, PWU	Flows across TX interfaces and interties	PWU	Historical Hourly Net System Load Shape (Not Likely by LDC, Possibly by Region/Sub- region)	ΔPPrO		Historical Energy Offer/Bid Data	Energy Storage Canada	Commercial EV Charger Counts by Zone	APPrO
Demand by Transmission Station/Subregion (Forecast, Peak)	Energy Storage Canada	Planned transmission lines and stations and anticipated completion dates	Enbridge Inc.	Behind the Meter data visibility for IESO and LDC	Energy Storage Canada		Transmission Rights Award Information	Capital Power	Transmission project approvals / status	Enbridge Inc.
Inputs to the Demand Forecast (Number of Years, Period)	APPrO	Transmission information to site new load	Enbridge Inc.	Transmission Related Data: congestion, constraints, expansions, timelines.	Enbridge Inc.		Transmission mapping showing TX elements	Enbridge	Procurement and planning data from Hydro One	Evolugen
Historical Forecast and Actual Price and Demand Data	Rodan Energy Solutions	Procurement and planning data from IESO	Evolugen	Congestion, Shadow Prices	Enbridge Inc.		Embedded Generation Data (Hourly)	APPrO	Expected maintenance / upgrade schedules	Energy Storage Canada
Real-time Generation Data (Hourly)	Capital Power	Heat Pump Demand Profiles	APPrO	Transmission, load, congestion and planning data necessary to invest in new builds and repowering projects	Enbridge Inc.					
APO, AAR and Public Report Data	Evolugen	Zonal transmission constraints	Enbridge Inc.	Emissions Data	Enbridge Inc.					
Historic information on losses	Enbridge Inc.			EV Demand Profiles	APPrO	1				



Next Steps

- The IESO will publish a document with links to requested data already publicly available, and some comment on other data, by the end of April.
- The IESO will explore further with participants the potential of making bid and offer data public.
- The IESO will consider the best way to release data that is not currently in the public domain, but has been committed to be published or could be made available, with the goal of providing more detail on planning information.



Thank You

<u>ieso.ca</u>

1.888.448.7777

customer.relations@ieso.ca

engagement@ieso.ca



@IESO Tweets



linkedin.com/company/IESO

