

ONTARIO ENERGY BOARD

Market Surveillance Panel

State of the Market Report 2023: Executive Summary

September 2024



Ontario

**Ontario
Energy
Board**

EXECUTIVE SUMMARY

The Market Surveillance Panel (MSP or Panel) serves as the market monitor for the Ontario wholesale electricity markets, which are administered by the Independent Electricity System Operator (IESO). Mandated to monitor, evaluate and report on the efficiency and competitiveness of the wholesale electricity markets, the Panel is an integral part of the oversight framework. The Panel provides independent evaluation and analysis of the wholesale electricity markets – which includes authoring public reports and making recommendations to other oversight authorities in alignment with its mandate. Appendix A provides a more detailed description of the Panel’s role. The work of the Panel is supported by the Market Assessment Unit within the IESO, in accordance with a Protocol between the IESO and the Ontario Energy Board.

The *State of the Market Report 2023* reviews the performance of the IESO-Administered Markets (IAM) in the calendar year 2023. The main findings of the review include the following:

- The all-in cost of electricity decreased slightly from \$23.6 billion in 2022 to \$23.4 billion in 2023. Government cost mitigation programs reduced the all-in cost to Ontario consumers by \$5.8 billion in 2023, down from \$6.2 billion in 2022. The all-in unit cost of electricity fell by 0.7% from \$162/MWh in 2022 to \$161/MWh in 2023, while Ontario demand slightly decreased from 145.4 TWh in 2022 to 145.2 TWh in 2023 (see also, Chapter 3 – Market Outcomes).
- Ontario Power Generation Inc. (OPG) and its subsidiary, Atura Power, collectively maintained a dominant market share by controlling 51% of the province’s generating capacity and 68% of price sensitive generating capacity¹ - a figure unchanged since last year’s report. Ontario continues to rely upon regulatory mechanisms and the Must Offer Conditions Agreement to contain the exercise of market power by OPG and its subsidiary and to promote dispatch efficiency (see also, Chapter 4 – Competitiveness and Contracting).

¹ Price-sensitive capacity refers to most hydroelectric (excluding self-scheduling), gas/oil and biofuel generation within the IAM. Market shares include capacity at generators where OPG has the majority ownership interest and operational control.

- There continues to be a dichotomy between the relative economic efficiency of Ontario’s import and export trade. In previous reports, the Panel has highlighted the systemic differences between hour-ahead pre-dispatch (PD-1) prices, which facilitate intertie scheduling, and real-time prices. Imports scheduled in the hour-ahead pre-dispatch are provided an Intertie Offer Guarantee (IOG), which ensures the import receives the higher of its offer price or the real-time price. In contrast, exports pay the real-time price, which may be higher than their bid price. The IOG was implemented prior to the start of the market in 2002 to “encourage imports, helping to ensure adequate supply in Ontario”.² The Panel is concerned that the persistent difference between the PD-1 price, and the real-time price combined with the price assurances provided to imports but not exports through the IOG, contributes to the relatively higher percentage of scheduling inefficiencies for imports. The planned implementation of the Market Renewal Program (MRP) will provide an opportunity to review the trade-off between the potential reliability benefits and the scheduling inefficiency costs of the IOG. The Panel recommends that the IESO conduct this review following the implementation of MRP (see also, Chapter 6 – External Transactions).

Recommendation 2024-1-1

The Panel recommends that the IESO review the benefits and costs of continuing the Intertie Offer Guarantee (IOG) in the real-time market after the deployment of the Market Renewal Program, once sufficient data is accumulated, but no later than one year after implementation. The review should consider imports arranged outside of the Day-Ahead Market and quantify the extent to which the IOG:

- ***enhances the reliability or adequacy of the electricity system;***
- ***contributes to inefficient import schedules; and***
- ***dampens real-time market prices thus contributing to other potential real-time scheduling inefficiencies.***

² See the [IESO Quick Takes, Intertie Offer Guarantee, 2007](#).

- The IESO issued three Energy Emergency Alert Level 1 (EEA-1) advisories in 2023,³ largely precipitated by weather conditions and unplanned nuclear outages. EEA-1 advisories serve as notice to neighbouring jurisdictions that supply and demand conditions are such that additional measures (such as limiting exports or calling on emergency energy) may be needed if those conditions persist or worsen. Prices that accurately reflect system conditions can play an important role in encouraging efficient and effective responses from market participants under extreme supply and demand conditions. These responses also support grid reliability. The Panel notes that wholesale market prices understated the relative scarcity of supply during the three EEA-1 advisories. The Panel further notes that following the activation of Hourly Demand Response (HDR) resources, wholesale market prices were well below the HDR bid prices (the highest price these consumers are willing to pay before having their consumption curtailed) as an indication of how prices understated the relative scarcity conditions (see also, Chapter 3 – Market Outcomes).
- The IESO is embarking on a new Resource Adequacy framework with a regularized publication of long-term planning outlooks and an attendant *Annual Acquisition Report* (AAR). The 2022 AAR sets out the need for new-build capacity totaling 2,500 MW by 2027 and another 1,500 MW by 2030 (4,000 MW total).⁴ In 2023, the IESO secured 1,463 MW (winter contract capacity) and 1,424 MW (summer contract capacity) of new supply through its Expedited Long-Term Procurement (E-LT1) and Same Technology Upgrade Solicitation, and articulated the need for future procurement efforts through two additional long-term RFPs (LT1 and LT2). Many of these projects have faced the challenge of securing the necessary municipal support in order to proceed and this could affect both the level of certainty and ultimate outcomes of these efforts (see also, Chapter 5 – Investment and Long-Term Procurement).
- Public policy has the potential to influence the long-run dynamic efficiency of any market. A wide range of policy choices ranging from technological selection to major infrastructure investment can affect the construct of the long-run average cost curve. This has been the case over the entire span of the historic

³ Under NERC Emergency Operations standard EOP-011-1, an Energy Emergency Alert Level 1 situation is defined as follows:

1. *EEA-1 — All available generation resources in use.*

Circumstances:

1. *The Balancing Authority is experiencing conditions where all available generation resources are committed to meet firm Load, firm transactions, and reserve commitments, and is concerned about sustaining its required Contingency Reserves.*
2. *Non-firm wholesale energy sales (other than those that are recallable to meet reserve requirements) have been curtailed.*

⁴ See the [IESO's 2022 Annual Acquisition Report](#), pages 39-40.

development of Ontario's electricity system. The Panel has observed that the IESO's procurement efforts have taken place alongside an increasingly active trend of Ministerial directives and policy measures at both the federal and provincial levels. Over the course of 2023, the IESO received 15 directives or letters from the Minister of Energy, some of which set the stage for both long-term capacity procurement and exploration for the potential of non-competitive procurements of both generation and storage resources of material size. In some cases, such as the government's announced nuclear building programs spanning the additional small modular reactors at Darlington and the Bruce Power Expansion, the ultimate source of funding and structuring of these projects remains presently unclear and potentially material to the future competition and efficiency of the electricity markets (see also Chapter 5 – Investment and Long-Term Procurement and Chapter 9 – Policy, Government and Community Influences).

- The Panel more specifically notes where environmental policy measures of the “energy transition” are now presenting a potential future impact on long-term procurements in the electricity market. At the federal level, the discourse over the proposal Clean Electricity Regulations also poses the potential to influence both the value of fossil-based generation investment, and the Ministerial-directed provisional guarantees against this policy risk afforded to natural gas generators in the IESO's procurement program (see also, Chapter 9 – Policy Government and Community Influences).⁵ In this year's report, the Panel also notes the increased utilization of Ontario's natural gas fleet and its increased role as a price-setting resource, in the face of lower natural gas prices (see also, Chapter 3 – Market Outcomes).

As noted in Chapter 10 – Future of Ontario Market Design, the Panel is increasingly turning its attention towards the implementation of MRP planned for mid-2025. The Panel has made numerous past recommendations for improvements to market efficiency, which directly intersect with the stated objectives of MRP's constituent design components. In this context, many of the observations in this *State of the Market Report 2023* set the stage for future analysis by the Panel, as Ontario embarks on the largest, single stepwise change to the wholesale electricity market since its inception.

⁵ A natural gas facility can suspend operations for the remainder of the contract term while retaining payments under the E-LT1 and LT1 contracts in the event that the project is, despite commercially reasonable efforts, unable to comply with such laws or regulations (see also, [Ministerial Directive to the IESO, Order-in-Council 1348 /2022, October, 6, 2022](#), Sections 2 g. and 9).