

Memorandum

To: Strategic Advisory Committee

From: Barbara Ellard, Director, Resource and System Adequacy

Date: June 26, 2024

Re: IESO Business Update – Resource Adequacy

The following provides an update to members of the Strategic Advisory Committee (SAC) on the IESO’s Resource Acquisition activities that are part of the IESO’s Resource Adequacy Framework.

Summary

The IESO continues to leverage the Resource Adequacy Framework (RAF) to meet emerging system needs. The IESO’s Long-Term (LT) and Medium-Term (MT) procurements will be executed in a cadenced manner and will work alongside the RAF’s other mechanisms, such as programs and the Capacity Auction.

The next long-term procurement is the LT2 RFP, which will have two streams – energy and capacity. The energy stream will focus on the acquisition of approximately 5 terawatt hours (TWh) (or about 2,000 MW) of energy-producing resources by 2030. The capacity stream will seek to acquire between 500 and 1,000 MW of capacity resources by 2031. In addition, the IESO has proposed launching a procurement for 500 to 1,000 MW of long-lead time resources to be in service by 2034/35.

Looking further ahead, the IESO is also forecasting a target of roughly 1,500 MW of additional new supply for each of its LT3 and LT4 energy procurement streams. This forward guidance

forms the key element of the IESO's cadenced procurement approach that is meant to offer ongoing investment opportunities vital to meeting growing system needs. In addition to Long-Term RFPs, the IESO will run Medium-Term RFPs that will offer five-year terms with a primary goal of re-committing existing resources with expiring contracts.

LT1 RFP

The LT1 RFP has now concluded with the acquisition of 10 battery storage facilities for a total of 1,784 MW and 3 non-storage facilities (natural gas and on-farm biogas) for a total of 411 MW. More information can be accessed here <https://www.ieso.ca/-/media/Files/IESO/Document-Library/long-term-rfp/LT1-RFP-results-table-20240509.pdf>

LT2 RFP Engagement

The IESO submitted its Report Back to the Minister on the LT2 RFP and continues to engage on the procurement.

The IESO has communicated to stakeholders that the energy stream will proceed with the Enhanced Power Purchase Agreement. The IESO has made a number of changes to the model, including an option to mitigate some of the identified risks of day-ahead to real-time operations.

On June 6, 2024, the IESO received a letter from the Ministers of Energy and Agricultural and Rural Affairs that provides guidance for siting new energy projects. The key points are:

- No new energy projects may be built in specialty crop areas
- Ground-mounted solar generation cannot be sited on Prime Agricultural Areas
- All other resource types may only locate on Prime Agricultural Areas if they have received both Municipal Council approval and municipal approval of an Agricultural Impact Assessment; and
- Rated criteria points will be awarded for projects that avoid Prime Agricultural Areas.

The letter can be found here: <https://www.ieso.ca/Corporate-IESO/Ministerial-Directives>

Concurrent with announcing the results of the LT1 RFP, the IESO confirmed that a capacity stream will be added to the LT2 RFP, targeting 500-1,000 MW of non-emitting, capacity-based resources (e.g. storage, bioenergy, hydrogen) to be in-service by 2031. This is in addition to the

5 TWh (approx. 2,000 MW) of energy producing resources that have been the primary focus of LT2 RFP discussions to date. The capacity stream of the LT2 RFP is expected to be nearly identical to the LT1 RFP in its design.

The IESO is continuing with frequent engagement on both Energy and Capacity streams, as well as the Long-lead time Procurement. The IESO continues to hold tailored webinars for Indigenous communities and municipalities, and hosted joint sessions with Ontario's ministries, including the Ministry of Natural Resources and Forestry (MNR), the Ministry of the Environment, Conservation, and Parks (MECP), Ministry of Municipal Affairs and Housing (MMAH) and Ontario Ministry of Agriculture and Food (OMAFRA) on various issues impacting the siting and development of energy resources.

MT2 RFP

The IESO has proposed accelerating the MT2 RFP to run it ahead of the LT2 RFP. The MT2 RFP will have an energy and a capacity stream as well and will utilize a capacity contract and Enhanced PPA. The eligibility for MT2 RFP will be for resources expiring no later than 2029.

Capacity Auction

On May 1, 2024, the summer 2024 obligation period began for 45 participants that secured a portion of the approximately 1,850 MW of capacity obligations awarded in the November 2023 Capacity Auction. This obligation period is the first one under the Auction's newly designed performance assessment framework. As part of the new framework, Capacity Auction participants participated in a week-long testing period which concluded on May 31. Assessment of these tests is expected to be concluded in July.

Through internal implementation activities for the 2023 Capacity Auction enhancements, some minor drafting issues were discovered in the Market Rules and Market Manuals. The IESO is working with stakeholders and the Technical Panel to correct the issues.

Meanwhile, the IESO is continuing to work with stakeholders to develop plans to prepare the Auction for a period of growing capacity targets, increased participation and reliable resource performance. These enhancements will help ensure the Auction can adapt to evolving market

conditions and continue to be a competitive, transparent and accessible marketplace for a diverse range of capacity resources.

Small Hydro Program

The IESO is working with a number of eligible hydroelectric facilities on their applications and contracts. The IESO received a Directive on May 9, 2024 to expand the eligibility of the program to include facilities that are contractually aggregated and larger than 10 MW under a single contract. Such aggregated facilities were not eligible under the original Directive. The IESO is working on updating the rules in response to the Directive.

Northern Hydro Program

On May 8, 2024, the IESO received a letter from the Minister of Energy asking the IESO to build on its October 2022 report to the Minister regarding re-contracting opportunities for large (>10 MW) hydro facilities. The letter asked the IESO to continue engaging with stakeholders to initiate the development of a Northern Hydro Program (NHP). The purpose of the NHP is to re-contract non-rate regulated hydroelectric facilities over 10 MW, creating a program that considers social value and capital investment requirements, while delivering ratepayer value. In preparing a report on the draft design for the Ministry by the end of 2024, the IESO will leverage lessons learned from the development of the Small Hydro Program.