

Feedback Form

2024 Annual Planning Outlook – April 23, 2023

Feedback Provided by:

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To promote transparency, feedback submitted will be posted on the Long-Term RFP engagement page unless otherwise requested by the sender. If you wish to provide confidential feedback, please mark "Confidential".

Following the APO Information Webinar on April 23, 2024, the Independent Electricity System Operator (IESO) is seeking feedback and comments from stakeholders on the items discussed. The webinar presentation and recording can be accessed from the [engagement web page](#).

Please submit feedback to engagement@ieso.ca by May 7, 2024.

Future Considerations

Topic	Feedback
Do you have any comments regarding information to include in future outlooks?	During the webinar it was discussed that the IESO does not consider pricing. Given that the price of a commodity impacts the degree to which it is demanded and considering that the APO forecasts demand, this seems like a significant omission.

General Comments/Feedback

To be clear, the following comment pertain to the Annual Planning Outlook and the Annual Acquisition Report, not just the presented material at the webinar on April 23, 2024. City of Ottawa Comments are as follows:

1. The City of Ottawa has the following comments about the strengths and weakness of the report:
 - a. In 2023, system needs included discussion of resource acquisitions in the ELT-1, and LT1 procurements. The City of Ottawa respectfully suggests that clean energy resources, such as those considered in the LT2 RFP procurement also be included. This may not be required from a system perspective until roughly 2028, but from a GHG emissions mitigation perspective it would be preferable for them to be procured sooner. The City of Ottawa therefore recommends that clean energy resources be brought on stream, whenever it feasible to do so, as a matter of practice to further mitigate GHG emissions as opposed to waiting for system needs to arise.

With respect to report improvements, we recommend clarifying if the LT 2, 3 and 4 procurements are replacing retiring resources and if so to what degree. The City of Ottawa would be pleased to review a clarification of this issue before its published.
 - b. The way in which the need for capacity vs. the need for energy is determined was only briefly discussed in a section on potential unserved energy on page 51. This section was unclear and City of Ottawa staff were unable understand it. Capacity is a large cost for electricity systems, and it is notable that there is electricity sector discussion that it is sometimes over-procured. A more fulsome discussion of capacity requirements could present environmental and cost opportunities.
 - c. The outlook does not attempt to look at trends around demand and supply in neighboring jurisdictions. Traditionally, this approach has been appropriate, but in the context of electrification happening globally, it needs to be re-considered. We note that Hydro Quebec and the PJM interconnection are expressing concerns about

resource adequacy. Knowing market conditions and forecasts in neighboring jurisdictions can help inform decisions on the IESO's planned cadenced procurements.

2. Consideration of potential policy instruments:
 - a. The APO laudably recommends the Distributed Energy Resources (DER's) can be a useful resource for the LT2-4 procurements. Virtual net metering is a policy instrument which can advance DER market penetration.
3. Demand issues for consideration:
 - a. The majority of the Outlook does stellar work estimating demand in a transitional period which is making forecasting a great challenge.
 - b. Data centres appear to be using more power for artificial intelligence applications. Discussion of this has been very recent with some large, estimated demand increases. This is an example of existing services which increase their consumption as opposed to a new service. The IESO may wish to consider how markedly increasing or decreasing loads on existing services are captured as demand drivers.
 - c. The City of Ottawa continues to advance the electrification of its municipal bus fleet and extension of the electrified Confederation light rail line.
4. Comments concerning transmission infrastructure:
 - a. It was not clear how the IESO prioritizes transmission development related to new generation. An optimized approach which enables the best combination of well-sited generation and transmission or distribution which serves it should be employed. This implies possible involvement by prospective generators which may not have projects in Ontario at this time but who may have valuable insights into the transmission or distribution infrastructure which they require.
5. Regarding the quality of assumptions and possible additional initiatives
 - a. Except for the suggestions made throughout this feedback, and to the extent of our knowledge, the City of Ottawa feels that the assumptions, inputs and methodology are reasonable. In the Overview of Ontario's Transmission Interfaces and Interties and Transmission Data, the IESO needs to clarify if the repairs to the Ontario – New York at St-Laurence intertie are complete.
 - b. The City of Ottawa would like to see a new focus on low carbon solutions for week-long periods of high demand and low renewable generation. These longer demand periods are often cited as the reason for the use of combustion-based generation, currently in the form of natural gas. While the need to ensure system stability is essential, it is also essential that work begins to address this issue, which is arguably our largest obstacle to obtaining net zero electricity in Ontario. Although aspects of the Enabling Resources Program have enhanced the delivery of capacity resources, long-duration capacity requires a specific focus. The IESO should establish a working group on this issue which would be empowered to establish pilots or small procurements related to long duration energy storage or long duration curtailment of demand. Additionally, market reform or renewal activities need to consider alleviating the

impact of protracted high demand periods. The City of Ottawa imagines initiatives related to procurement of long duration storage, changes to the ICI program, changes to capacity auctions and renewal of the Class B rate structure which could be undertaken. These are all actions which could be considered by a well-constituted working group as supported more broadly by the IESO in the implementation of feasible recommendations.

6. General comments:

The City of Ottawa was involved in many IESO engagement activities in 2023, including discussion of the E-LT1 RFP, the LT1 RFP the LT2 RFP and Ottawa Regional planning. Through these engagements, issues related to clean energy credits and electricity decarbonization have also been discussed. The informative update provided by the Annual Planning Outlook (APO) provides a good context to review this past year's activities.

The City of Ottawa is a tier one municipality with a population of approximately one million. It is comprised of rural, suburban, and urban areas, each seeing significant growth. In 2019, the City of Ottawa declared a climate emergency and in 2020, Council approved the City's integrated community energy transition plan, Energy Evolution.

The Energy Evolution plan relies heavily upon electrification and a clean energy supply to reach corporate and community net zero targets. The City of Ottawa therefore take a strong interest in issues around Ottawa's electricity supply.

The following are the City of Ottawa's general comments related to the APO report and the associated webinar.

- a. In the context of decarbonization pathways, it will be natural for the IESO to look at renewable fuels (such as RNG for example). The IESO needs to be aware that there will be other calls on renewable fuels for decarbonization and be circumspect about relying on them heavily. Municipal energy plans and projects arising from them can help to inform the IESO on this issue. Even biofuels which have been available for some time are the subject of ongoing research. As municipalities are responsible for waste streams which feed these resources, we can provide insights.
- b. There is uncertainty if the GHG emissions profile includes the sale for clean generation attributes (or clean energy credits) outside the electricity sector. Any sale of clean attributes outside the electricity sector will negatively impact the emissions intensity of the electricity system and must be reflected in the data supplied.
- c. The City of Ottawa notes that the IESO appears to be planning to be location and technology agnostic on the upcoming LT-2,3 and 4 procurements. Changing to this hands-off approach has advantages which the IESO should consider. Siting energy resources close to loads will have resiliency benefits and may reduce the need for future transmission reinforcements. Specifying the generation technology, or the generation profile, can ensure that the energy produced aligns more closely with

energy system need. The IESO may wish to consider a location and technology specified approach or generation profile to energy cadenced acquisitions as the energy procurement proceeds into LT's 3 and 4.

- d. Regarding society-wide decarbonization, although it's good to celebrate successful decarbonization through electrification, it's important to remember that emissions reductions cannot be double counted. If an industrial customer makes a substantial emissions reduction through electrification on their side of the meter, they are the rightful owner of these emissions reductions. In the City of Ottawa's direct experience that double counting of emissions reductions is a challenge to assessing emissions. Any discussion of an emissions reduction initiative should be clear as to the rightful owner on the emissions reduction even if the IESO feels they played a role in enabling it.

Thanks again to the IESO's for producing the interesting and informative reports and webinar.