



Meeting Date: July 19, 2023

Submitted by: Michael Di Lullo, CAO

Report No: CAO-21-2023

Subject: Ontario's Growing Electricity Needs

Recommendation:

THAT Report CAO-21-2023, re: Ontario's Growing Electricity Needs be received for information.

Purpose:

The intent of this report is to provide an overview of information that was provided by the Independent Electricity System Operator (IESO) on July 11, 2023 regarding Ontario's Electricity System and growing demands.

Background:

On July 11, 2023, presentation information was provided by IESO for stakeholders specifically in the municipal and indigenous sectors. The intent of the information was to provide an overview of the electricity system and the expected growing demands that the Province will be facing.

There are many factors driving the electricity system needs including strong economic development, decarbonization initiatives, a changing supply mix and evolving consumer preferences (i.e. conversion to electric vehicles).

As illustrated in the first appendix to this Report, over the next 20-year horizon, the supply and demand forecasts show that there will be electricity demand increasing about 2% annually due to economic growth. On top of this demand, there are pressures on the supply side due to nuclear retirements and refurbishments along with expiring generator contracts. As such, overall energy production will be required by end of decade.

Analysis:

Municipalities have a key role in the electricity sector. As outlined in Appendix Two to this Report, there are many ways in which municipalities are involved:

- Ensure electricity planning to ensure a reliable and adequate supply to meet future needs;
- Shape the province's energy transition by providing input into procurement designs and requirements;
- Host new generation, transmission and storage,
- Work with project proponents on the applicable approvals;
- Keep constituents engaged and informed on key decisions.

Long-Term RFP (E-LT1 and LT1 RFP) Overview

To address growing energy needs, the LT1 RFP in addition to the expedited procurement process "the Expedited Process" (E-LT1 RFP) and the Same Technology Upgrade Solicitation for which the deadline for proposals has passed, will combine to procure a target of 4,000 MW. There are 17 Selected Proponents' projects that have been awarded through the E-LT1 RFP Process and these projects are listed on the [IESO website](#). In doing so, 1,176.7 MW of long-term capacity has been secured.

In addition to the E-LT1 process, IESO is moving ahead with a LT1 process aimed to procure new-build resources as well as eligible expansions at existing facilities to meet capacity needs that emerge mid to late 2030s. The IESO expects to procure 2,200 MW from the Long-Term Request for Proposals (LT1 RFP). Proponents unsuccessful in the E-LT1 RFP evaluation process will have the opportunity to re-submit projects into the LT1 RFP. The evaluation and contract award for the LT1 RFP is expected Q1/Q2 2024.

Community engagement and Municipal Council Support Resolution (MCR) will continue to be required for any new proposed projects. A MCR provide an opportunity for communities to understand and evaluate projects and to discuss their impacts/benefits. This also give emphasis to the importance of being fully engaged in the procurement process, helping to build trust between proponents and communities.

To date, there have been no requests from any proponent seeking a MCR from Middlesex Centre. Should this change, staff will bring forward an evaluation report for council consideration

Financial Implications:

N/A

Strategic Plan:

This matter aligns with following strategic priorities:

- Sustainable Infrastructure and Services
- Responsive Municipal Government

As Ontario's Electricity landscape changes, municipalities will play a pivotal role in helping shape the system's future. In order to qualify and put forward proposals to address the growing demand, council input is needed which indicates the importance of engaging and maintaining buy-in from the municipal sector.

Attachments:

Attachment 1: Ongoing Activities to Address Ontario's Growing Electricity Needs, dated July 11, 2023

Attachment 2: Ongoing Activities to Address Ontario's Growing Electricity Needs – Discussion with Municipalities, dated July 11, 2023