Report to: General Committee Meeting Date: December 6, 2022

SUBJECT: Independent Electricity System Operator Expedited Long-Term Reliability Request for Proposals ("E-LT1 RFP") Municipal Support Resolution

PREPARED BY: Jennifer Wong, Sustainability Coordinator, Sustainability & Asset Management, Ext. 2368

RECOMMENDATION:

1) THAT the report "Independent Electricity System Operator Expedited Long-Term Reliability Request for Proposals ("E-LT1 RFP") Municipal Support Resolution" be received; and,

2) THAT Markham City Council support the Alectra Utilities and Convergent Energy and Power proposed Battery Energy Storage Systems at 7970 Markham Road located in Ward 7 and 3430 14th Avenue located in Ward 8 by issuing Municipal Support Resolutions for the E-LT1-RFP in the form shown in Appendix A; and,

3) THAT the Director of Sustainability & Asset Management be delegated the signing authority for any additional Municipal Support Resolutions requested for the E-LT1-RFP or similar on behalf of the City of Markham; and,

4) THAT staff be authorized to do all things necessary to give effect to this resolution.

PURPOSE:
The purpose of this document is to obtain Municipal and Council support for applications and future projects under "Independent Electricity System Operator's ("IESO") Expedited Long-Term Reliability Request for Proposals ("E-LT1 RFP").

Ontario is anticipated to be facing a province-wide energy shortage of 3,500MW due to planned nuclear power generation refurbishments, and the IESO program seeks to increase both energy production and storage capacity to meet the impending demand for electricity.

BACKGROUND:
In 2018, City of Markham Council endorsed the Municipal Energy Plan ("MEP") – Getting to Zero, with the objective of net zero emissions by 2050.

As a leader in municipal energy planning and corporate energy operations, Markham delivers unique projects including:

- Municipally owned central heating and cooling through Markham District Energy, serving over 14 million square feet of buildings in Markham Centre and Cornell Centre; and,

- Partnering with The Atmospheric Fund, Enwave Energy Corporation, and Mattamy Homes to develop a subdivision-wide geo-exchange system that delivers heating and cooling to approximately 310 homes, significantly reducing emissions on a community scale; and,
- Hosting 2.1 megawatts ("MW") of roof top solar, generating approximately $300,000 of revenue per year that is invested in a revolving energy fund; and,
- Piloting home energy retrofit programs such as the Power.House Hybrid pilot program with Alectra Utilities ("Alectra"), Enbridge Gas, Natural Resources Canada and Toronto Metropolitan University (formerly Ryerson University); and,
- Hosting the first municipally-owned Level 3 electric vehicle ("EV") fast charging station at Markham Civic Centre in 2015, and expanding the Level 2 EV charging network in partnership again with Alectra.

According to the draft document "Independent Electricity System Operator's ("IESO") Request for Proposals: For the Procurement of Expedited Long-Term Electricity Reliability Services E-LT1 RFP (revised on November 8, 2022):

> "Ontario is entering a period of emerging electricity system needs, driven by increasing demand, the retirement of the Pickering nuclear plant, the refurbishment of other nuclear generating units, as well as expiring contracts for existing facilities.

To address these needs, the IESO is competitively securing 3,500 MW of capacity through the first Long-Term Request for Proposals ("LT1 RFP") and the complementary expedited procurement process "the Expedited Process" ("E-LT1 RFP")."

In 2022, the IESO released a procurement program for New Build and Eligible Expansion Electricity Resources through the Expedited Long-Term Reliability Request for Proposals ("E-LT1 RFP") to acquire capacity services and meet system reliability needs for commercial operation as early as 2025.

In order to ensure that a proposed E-LT1-RFP project is welcome in each municipality where planned, the IESO has required a Municipal Support Resolution process for proponents to obtain support for their proposed project in the host municipality.

Alectra Requests:

Two requests for Municipal Support Resolutions have been received from Alectra and its business partner, Convergent Energy and Power ("Convergent"), to date (Appendices B and C describe both in further detail); additional proposals may come forward prior to the IESO submission date of December 20, 2022.

Alectra is proposing to integrate Battery Energy Storage Systems (BESS) at two of their existing transformer stations:

1. A.M. Walker Transformer Station property at 7970 Markham Road located in Ward 7
2. Alectra's J.V. Fry Transformer Station at 3430 14th Avenue located in Ward 8

Purpose of IESO Municipal Support Resolution

The purpose of the Municipal Support Resolution is for the proponent to confirm to the IESO that the municipality where the intended project is located is supportive and welcoming of this new infrastructure, it is meant to prevent reversals of decisions such as the Oakville Gas Plant in 2011.

A Municipal Support Resolution provides three points to each proposal which strengthens its ranking against other proposals, but does not guarantee a contract offer to the applicant from the IESO.

Appendix A – IESO Expedited Long-Term Reliability Request for Proposals Municipal Support Resolution is the template to be used to grant all successful proposals with Municipal Support Resolution in Markham.

Previous Experience - IESO Feed-In Tariff ("FIT") Program

From 2012 to 2016, the City of Markham's Sustainability & Asset Management department conducted a similar process to provide Municipal Council Support Resolutions for photovoltaic applications proposed on commercial and industrial properties across the city.

Over 100 applications were approved by Markham Council generating a revenue of approximately $187,500 (HST inclusive). The former minor site plan application fee of $2,450+HST was used to account for staff time to administer the IESO forms from application to Council approval per project.

Similar and updated fees are recommended to be levied for this current process and are discussed in the Financial Considerations section below.

Review of Municipal Support Resolution Requests

Markham is a leader in sustainability, energy conservation, renewable energy and emissions reductions in support of our Net zero emissions by 2050 goal. All requests for Municipal Support Resolutions will be reviewed to determine alignment with the City's strategies, policies and community expectations.

Specifically, requests for Municipal Support Resolutions will be reviewed to determine if the proposals meet the following requirements:

1. Reduce or does not contribute to the increase of community-wide emissions; and,
2. Increase or neutrally impact electricity system reliability; and,
3. Complementary or similar to existing electricity system technologies already in operation within Markham; and,
4. Does not negatively affect the aesthetics of the proposed site and surrounding areas; and,

5. Is not constructed on properties on the Markham Register of Property of Cultural Heritage Value or Interest.

Alectra's proposal for battery energy storage systems at the two sites meets these requirements.

More requests for Municipal Support Resolutions are not expected, but staff are recommending delegating any further requests to the Director, Sustainability & Asset Management to screen against the requirements noted above in case they come forward due to a December 20, 2022 IESO deadline. Proposals that do not meet these conditions will be referred to Council on an exception basis to determine eligibility for a Municipal Support Resolution.

Based on consultation with Planning & Urban Design, By-Law Enforcement & Regulatory Services and Legal Services, it should be noted that the following anticipated issues will need to be addressed by the project proponents later in their project development process:

Category	Description
Industrial Equipment Setback	Should project proposals be located on industrial lands and/or require industrial equipment, applicants must ensure a minimum setback of six meters from the lot line
Urban Design Review	All projects subject to an Urban Design Review will incur an additional fee of $938+HST in addition to the total administration fee below

FINANCIAL CONSIDERATIONS

Proposed Fee for City of Markham Expedited Long-Term Reliability Program Municipal Support Resolutions

In consultation with Planning & Urban Design Staff, a total fee of $5,613.84 (HST inclusive) is proposed and will be applied to each application to reimburse Staff costs for the pre-consultation and application review for Municipal Support Resolutions.

The breakdown of the fee based on anticipated Staff time is as follows:

Administrative Fee	Cost
Pre-Consultation	$775 + HST
Minor Site Plan Application Review	$4,193 + HST
Total Inclusive of HST	**$5,613.84**

HUMAN RESOURCES CONSIDERATIONS

Not applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Supports the BMFT Safe, Sustainable & Complete Community priority, the Greenprint, Markham's Community Sustainability Plan and the Municipal Energy Plan's goal of Net Zero Energy Emissions by 2050.

BUSINESS UNITS CONSULTED AND AFFECTED:
Planning & Urban Design, By-Law Enforcement & Regulatory Services and Legal Services have been involved in this preparation of the report.

RECOMMENDED BY:

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Graham Seaman
Director, Sustainability & Asset Management

ATTACHMENTS:
Appendix A: IESO prescribed form for Municipal Support Resolutions for the E-LT1-RFP
Appendix B: Markham Submission Document - IESO BESS - Alectra and Convergent
Appendix C: Presentation from Alectra describing their two proposed battery energy storage projects