
HALDIMAND COUNTY

Report CAO-03-2023 IESO Battery Storage Proposal – Municipal Support Resolutions



For Consideration by Council in Committee on October 31, 2023

OBJECTIVE:

To provide delegated authority to the Chief Administrative Officer to issue municipal support letters to battery storage proponents who meet an approved set of County criteria.

RECOMMENDATIONS:

1. THAT Report CAO-03-2023 IESO Battery Storage Proposal – Municipal Support Resolutions be received;
2. AND THAT the criteria for issuing a municipal support letter, as outlined in Report CAO-03-2023, be approved;
3. AND THAT authority be delegated to the Chief Administrative Officer to provide a municipal support resolution in the form of a municipal support letter, for battery storage projects approved by IESO, conditional on all criteria being satisfactorily met;
4. AND THAT the Chief Administrative Officer and Chief Financial Officer be authorized to execute the necessary agreements associated with the approved criteria;
5. AND THAT staff report back to Council, outlining the principles and recommendations related to the community support contribution program for battery storage projects.

Respectfully submitted: Cathy Case, Chief Administrative Officer

EXECUTIVE SUMMARY:

Ontario's energy consumption is expected to more than double by 2050 according to the Independent Electricity System Operator (IESO). The IESO has an established strategy to secure a variety of new resources to address short, medium and long term needs in the province. One of the long term strategies is procuring energy storage that will connect to the grid to ensure a reliable energy source for the foreseeable future. To help address Ontario's future electricity needs, the IESO has launched the second in a series of long-term procurements, expected to competitively procure 2,518 megawatt (MW) of capacity. As part of the IESO procurement process, proponents are expected to approach municipalities to obtain support as part of their proposal submission.

The proposed battery storage projects are built by private industry and can have a capital cost ranging from the tens of millions of dollars to hundreds of millions of dollars. It is expected that the full future build out of these facilities could end up with a capital expenditure well over one billion dollars in Southern Ontario.

Attachment 1 to the report provides the company and project names, proposed locations and sizes of the currently proposed battery storage projects. The report is seeking approval of a set of criteria that must be met/agreed to by each proponent in order for the municipality to provide a Municipal Support

Resolution (MSR). The criteria encompass public safety, public consultation, visual aesthetics of the site, community benefit contributions and land use planning. Staff is seeking delegated authority for the Chief Administrative Officer to provide MSR's to current and future proponents of battery storage facilities, if all criteria are satisfied. The IESO has a standard Evidence of Municipal Support document included as Attachment 2, however IESO has indicated that municipalities can provide a different format of support therefore it is recommended that, through delegated authority to the CAO, the municipal support resolution would be provided in the form of a municipal support letter containing much of the same information as shown in the attachment.

BACKGROUND:

Ontario is entering a period of evolving electricity needs, driven by increasing demand, the refurbishment of nuclear generating facilities, and expiring contracts for existing facilities. The Independent Electricity System Operator (IESO) is forecasting that Ontario will be short on power starting in 2025. Under the direction of the Minister of Energy, IESO is undertaking initiatives by competitively securing additional capacity in Ontario through procurement processes from private companies. IESO began competitively securing 3,500 MW of capacity through a Long-Term Request for Proposals (LT1 RFP) and Expedited Process (E-LT1 RFP). The E-LT1 RFP was completed in early 2023. The LT1 RFP which seeks to add approximately 2,518 MW of capacity, is in progress and suppliers have been qualified to respond with proposals by December 12, 2023. The LT1 RFP is intended to competitively acquire capacity to meet system reliability needs from new builds and eligible expansion electricity resources starting in 2027 or earlier, including new build hybrid electricity generation/co-generation and battery storage facilities, registered or able to become registered in the IESO administered markets, larger than 1 MW and which can deliver a continuous amount of electricity to a connection point on a distribution system or transmission system for at least four consecutive hours.

This report is specifically focusing on battery storage facilities within Haldimand County. Battery storage or battery energy storage systems are devices that allow energy to be stored when supply is higher than demand, then released back to the grid when demand is higher than supply. The most popular type of battery is lithium-ion, which is used in smartphones, laptops and electric vehicles. Batteries conserve energy until it is needed, which makes them a reliable and flexible source of electricity supply. In general terms, battery storage systems look like storage or shipping containers situated on concrete pads, but also include several additional components, such as air conditioning components, electrical controls and wiring, inverters, medium voltage transformers, gravel internal access roads, a small transmission substation and potential garage and operations or maintenance buildings. The storage system is connected to a transformer before connecting to the local distribution system or provincial grid.

As part of the IESO RFP process, proponents must meet an extensive list of requirements, one of which is seeking municipal support. As part of the LT1-RFP process, IESO has determined that a Municipal Support Resolution (MSR) is a weighted criteria for a company seeking to develop a battery storage facility. In other words, the company will receive additional points in the RFP evaluation process if they provide a letter of support from the municipality where the proposed battery storage system will be located. If a municipality does not issue an MSR it does not necessarily mean that the project won't be successful in the RFP process.

IESO has set aggressive timelines for the procurement of new and expanded energy solutions. The table below shows the timeline constraints for proponents.

LTI Milestones

Milestone	LT1
Qualified Applicants Announced	August 23, 2022
Draft RFP and Contract Posted	
Deliverability Test Submissions Deadline	June 2023
Final RFP and Contract Posted	September 29, 2023
Deliverability Test Results	September 18, 2023
Proposal Submission Deadline	December 12, 2023
Contract Offer Announced	Q1/Q2 2024

To date, 6 companies have reached out for support resolutions from Haldimand County as they seek to develop battery storage systems across multiple sites in the municipality. Haldimand County seems to be one of several preferred areas across the province, presumably due to the existing transmission lines that allow energy to be transmitted directly to northern areas of the province. The first company to reach out was Boralex who was successful through the Expedited LT1 RFP process that IESO has already closed. The Boralex project sought 251MW of capacity and the company is currently preparing to submit planning applications. Five new companies have approached the County with respect to the current RFP process, collectively seeking 2,049MW across six locations. Attachment 1 outlines the five proponents including the site locations and MW capacity being sought through the RFP for each project.

The main purpose of this report is to seek Council approval to provide MSR's to each proponent through delegated authority to staff. The intent is to outline a number of specific criteria that the County will require be met by the proponent, many in the form of one or more executed agreements, in addition to the numerous requirements of the IESO, and that specifically benefit the local municipality over the course of the operations which are estimated at approximately 20 years.

ANALYSIS:

The Provincial government recognizes that support from local communities is vital to new-build energy projects and expects proponents to engage local communities to seek their support for the proposed projects. The Province's Green Energy Repeal Act in 2018 gave powers back to municipalities regarding how land use for renewable energy is regulated and approved in Ontario, including restoring municipal siting authority under the Planning Act over new proposed projects (i.e. zoning and site plan control). In addition to this, the Minister of Energy has placed emphasis on municipal council support of projects proposed on sites that are located within their boundaries through avenues such as the MSR. The direction from the Minister is for IESO to give preference to projects that obtain a MSR from municipalities supporting a proponent or counterpart with a proposed project located in that municipality, separate and apart from that municipality's permitting and regulatory requirements.

MSRs do not exempt projects from going through the required Environmental Assessment (EA) and planning processes, which is outlined in more detail below. If a project fails to meet the standards of either, the project cannot move forward. The following potential concerns will be addressed through the EA process:

- cultural heritage assessment,
- natural heritage assessment,
- noise assessment (to demonstrate provincial sound limits can be complied with),

- land use planning, and
- archaeological assessment (including engagement with First Nations).

Additionally, matters such as road impacts, visual impacts, and the development process will be addressed through the EA.

Planning Considerations

Although power generation and the types of energy storage projects approved for use in Canada fall under provincial jurisdiction, municipalities still play a critical role in deciding where new electricity resources go. That role is of most impact via a municipality's zoning bylaw. In this regard, the first planning consideration is that of land use permissions. Haldimand County's Zoning By-law HC 1-2020 (By-law), does not specifically define the use of battery storage. However, as-of-right permissions for the use are captured under a series of provisions in the By-law as follows (underline emphasis added):

- battery storage fits under the broad definition of "public utility installations (PUIs)" in section 3 of the By-law. PUIs are defined as "...*a building, plant, works, equipment or infrastructure used by the County, a conservation authority or an entity operating within a regulated industry that has been given the express right and subsequent legal duty to supply the general public with a product or service such as natural gas, electricity, public transit, rail service, communications / telecommunications, cable television, drainage, sewage or waste collection and disposal services or water*"; and,
- section 4.62 of the By-law sets out that PUIs are permitted in all zones with very few limitations (i.e. wetlands and natural hazard areas) and scoped development criteria (i.e. limits on outdoor storage). Each facility would be required to meet the provisions of the applicable zone as it relates to setbacks, building height limits, etc.

Based on the above, site specific or general zoning amendments would not be required to establish battery storage facilities across the majority of land use zones.

A second planning consideration is that related to site plan control. While the majority of land use zones in the County are subject to site plan control, thereby requiring a site plan application review process, the Agricultural (A) zone is exempt. The significance of this exclusion rests in the fact that a number of the current proposals would be on lands that currently contain the A zone. In these situations, there is no legal authority for staff to require a detailed technical site plan review process under the Planning Act. The absence of such a process is of concern to staff as it could remove the ability to review and regulate access, grading / drainage, stormwater management, lighting, and other key public interest matters. To address this, staff is proposing to amend the County's Zoning By-law as part of the upcoming update (in December) to add battery energy storage system developments as a land use that is regulated by site plan control.

It is expected that there will be a number of local benefits to supporting battery storage facilities within the municipality, including:

Assessment Revenue – Although staff is not yet fully aware of the MPAC assessment value or classification of these projects, it is anticipated that over the course of their life, the projects will provide reliable, ongoing contributions to the municipality's tax base while requiring minimal municipal services.

Local Economy – during construction these projects are anticipated to create local jobs. In addition, increased electrical capacity contributes to the economic viability of the area and may assist in the attraction of new or expanded business. The chart below is a rough estimate, provided by the proponents, of expected job creation during the construction phase and on a permanent, ongoing basis.

Proponent	Construction Stage Jobs	Permanent Jobs	Comments
Aypa	200-300 FT jobs	6 FT	Construction phase approximately 3 yrs.; FT permanent jobs for a 20 year period
Atura	Up to 150	12	Construction phase approx.. 2 yrs.
Capstone	50-75	2 FT	
NRStor	500 FTE	>700 person years of employment	Construction phase expected to be 2-3 years; permanent jobs include electricians, security and groundskeeping
Samsung	110	1-2	

Note: The variability of the information in the table above indicates that there are different interpretations of the job creation. For example, some companies may consider job creation during the construction phase to include transportation, third party suppliers, etc. while others may have only included contractor employees through direct contracted services.

Construction Revenue – one-time and building permit fees would be applicable to every building or structure (including the container units) and would be charged on a per square metre basis in line with the nature and size of the facility. There is a potential for some development charges but until the exact construction plans are known it is difficult or predict how significant these may be. In simple terms, the larger the facility, the greater the DC and permit value will be.

Environmental Impacts – these projects will help to reduce Ontario’s emissions by limiting the need to run natural gas generators during times of peak loads. They will also contribute to provincial grid resilience and allow integration of existing renewable energy infrastructure, potentially avoiding the need to build new transmission infrastructure in the future.

Community Benefit Agreement – as a condition of local support, each proponent will be required to enter into a Community Benefit Agreement with Haldimand, which would result in significant financial contributions to the municipality over the next 20+ years. (further described below)

Specific to Haldimand County’s support of battery storage systems on lands within Haldimand, it is reasonable to tie various requirements to the MSR to ensure the Haldimand community interests are protected and Haldimand is receiving value relative to the project being located within municipal boundaries. The fact that the system is tied into existing transmission corridors located on County lands (primarily road allowance) demonstrates the reasonableness in expecting a community benefit from the proponents in addition to other municipal revenue that may be generated. Additionally, it is beneficial to have approved criteria to rely on to allow for consistency among all proponents. Staff has indicated to each of the proponents engaged to date, that County established criteria will need to be met before a MSR will be provided. The criteria staff are recommending for Council approval is outlined below.

1. Evidence of Community Engagement

Community engagement is already a requirement of the IESO RFP process. Engagement includes:

- Creation of a public website that will host the proponent’s Community Engagement Plan, including notice of public meeting(s)
- Evidence of at least 1 public meeting with each local community in which the project is proposed to be located prior to submission of the proposal
- Evidence that the local municipality was notified of the public meeting(s).

Proponents are also required to consult with a number of regulatory bodies to secure various permits and approvals including: Ontario Ministry of Energy, Northern Development and Mines; Ontario Ministry of Environment, Conservation and Parks, the IESO, Electrical Safety Authority, Local Conservation Authorities and Public Utilities (Hydro One).

Despite the fact that community engagement is built into the RFP, staff believe the County should independently confirm the public consultation process within the County has been met. In doing so, staff will ensure that each proponent has provided notification to the municipality of the IESO required community engagement or public meeting for their specific project within Haldimand County. Evidence may be in the form of email or other written correspondence addressed to the Chief Administrative Officer or designate.

2. Fire Plan acceptable to HCFD

With respect to the risk of fire and public safety, most proponents will establish a fire and safety plan to mitigate any loss. To ensure that the risk of fire is mitigated and public safety upheld in a satisfactory manner, staff recommend that the proponent agrees to submit a fire safety plan to the municipality that is acceptable to the Haldimand County Fire Department. Any training related to the execution of the safety plan would be administered by County staff (e.g. Fire Safety & Training Coordinator).

3. Location and site plan – meets all municipal planning requirements

Although there are already several planning criteria that exist as part of the IESO regulated process (the EA process in particular), it is recommended that the requirement to meet all County planning requirements be reiterated as part of the conditions in providing a MSR.

4. Commitment to aesthetically pleasing visual barriers in consultation with the County

Since the composition of a typical battery storage facility may be considered visually unappealing, it is recommended that the proponents be required to provide a written commitment to work with the municipality on a visually pleasing barrier to the site where necessary, to allow the site to blend in with the surrounding natural area. This commitment can be further implemented through the aforementioned site plan review process.

5. Road Use Agreement

All proponents will be required to commit to entering into a road user and maintenance agreement, ensuring that affected roads are maintained to previous standard, should they be successful in the IESO RFP process. This would include both pre and post condition surveys, as necessary, conducted by the developer and reviewed/confirmed by County staff.

6. Community Support Agreement

Each proponent will be required to commit, prior to being issued a MSR, to provide an annual monetary contribution, per megawatt, over the life of the project. This commitment would be in the form of an executed agreement indicating that, if successful in the IESO RFP process, they agree to the annual payment terms. Staff are aware of other municipalities in Southwestern Ontario who have entered similar agreements requiring a financial contribution and have considered their approach as part of the report recommendations. It is staff's position that in addition to any assessment revenue that is received, these projects will benefit significantly from the ability to use municipal land for energy transmission and collection and that there should be further financial compensation provided to the municipality in this regard.

More details of this commitment are outlined under the Financial / Legal Implications section of the report.

7. Litigation Matters

It will be important to include criterion that addresses litigation or associated litigation matters to protect the future interests of the municipal corporation. Staff will ensure that there are no existing legal or conflict resolution matters pertaining to the proponent and the County, related to similar types of projects or activities (i.e. energy projects). If the proponent does not satisfy this element of the criteria, legal advice will be sought by the County in order to confirm if a municipal letter of support should be issued or denied.

The proponents are at various stages in preparing their proposals for submission to the IESO. With the RFP deadline approaching, it is key to have the MSR's in place in the coming weeks. Staff is recommending that Council delegate the issuance of a MSR in the form of a project specific Municipal Support Letter to the Chief Administrative Officer for current and future battery storage facility proponents once the municipal criteria outlined within the report has been satisfied.

Delegating the issuance of municipal support letters to the Chief Administrative Officer for battery storage systems will streamline and accelerate the process for both the County and the proponents. The delegation of authority is not being requested at this time for non-battery storage projects since these may vary in nature and are not expected to be numerous. Should other types of energy storage proposals come forward that require municipal support, staff would report back to Council to seek direction (i.e. hydrogen storage).

Should delegated authority be provided, staff will work to finalize the necessary agreement(s) tied to the Haldimand criteria and further engage each proponent. Once all necessary agreements and commitments are executed and/or confirmed, the CAO will provide a municipal support letter from Haldimand County. Staff will report back to Council periodically to advise of the status of support letters for current and new proponents.

FINANCIAL/LEGAL IMPLICATIONS:

The Community Support Agreement would provide the following benefits to Haldimand:

1. The proponent will make an annual community benefit contribution to Haldimand County in the aggregate amount of \$1,100/MW of Project Contract Capacity for the duration of the agreement with the IESO for each Project, up to a maximum amount of \$300,000 per year per project. The Community Benefit Contribution shall be increased annually by an amount equal to the escalation factor received by the Long-Term Reliability Project Entity under its Power Purchase Agreement and the maximum would be adjusted accordingly.
2. The proponent shall be responsible for compliance with all applicable laws in respect to the project, including Federal and Provincial legislation, and shall indemnify and hold the municipality harmless for any breach thereof.
3. The proponent will obtain approvals in the normal course from Haldimand where Haldimand is the governing or approval authority (i.e. Planning Act, Building Code, Fire Code, Drainage Act, Municipal By-laws, etc.). Nothing in the Agreement affects the authority of Municipal officials or decision makers (Chief Building Official, Fire Chief, Council etc.) from enforcing and exercising their authority and discretion under applicable law, acting reasonably.
4. Other criteria related to the submission of a fire plan, road use and a commitment to address visual aesthetics would be captured within the agreement or may be completed as a separate agreement, prior to a municipal support letter being issued.

The proposed Community Support Agreements would result in meaningful financial contributions to the Municipality over the next 22 years. However, it is also noted that the Community Benefit

Contribution is only payable by each proponent if the respective project reaches commercial operation, as confirmed by the IESO.

Staff will work with legal to develop the necessary agreements.

Staff propose to report back to Council with respect to the status of the current proponents as well as to seek approval related to establishing a reserve or reserve fund to accumulate annual payments and to determine the principles of use, with allocation and distribution of the funds to be at the sole discretion of the municipality.

STAKEHOLDER IMPACTS:

If delegated authority is not provided to staff to issue municipal support letters, each current and future proponent will be required to delegate to Council to seek individual support. As each project has many similarities, and since the suggested criteria along with RFP requirements addresses other aspects of importance, staff are suggesting that it would be more efficient for both the County and the proponents to proceed through a delegated authority approach.

REPORT IMPACTS:

Agreement: Yes

By-law: No

Budget Amendment: No

Policy: No

REFERENCES:

1. The IESO website is an excellent resource on electricity and energy storage in Ontario.
<https://www.ieso.ca/en/>

ATTACHMENTS:

1. Summary of proposed projects
2. Evidence of Municipal Support document