



Township of Brock Interoffice Memorandum

To: Mayor and Member of Council
From: Robin Prentice, Director of Development Services
Subject: Proposed Battery Energy Storage Facilities
Date: Tuesday, November 21, 2023

The Independent Electricity System Operator (IESO) manages Ontario's power system. After more than a decade of strong supply, 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, IESO has released a Request for Proposals for new electrical capacity as part of the procurement for long-term electricity reliability services (LT1 RFP).

Energy storage is changing the way electricity grids operate. Under traditional electricity systems, energy must be used as it is made, requiring generators to manage their output in real-time to match demand. Energy storage is changing that dynamic, allowing electricity to be saved until it is needed most. A battery energy storage system would allow energy to be stored when supply is higher than the demand and release it back to the grid when demand is higher than the supply.

RFP Proposals

There are two proposals within the Township of Brock. Two companies are proposing a battery energy storage system facility near the Hydro One transfer station in Beaverton.

ABO Wind Canada Ltd. Proposal

Location:	Part of Lot 11, Concession 3 (B26740 Highway 12)
Official Plan Designation:	Greenbelt Protected Countryside Greenbelt Natural Heritage System Prime Agricultural Area

Zoning: Rural (RU) and Environmental Protection (EP)
Present Use: Agricultural and environmental
Adjacent Uses: Hydro Transfer Station, agricultural, rural residential, environmental, rural commercial (self storage facility)

Wpd Canda Corp. Proposal

Location: Part of Lot 13, Concession 2-3 (Thorah Conc Rd 3)
Official Plan Designation: Greenbelt Protected Countryside
Greenbelt Natural Heritage System
Prime Agricultural Area
Zoning: Rural (RU) and Environmental Protection (EP)
Present Use: Agricultural and environmental
Adjacent Uses: Agricultural, environmental, rural residential

Policy Planning Context

Provincial Policy Statement (2020)

The Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. It provides for appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment.

The PPS defines infrastructure as the physical structures (facilities and corridors) that form the foundation for development. Infrastructure includes electricity generation facilities, electricity transmission and distribution systems, and associated facilities among other things.

Major Facilities are defined as facilities which may require separation from sensitive land uses, including but not limited to airports, manufacturing uses, transportation infrastructure and corridors, rail facilities, marine facilities, sewage treatment facilities, waste management systems, oil and gas pipelines, industries, electricity generation facilities and transmission and distribution systems, and resources extraction activities.

Section 1.2.6.1 speaks to planning for major facilities to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.

Section 1.6.11 - Energy Supply notes that planning authorities should provide opportunities for the development of energy supply including electricity generation facilities and transmission and distribution systems, district energy, and renewable energy systems and alternative energy systems, to accommodate current and projected needs.

The subject lands are located within areas defined by the PPS as Prime Agricultural Areas, which are intended to be protected for long-term use for agriculture (2.3.1). The following definitions are applicable:

Prime agricultural area means areas where prime agricultural lands predominate. This includes areas of prime agricultural lands and associated Canada Land Inventory (CLI) Class 4 through 7 lands, and additional areas where there is a local concentration of farms which exhibit characteristics of ongoing agriculture. Prime agricultural areas may be identified by the Ontario Ministry of Agriculture and Food using guidelines developed by the Province as amended from time to time. A prime agricultural area may also be identified through an alternative agricultural land evaluation system approved by the Province.

Prime agricultural land means specialty crop areas and/or Canada Land Inventory Class 1, 2, and 3 lands, as amended from time to time, in this order of priority for protection.

In accordance with the CLI mapping, the proposed sites would be on Class 1-2 lands and considered prime agricultural lands.

Section 2.3.6 deals with Non-Agricultural Uses in Prime Agricultural Areas and provides criteria for consideration of limited non-residential uses in these areas (see Attachment 2).

Growth Plan for the Greater Golden Horseshoe (2019)

The Growth Plan for the Greater Golden Horseshoe (Growth Plan) provides policies for lands within the Agricultural areas of the Township and encourages the protection of existing farmland and the continued use of these lands for agricultural purposes.

Section 3.2.5 of the Growth Plan includes policies related to infrastructure corridors and supporting facilities (Attachment 3). 3.2.5.1 requires an agricultural impact assessment or equivalent analysis as part of an environmental assessment, to demonstrate that any impacts on the agricultural system, as well as natural heritage features and key hydrologic features, have been avoided, or if avoidance is not possible, minimized and to the extent feasible mitigated.

Section 4.2.3.1(c) notes that activities that create or maintain infrastructure authorized under an environmental assessment process may be permitted outside of settlement areas, within key natural heritage features and/or key hydrologic features.

Section 4.2.6.5 encourages the retention of existing lots of record for agricultural uses and discourages the use of lots for non-agricultural uses.

4.2.9.1 requires municipalities to develop and implement Official Plan policies and strategies in support of conservation objectives, through conservation, energy efficiency and demand management techniques to use energy wisely. In accordance with 4.2.10.2(a), in planning to reduce greenhouse gas emissions and address the impacts of a changing climate, municipalities are encouraged to develop strategies to reduce greenhouse gas emissions and improve resilience through the identification of vulnerabilities to climate change, land use planning, planning for infrastructure, including energy.

Greenbelt Plan (2017)

The Greenbelt Plan provides policies to protect the agricultural land base and the ecological features and functions that occur in the rural landscape. The subject lands are located within the Greenbelt Protected Countryside and Greenbelt Natural Heritage System.

Infrastructure is permitted within the Greenbelt Protected Countryside and the Greenbelt Natural Heritage System subject to the criteria outlined in the Greenbelt Plan (Attachment 4).

Section 4.2.1.1 states “All existing, expanded or new infrastructure subject to and approved under the Canadian Environmental Assessment Act, the Environmental Assessment Act, the Planning Act, the Aggregate Resources Act or the Telecommunications Act or by the National or Ontario Energy Boards, or which receives a similar environmental approval, is permitted within the Protected Countryside, subject to the policies of this section and provided it meets one of the following two objectives:

- a) It supports agriculture, recreation and tourism, Towns/Villages and Hamlets, resource use or the rural economic activity that exists and is permitted within the Greenbelt; or
- b) It serves the significant growth and economic development expected in southern Ontario beyond the Greenbelt by providing for the appropriate infrastructure connections among urban centres and between these centres and Ontario’s borders.”

Greenbelt Plan policy 4.2.1(f) states “New or expanding infrastructure shall avoid specialty crop areas and other prime agricultural areas in that order of priority, unless need has been demonstrated and it has been established that there is no reasonable alternative.”

Non-agricultural uses may be permitted subject to the policies of Sections 4.2 to 4.6. These uses are generally discouraged in prime agricultural areas and may only be permitted after the completion of an agricultural impact assessment.

Guidelines on Permitted Uses in Prime Agricultural Areas

OMAFRA's Guidelines on Permitted Uses in Ontario's Prime Agricultural Areas expands on the policies in the PPS, with respect to the uses permitted in prime agricultural areas. The Guidelines provide more detail on the "demonstration of need" and "alternative location" criteria for non-agricultural uses in prime agricultural areas and further explains the expectations for impact mitigation in more detail (Attachment 5).

Lake Simcoe Protection Plan (LSPP)

The Lake Simcoe Protection Plan (LSPP) is a comprehensive plan designed to protect and restore the ecological health of Lake Simcoe and its watershed. It applies to the Lake Simcoe watershed which includes the subject lands. Infrastructure may be permitted but only if the need for the project has been demonstrated through an Environmental Assessment of other similar environmental approval and there is no reasonable alternative.

Region of Durham Official Plan (Existing and New)

The subject lands are designated "Prime Agricultural Area" in both the existing Regional Official Plan and the new Regional Official Plan that has been adopted by Regional Council, but not yet approved by the Province.

Section 2.3.47 of the existing Regional Official Plan outlines that Regional Council shall support alternative, renewable energy sources and green technology.

The following policies would apply to the battery energy storage proposals:

5.2.6 It is the position of the Region that all new utilities, as well as any expansions or other undertaking related to existing utilities which are subject to an individual environmental assessment, or subject to a leave to construct application in accordance with the provisions of the Ontario Energy Board Act, should not be exempt from an environmental assessment under the provisions of the Environmental Assessment Act. In addition, such undertakings may be subject to agreements between the proponent and the Region and between the proponent and the respective area municipality.

5.2.7 The development of electric power facilities including renewable energy facilities such as commercial wind turbines, shall occur in an orderly manner to facilitate the efficient and reliable provision of adequate electric power. It is the policy of this Plan that electric power facilities are permitted in all land use designations, provided that the planning of all such facilities satisfies the requirements of the Environmental Assessment Act and is carried out having regard to the other policies of this Plan. Area Municipalities should consider the inclusion of policies in their respective Official Plans, ensuring that renewable energy facilities are located appropriately.

5.2.8 Ontario Power Generation or other electricity providers/suppliers shall consult with the Region on the location of any new electric power facilities, and throughout any required environmental assessment processes. The location of such facilities shall be incorporated into this Plan by amendment, where necessary.

It is a goal in the new Regional Official Plan that the Region shall enable the efficient delivery, location and effective use of energy and utilities and the Region shall promote energy conservation, efficiency measures and renewable and alternative energy systems to reduce greenhouse gases and adapt and build resiliency to the impacts of a changing climate (Attachment XX). Utilities include electricity generation facilities and transmission and distribution systems, district energy facilities, and pipelines for oil and gas.

Section 4.3.2 notes that utility infrastructure that meets the definition of major facilities may occur in any designation subject to the policies of the ROP. Section 4.3.3 encourages proponents to minimize negative impacts and constraints on the natural, built and cultural environments in the consideration of the location, design and construction of utilities, while Section 4.3.4 encourages proponents to give primary consideration to existing utility corridors in locating and designing new utilities, where feasible.

Section 4.1.6 notes that the location and construction of infrastructure within the Greenbelt Plan area shall adhere to the policies of the Greenbelt Plan.

Chapter 6 in the new Regional Official Plan provides policies for the agricultural area and Section 6.2.6 requires Prime Agricultural Areas be protected for long-term use for agriculture, as a significant element of the Region's economy and a secure source of food. Section 6.2.8 discourages the establishment of new non-agricultural uses in Prime Agricultural Areas. Non-agricultural uses may only be permitted in Prime Agricultural Areas for infrastructure, after the completion of an agricultural impact assessment.

Section 7.4.4 prohibits development and site alteration within the regional natural heritage system, key natural heritage features and key hydrologic features, except as permitted by the applicable provincial plans including new infrastructure if authorized through an Environmental Assessment or if no reasonable alternative location exists and an environmental impact study demonstrates that construction will have no negative impact.

Township of Brock Official Plan

Section 3.2.1 of the Township's Official Plan deal with Agricultural Lands. As per Section 3.2.1.1, agriculture is and will continue to be a significant economic sector and the Township will designate and protect prime agricultural land for long-term agricultural use.

Section 3.2.1.2 defers to the Durham Regional Official Plan with respect to policies and designations for the rural portion of the Township. The predominant use of land within the Prime Agricultural Area shall be agriculture and agriculture-related uses.

While the proposals are not necessarily renewable energy, it is relevant to point out that Policy 3.2.2.3 of the Official Plan notes that commercial renewable energy generating systems which are intended to feed into the transmission grid of Hydro One, may be permitted in the Rural System and Prime Agricultural Areas subject to satisfying the requirements of the Ministry of the Environment. These requirements may include the preparation of studies and site plans to address land use compatibility and development matters, including but not limited to height, noise levels, vibration, an assessment of dust, odour and resulting effluent, setbacks and drainage in accordance with the Ministry of the Environment Renewable energy Approval Regulation O. Reg. 359/09 issued under the Environmental Protection Act.

Township of Brock Zoning By-law 287-78-PL

The lands subject to the 2 proposals are both currently zoned Rural (RU) in the Township's Zoning By-law 287-78-PL (as amended). Battery energy storage is a newer technology, that is not specifically contemplated in the Township's Zoning By-law. Public uses are permitted in all zones.

Attachments

Attachment 1 – Map of the Two Proposed Sites in the Township of Brock

Attachment 2 – Excerpt from Provincial Policy Statement (Section 2.3.6)

Attachment 3 – Excerpt from Growth Plan (Section 3.2.5)

Attachment 4 – Excerpt from Greenbelt Plan (Section 4.2)

Attachment 5 – Excerpt from Guidelines for Permitted Uses in Prime Agricultural Areas (Sections 3.2.2 – 3.2.4)

Attachment 6 - Excerpt from the New Regional Official Plan (Section 4.3)

End of Memorandum