Lily Lake Storage Project — Preliminary Decommissioning Plan

Location: 277 Lily Lake Rd, Selwyn, Ontario
Prepared by: Nexus Energy
Proponent: 16656048 Canada Inc.
Energy Capacity: 80 MWh AC
Technology: Battery Energy Storage Project

Disclaimer

This is a draft version submitted to support Municipal Support Resolution. The final version will be provided during the Development stage.

This Decommissioning Plan (ERP) is a controlled document. Printed copies are uncontrolled. Ensure you are using the latest approved version.

Executive Summary

This Decommissioning Plan outlines the procedures and responsibilities required to safely and responsibly retire the 80 MWh Lithium-Ion Battery Energy Storage System (BESS) situated within the Municipality of Selwyn, Ontario.. All decommissioning activities will be carried out in accordance with all applicable federal, provincial, and municipal regulations including NFPA 855, the Ontario Electrical Safety Code (OESC), the Ontario Fire Code, Ontario Regulation 347 for waste management, and the Ministry of the Environment, Conservation and Parks (MECP) environmental protection guidelines in place at the time of decommissioning. The overarching goal of this plan is to achieve safe system dismantling, maximize recycling opportunities, minimize environmental impact, and restore the project site to pre-existing conditions or other acceptable use as approved of by the landowner and municipality at the time of decommissioning.

1. Introduction

The project will be a privately owned facility contracted to Hydro One's 44 kV distribution network and contracted to the IESO to provide storage of electricity and grid stability services. This plan defines the approach for decommissioning an 80 MWh Li-ion BESS at the end of its operational life or a permanent end of operations. The decommissioning scope includes the removal of battery containers, inverters, transformers, underground cabling, concrete foundations, fencing, and other associated infrastructure. The plan also establishes procedures for the transportation and disposal of all materials in accordance with provincial waste management laws.

2. Regulatory and Standards Framework

All decommissioning works shall be executed in accordance with relevant Ontario and national standards of the day, including the NFPA 855 Standard for the Installation of Stationary Energy Storage Systems, the Ontario Electrical Safety Code as enforced by the Electrical Safety Authority (ESA), the Ontario Fire Code (O.Reg. 213/07), and Ontario Regulation 347 for General Waste Management. Environmental safeguards will align with the Ministry of the Environment, Conservation and Parks (MECP) Erosion and Sediment Control Guidelines and the Environmental Protection Act. In addition, all activities will adhere to the Occupational Health and Safety Act (OHSA) and applicable municipal by-laws within the Municipality of Selwyn.

3. Project Description

The BESS facility will have a capacity of 80 MWh and consists of twenty (20) containerized Li-ion battery enclosures with integrated inverters, and ten (10) step-up transformers that interface with Hydro One's 44 kV distribution system. The facility also includes below-grade collection cabling, concrete foundations, access roads, perimeter fencing, and a SCADA-based monitoring system. A draft layout is included in Appendix A. The system is designed to provide energy storage and grid stability services for private industrial use.

4. Roles and Responsibilities

The Project Owner retains overall responsibility for compliance and coordination with regulatory agencies. The Decommissioning Contractor will carry out dismantling, transport, and site restoration in accordance with this plan and applicable standards. The Environmental Coordinator will oversee all environmental management practices, including erosion control and waste tracking. The Health and Safety Officer will be responsible for ensuring compliance with OHSA and enforcing site-specific safety procedures. The Electrical Safety Authority (ESA) will verify electrical disconnections and approve safe work practices prior to commencement of removal activities. The Township of Selwyn and the Selwyn Fire Department will be consulted prior to the start of decommissioning.

5. Decommissioning Procedures

Decommissioning will commence within six months of permanent cessation of operations. The process will begin with stakeholder notification and the obtaining of any required

permits or approvals. Once all permits and/or approvals are obtained, the batteries will be fully discharged, the facility will be de-energized and disconnected from Hydro One's network under any required supervision. The Li-ion battery containers will be removed following manufacturer guidelines to prevent any risk of thermal runaway or electrical hazard. Inverters, transformers, and other electrical components will be dismantled in sequence and evaluated for potential reuse or recycling. Subsurface collection cables will be excavated and removed, and the trenches will be backfilled with native soil. Finally, all concrete foundations, access roads, and fencing will be dismantled, with the materials either recycled or transported to approved disposal facilities. The site will then be regraded and reseeded with native vegetation.

6. Health, Safety, and Fire Management

The decommissioning process will strictly adhere to OHSA and NFPA 855 safety provisions as well as any applicable standards. Lockout/tagout procedures will be used to ensure all systems are fully de-energized prior to work. Appropriate personal protective equipment (PPE), including arc-flash protection, chemical-resistant gloves, and respiratory protection, will be worn at all times. Fire detection and suppression systems will remain operational until all battery containers fully de-energized and are removed or disassembled. Thermal event management procedures will be developed in consultation with the Selwyn Fire Department, including on-site emergency coordination, exclusion zones, and firefighting access routes.

7. Environmental Management and Protection

Environmental safeguards will be implemented throughout the decommissioning process. Erosion and sediment control structures will be established as per MECP guidelines, and dust suppression measures such as water spraying will be used during excavation. All waste will be managed in accordance with Ontario Regulation 347 and any applicable regulations. Spill response equipment will be maintained on site, and any incident will be immediately reported to MECP as required by the Environmental Protection Act. After removal, topsoil will be replaced and reseeded with approved native species to ensure the site remains stable and non-erosive.

8. Waste Handling, Transport, and Documentation

All decommissioned materials will be handled and transported by licensed carriers to approved facilities. Lithium-ion batteries will be transferred to certified recycling facilities, while metallic components including cables and support structures will be processed through local metal recyclers. Concrete will be crushed and repurposed where possible. Each shipment will be accompanied by a MECP-compliant waste manifest, and copies of these documents will be retained for no less than seven years.

9. Site Restoration

Following removal of equipment, the site will be graded to its original contours and stabilized using topsoil and native seed mixes or other suitable method approved by the landowner. The objective is to restore the land to a condition equivalent to its pre-construction use or as specified in the landowner agreement. Post-restoration inspections will be completed six

months after completion to verify site stability, vegetation growth, and environmental compliance.

10. Stakeholder Communication

Formal written notification will be provided at least sixty days prior to the commencement of decommissioning to the Township of Selwyn, Hydro One Networks Inc., the Electrical Safety Authority, the Selwyn Fire Department and the MECP, if required.. Status updates will be communicated throughout the project, and a completion summary will be provided at the conclusion of decommissioning activities.

11. Decommissioning Schedule

Activity	Estimated Duration	Timing (Post-Shutdown)
Permitting and Notifications	4 weeks	Immediately after shutdown
Site Preparation and Safety Setup	1 week	After permitting
Grid Disconnection and De-energization	1 week	Following approvals
Battery Container and Module Removal	4 weeks	Following disconnection
Ancillary Equipment Removal	3 weeks	Concurrent with battery removal
Civil and Structural Removal	3 weeks	Post equipment removal
Site Restoration and Monitoring	4 weeks	Final phase

12. Cost Estimate (2025 CAD$)

A comprehensive decommissioning cost estimate will be submitted to the Municipality during the Development Stage, once project design and technical details are finalized

13. Documentation and Recordkeeping

All decommissioning records, including permits, inspection reports, waste manifests, and photographic documentation, will be maintained and submitted as part of the Decommissioning Completion Report to the Municipality of Selwyn and the MECP. These records will demonstrate that the decommissioning process was completed safely and in accordance with regulatory requirements.

Appendix A – Draft Site Layout Plan