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TOWNSHIP OF ARMOUR

Decommissioning Plan

903 BESS Project

SOLARBANK

Date: July 17, 2025

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1. INTRODUCTION

Purpose

The purpose of this document is to provide a comprehensive overview of activities that will occur during the decommissioning phase of SolarBank's 903 Battery Energy Storage System (BESS), located at 219 Peggs Mountain Rd, Armour, Ontario. The plan outlines procedures to ensure safe, environmentally responsible, and compliant dismantling, removal, and restoration efforts at the project site. Activities include:

- Equipment dismantling and removal
- Removal of battery energy storage modules
- Removal of ancillary electrical equipment
- Removal of equipment pads, supporting structures, gravel, and fencing
- Site restoration
- Environmental protection measures
- Stakeholder and authority notification
- Contingency decommissioning in the case of emergency events

This plan reflects current best practices and will be updated based on new standards, regulations, and emergent best practices at the time of decommissioning. All required permits will be obtained, and stakeholders will be notified prior to any decommissioning work.

BESS Facilities Description

The 903 BESS project has a nameplate capacity of **4.99 MW / 19.9 MWh**, comprised of:

- Nine (9) energy storage containers
- Five (5) inverters
- Two (2) transformers
- Overhead poles connecting to the Hydro One 44kV distribution system
- Auxiliary electrical equipment

The equipment is mounted on concrete pads, with subsurface collection cabling installed approximately 1 meter deep. A detailed site plan and layout of the facility is included as Appendix A.

Note: For additional details on the site's environmental and land characteristics, please refer to Appendix B – Environmental Site Assessment (ESA), which contains comprehensive information on soil conditions, topography, groundwater, and surrounding land use.

Key Stakeholders

- Government and Regulatory Authorities
  - Township of Armour
  - Hydro One Networks Inc.
- Environmental and Emergency Stakeholders
  - Local Fire Department - Burk's Falls Fire Department
- Technical Stakeholders
  - Battery Manufacturer (EVLO) / OEMs
- Community Stakeholders
  - Local Landowner
  - Nearby Residents

2. DECOMMISSIONING ACTIVITIES

Compliance with Fire Safety and Risk Standards

All decommissioning activities, particularly those involving the removal, handling, and transport of Battery Energy Storage System (BESS) components, will be conducted in accordance with the National Fire Protection Association (NFPA) Standard 855 – Standard for the Installation of Stationary Energy Storage Systems, and any other relevant sections applicable at the time of decommissioning.

NFPA 855 outlines fire safety standards, including requirements for thermal event risk mitigation, system disconnection, and hazard communication, which will guide the safe removal and disposal of energy storage components.

Compliance to these standards ensures that risks associated with thermal runaway, fire, and hazardous material exposure are minimized during decommissioning operations. The project owner and decommissioning contractor will consult with the local fire department and qualified professionals to implement all NFPA protocols and safety measures throughout the decommissioning process.

Timeline

Decommissioning is expected to begin within **6 months** following the permanent cease of operations and disconnection from the grid. The overall duration of decommissioning activities is estimated to be **3 to 6 months**, contingent on weather, permitting, and third-party coordination.

General Approach

All equipment will be de-energized and disconnected from the grid in coordination with Hydro One and relevant authorities. Decommissioning will be performed following manufacturer guidance, applicable standards, and all required environmental and safety protocols. Equipment and materials will be repurposed where feasible, and the site will be restored to a condition similar to pre-construction.

Battery Energy Storage Modules

The following steps will be taken to remove the BESS containers:

- Safely disconnect the BESS from the grid.
- Disconnect all collection cables from each battery container.
- Remove battery modules following manufacturer procedures and safety protocols, including those related to thermal event risk.
- Transport containers off site.

Ancillary Electrical Equipment

- Disconnect inverters, transformers, and auxiliary panels.
- Assess equipment for potential repurposing.
- Excavate and remove underground cables; backfill trenches with native soil.
- Repurpose of components according to Electrical Safety Authority (ESA) standards and applicable laws.

Removal of Foundations, Gravel, and Fence

- Excavate and remove concrete pads, support structures, gravel, and perimeter fencing.
- Transport material to appropriate facilities, ensuring dust suppression and noise mitigation measures during demolition.

Site Restoration

- Stabilize the site to prevent erosion or other environmental degradation.
- Reseed disturbed areas with native vegetation or vegetation specified by the landowner or as per Ministry of the Environment, Conservation and Parks (MECP) guidance.
- Restore the site in accordance with landowner agreements and municipal by-laws to a condition consistent with pre-construction.

3. ENVIRONMENTAL PROTECTION

General environmental protection measures and site safety protocols will be observed throughout decommissioning, including:

- Erosion and sediment control measures as per **MECP's Erosion and Sediment Control Guidelines**.
- Dust suppression techniques during excavation and removal.
- Hazardous materials handling and disposal in compliance with **Ontario Regulation 347 (General - Waste Management)**.
- Spill response plans and designated Environmental Coordinator on-site during critical phases.

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4. STAKEHOLDER NOTIFICATION

The following stakeholders will be notified prior to decommissioning:

- Township of Armour
- EVLO
- Hydro One
- Burks Falls Fire Department / Emergency Services

Notifications will be issued no less than 60 days prior to the start of decommissioning, with updates provided throughout the process as needed.

5. DECOMMISSIONING IN CASE OF AN EVENT

In the event of a significant incident — such as a fire, thermal runaway, flood, equipment failure, or any other emergency — that renders the Battery Energy

Storage System (BESS) facility partially or fully inoperable, the following decommissioning protocol will apply:

- Immediate Shutdown: The BESS will be safely and completely shut down in coordination with Hydro One and emergency services. All systems will remain de-energized and locked out.
- No Re-energization: The facility will not be restarted or reconnected under any circumstances unless a full reassessment is conducted and formal approvals are obtained. If the damage is found to be irreparable or restoration is not feasible, full decommissioning will proceed.
- Decommissioning Process: In such cases, the site will transition directly into decommissioning. Activities will include:
    - Isolation and removal of all compromised energy storage and electrical components;
    - Transportation and disposal of damaged materials
    - Site remediation, environmental cleanup, and hazard mitigation;
    - Permanent disconnection from the grid in accordance with Hydro One's Requirements.
- Standards & Guidance: The decommissioning process will follow:
    - Battery manufacturer protocols for post-incident handling and dismantling;
    - The Association of Municipalities of Ontario (AMO) BESS Safety Guide
    - All HONI guidance that pertain to the facility will be implemented and adhered to.
- Ongoing Compliance: All standards and procedures will be reviewed and updated as needed to reflect the most current regulatory and industry requirements for BESS facilities in Ontario, Canada.

6. COST OF DECOMMISSIONING

Activity	Unit	Quantity	Cost per Unit (2025 CAD$)	Total (CAD$)
Mobilization / Demobilization	project	1	$10,000	$10,000
Battery Container & Module Removal	each	9	$2,800	$25,200
Inverter / Transformer Removal	project	1	$5,500	$5,500
Foundation Removal	project	1	$6,000	$6,000
Auxiliary Electrical Equipment Removal	project	1	$17,000	$17,000
Fence Removal	project	1	$1,200	$1,200
Site Restoration (grading, reseeding)	project	1	$9,500	$9,500
Trucking Off Site	project	1	$11,000	$11,000
			Total	$85,400

Basis of Estimate

All costs are expressed in 2025 Canadian dollars. This estimate is based on the following:

- Benchmarking data from publicly available information on comparable utility-scale energy storage projects in Ontario;
- Current market rates from contractors and service providers specializing in Battery Energy Storage System (BESS) decommissioning;
- North American industry research and planning guidelines for BESS lifecycle management, including technical studies and decommissioning best practices [1], [2].

The cost intensity for this project is estimated at CAD $4,291 per MWh, which reflects the expected effort and resource requirements for battery container removal, electrical equipment dismantling, site logistics, and restoration activities. This value falls within the typical range observed in similar utility-scale BESS decommissioning efforts across North America.

7. Decommissioning Timeline

Decommissioning of the 903 BESS facility will commence following the cessation of commercial operations, subject to applicable regulatory approvals and

stakeholder notifications. The timeline outlined below provides an estimated schedule for key decommissioning activities:

Activity	Estimated Duration	Timing (Post-Operations)
Stakeholder notifications and permitting	2–4 weeks	Immediately post-operations
Site preparation and safety checks	1 week	After stakeholder notification
Grid disconnection and de-energization	1 week	After permitting
Battery module and container removal	2–3 weeks	Following disconnection
Removal of ancillary electrical equipment	2 weeks	Concurrent with battery removal
Removal of pads, structures, gravel, and fence	2–3 weeks	Post equipment removal
Site restoration (grading, seeding, etc.)	3–4 weeks	Final step
Total Estimated Duration	~3 months (12 weeks)	After cessation of operations

These durations are estimates and will be refined prior to decommissioning based on site conditions, regulatory input, weather constraints, and contractor availability. Any changes to the schedule will be communicated to stakeholders throughout the process.

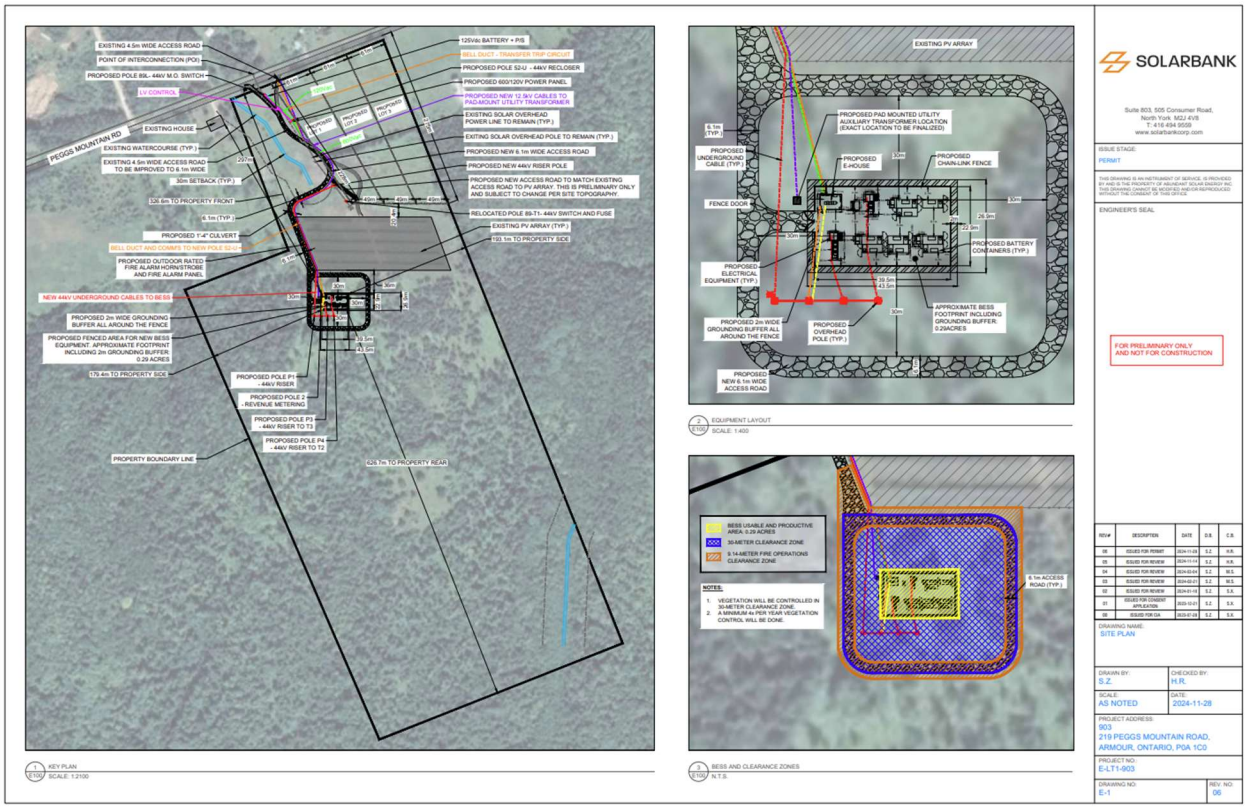
8. References

[1] S. Sterlace, “Battery Energy Storage System Decommissioning and End-of-Life Planning,” *IEEE Electrification Magazine*, vol. 11, no. 2, pp. 56–63, Jun. 2023.

[2] DNV, *Begin at the End: The Cost of Decommissioning Renewable Energy Projects*, DNV Energy Systems, Technical Report, 2023.

9. APPENDICES

Appendix A – Site Plan and Layout



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ISSUE STAGE:
PERMIT

ENGINEER'S SEAL

FOR PRELIMINARY ONLY AND NOT FOR CONSTRUCTION

REV#	DESCRIPTION	DATE	D.S.	C.S.
06	ISSUED FOR PERMIT	2024-11-28	S.Z.	H.R.
05	ISSUED FOR REVIEW	2024-11-14	S.Z.	H.R.
04	ISSUED FOR REVIEW	2024-03-04	S.Z.	M.S.
03	ISSUED FOR REVIEW	2024-02-21	S.Z.	M.S.
02	ISSUED FOR REVIEW	2024-01-19	S.Z.	S.K.
01	ISSUED FOR CONSENT APPLICATION	2023-10-31	S.Z.	S.K.
00	ISSUED FOR DA	2023-07-05	S.Z.	S.K.

DRAWING NAME:
SITE PLAN

DRAWN BY:	CHECKED BY:
S.Z.	H.R.
SCALE: AS NOTED	DATE: 2024-11-28

PROJECT ADDRESS:
903
219 PEGGS MOUNTAIN ROAD,
ARMOUR, ONTARIO, P0A 1C0

PROJECT NO.:
E-LT1-903

DRAWING NO.	REV. NO.
E-1	06

Appendix B – ESA Section 2.1: Site Information

2.1 Site Information

Details of the Site are as follows:

Municipal Address(es)	219 Peggs Mountain Road, Burk's Falls
Current Land Use	Industrial
Proposed Land Use	Industrial
Legal Description	LOT 3, CONCESSION 6 ARMOUR, SAVE & EXCEPT PARTS 1 & 2 Plan 42R22137; TOWNSHIP OF ARMOUR
Property Identification Number (PIN)	52143-0686 (LT)
Approximate Universal Transverse Mercator (UTM) coordinates	NAD83 17T 624358 m E 5050257 m N
Accuracy Estimate of UTM	10-15 m
Measurement Method	GPS
Site Area	37.02 hectares (91.5 acres)
Property Owner	David Joseph Creasor
Client Contact and Address	Mr. Matt McGregor Solarbank Corp. 505 Consumers Road, Suite 803 North York, ON M2J 4V8