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July 24, 2025

RECEIVED
JULY 24, 2025
TOWNSHIP OF ARMOUR

Ms. Charlene Watt
Township of Armour
PO Box 533, 56 Ontario Street
Burk's Falls, Ontario

Dear Ms. Watt:

Subject: Project 903 Battery Energy Storage System – Response to Dispositions

PLC Fire Safety Engineering (PLC) has completed a review of the responses to the Third-Party Review (TPR) of the Hazard Mitigation Analysis Report for the above-captioned project. The original review, documented in report # PLC-ARMOUR-P2738-001-TPR-C, dated May 15, 2025, identified nine (9) clarification items.

Following a review of the responses to our clarification items (dated June 5th, 2025), PLC has determined that four (4) items have been satisfactorily addressed and are now considered closed. The remaining five (5) items require additional information and therefore remain open.

Please find enclosed PLC's response to the disposition of each clarification item.

Prepared by,

Gary Chan, P.Eng.

Technical Specialist

Reviewed by,

Mohamed Mushantat, P.Eng., M.Eng.

Senior Fire Protection Engineer

DISPOSITION OF FINDINGS

NO.	REVIEWER COMMENT	DESIGN DISPOSITION	REVIEWER CONCURRENCE
1	Prior to system operation, construction documents must be provided to the building owner, and a detailed operations and maintenance (O&M) manual must be delivered to both the ESS owner and system operator. The O&M manual must outline system specifications, maintenance procedures, contact information, operational narratives, and service logs. It must be finalized before approval and remain accessible to AHJs and emergency responders. Confirmation is required that project documentation will be provided to the AHJ as needed and will meet all the requirements of the applicable codes including NFPA 855. *Reference: NFPA 855 Section 4.9*	FRA Response: *Added clarification in several key locations throughout the document that all required documentation will be provided to the AHJ and emergency response personnel as necessary for NFPA 855 SS 4.9 compliance.*	**Disposition accepted. Item closed.**
2	Installation requirements such as electrical, loading and seismic were not addressed in the HMA report. Clarify if the project is compliant with NFPA 855 electrical, loading and seismic requirements of Chapter 4. *Reference: NFPA 855 Section 4.7.1, 4.7.2 and 4.7.3*	FRA Response: *This is discussed in Section 5.2 of the HMA. Electrical, Design loading and Seismic requirements are specifically outside of the scope of this HMA. Added a clarification that these must be addressed separately in design documents provided to the AHJ as necessary.*	Response acknowledged. However, this item is to remain open until design details on electrical, design loading and seismic requirements are provided for review.

NO.	REVIEWER COMMENT	DESIGN DISPOSITION	REVIEWER CONCURRENCE
3	Section 4.1.6 of the HMA report states that the detection system will be connected to a fire alarm control panel (FACP). HMA Report to clarify the location of the FACP. *Reference: NFPA 855 Section 4.8*	FRA response: *The control panel is shown in Figure 8 and the report has been revised to clarify the location.*	**Disposition accepted. Item closed.**
4	HMA Report Section 5.4.3 states that the requirements of NFPA 1142 apply. Clarify what are the relevant requirements, and whether they are met for this site. *Reference: NFPA 855 Subsection 4.9.4*	FRA Response: *Added the clarification to Section 4.1.6 that the water supply requirements can be relaxed with agreement between AHJ and site owner as listed in NFPA 855 Section 9.5.2.5.*	Section 5.4.3 of the updated report states that: *"The ERP recommends alternate methods of suppression that do not rely on water. As such, the Project 903 BESS site design complies with the NFPA 855 water supply requirements".* Clarify or explain what is the alternate fire suppression system that is being proposed and how it complies with NFPA 855 requirements.
5	HMA Report Section 4.1.5 states that a dry hydrant is being proposed. Confirm the details regarding its location and what standard it is to comply with.	FRA Response: *Added details to Section 4.1.5 for the location of the dry hydrant.* Section 4.1.5 of the HMA report indicates that the hydrant is located at 1014 Ferguson Rd.	Section 4.1.5 of the HMA report states the address of where the hydrant is located, however it does not specify the distance to the Solarbank Project 903 site. Please clarify the distance of the hydrant to the site and whether it complies with OBC Article 3.2.5.5.

NO.	REVIEWER COMMENT	DESIGN DISPOSITION	REVIEWER CONCURRENCE
6	(1) Clarify specifically how the BMS is certified to UL 9540, and (2) Explain whether the TMS forms part of the thermal runaway protection. *Reference: NFPA 855 Section 9.6.5.5*	FRA Response: *Added clarification to Section 2.0 that the BESS is compliant with UL 9540 and clarification to Section 5.2.4 that the ESMS complies with the relevant NFPA requirements. Additional commentary on why or how such systems are in compliance is not necessary here.*	Section 3.2 of the report states that the "module is not connected to the BMS or TMS" during the UL 9540A module-level testing. In contrast, Section 5.2.4 notes that "The EVLOFLEX is equipped with a BMS that was tested and verified to UL 9540." Could you please clarify whether this statement means the BMS was evaluated as part of the overall UL 9540 system certification, or if the BMS was independently certified to UL 9540? Additionally, provide the relevant certifications.
7	Section 5 (Page 27) of the HMA report states that the OFC references NFPA 855. Additionally, Section 7.1.3.1 (Page 39) notes that the “EVLO BESS has been tested to UL 9540A as required by the OFC”. Clarify these statements with specific references to the OFC. *Reference: Ontario Fire Code (O. Reg. 213/07)*	FRA Response: *Language has been corrected to point to NFPA 855 as the industry best practice. The current version of OFC does not reference 855 and contains no specific guidance for BESS.*	**Disposition accepted. Item closed.**

NO.	REVIEWER COMMENT	DESIGN DISPOSITION	REVIEWER CONCURRENCE
8	The OFC is referenced throughout the HMA report, however the specific relevant OFC sections are not referenced where applicable. Clarify the applicable sections of the OFC, where mentioned in the HMA report.	FRA Response: *Most OFC references have been replaced with NFPA 855 as appropriate. Where possible, the report is updated to the appropriate section of OFC.*	**Disposition accepted. Item closed.**
9	Ontario Electrical Safety Code covers all electrical work and electrical equipment operating or intended to operate at all voltages in electrical installations for buildings, structures, and premises. Section 26 of Ontario Electrical Safety Code in particular outlines requirements for storage battery installations. Ontario Electrical Safety Code is not referenced in the HMA report. Provide further details on whether the installation will comply with CSA C22.1. *Reference: Ontario Electrical Safety Code*	FRA Response: *Added the OESC to Section 1.2 for Applicable Codes and Standards. Note that this HMA does not apply to electrical. As per response to comment 2, this limitation is discussed in Section 5.2 of the HMA. Electrical, Design loading and Seismic requirements are specifically outside of the scope of this HMA. This must be addressed separately in design documents provided to the AHJ as necessary.*	Response acknowledged. However, this item is to remain open until design details on electrical, design loading and seismic requirements are provided.