

Potentia

Emergency Response Plan

Skyview 2 Battery Energy Storage System

2025/09/11

Table of Revision

Section	Description	Date	Reviewed By	Approved By
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1 Introduction

This Operations Emergency Response Plan (ERP) is meant for staff or visitors at site and covers the requirements for those individuals. A specialised plan has been developed for Emergency Responders to address management of BESS related fires or incidents and is available in Appendix XXX. Emergency Responders have received specialised training on management of BESS incidents.

2 Project Overview

The Skyview 2 Battery Energy Storage Project (the Project, or Skyview BESS) is a proposed energy storage facility located in the Township of Edwardsburgh Cardinal, United Counties of Leeds and Grenville. The Project is proposed on approximately 20 hectares (ha) (50 acres) of privately owned land north of Dobbie Road and approximately 2 kilometres (km) east of Shanly Road (County Road 22). The proponent of the Project is Skyview BESS Inc. (Skyview), a company owned by subsidiaries of the Algonquins of Pikwàkanagàn First Nation and Power Sustainable Energy Infrastructure (PSEIP), a private investment fund. Potentia Renewables Inc., a subsidiary of Power Corporation of Canada, provides asset management services to PSEIP and Skyview.

The Project is a lithium-iron-phosphate Battery Energy Storage System (BESS) facility that will have a proposed nameplate capacity of 411 megawatts (MW) for upwards of 1,560 megawatt-hours (MWh) of electricity supply. The Project will connect to the existing 230 kilovolt (kV) Hydro One Networks Inc. (HONI) lines south of the Project via new transformer substation and transmission lines. Statement of Compliance

It is noted that this Emergency Response Plan (the "Plan") was prepared on May 12, 2025, in draft form and will be updated as necessary once the Project meets the Commercial Operation Date (COD) and Operations.

3 Emergency Contact Numbers

3.1 External

Contact	Phone Number
Police/Fire/Ambulance	Call 911
OPP 200 Development Drive Prescott, Ontario, K0E 1T0	Non Emergency - +1(888) 310-1122
Edwardsburgh Cardinal Fire Station 1 6055 County Road 44 Spencerville, ON K0E 1X0	Non-Emergency - +1 (613) 658-3001



Contact	Phone Number
Poison Control	1-800-332-1414
e-Storage 4273 King St. East, Suite 102 Kitchener, Ontario N2P 2E9	(917) 819-1900
Canadian Solar Inc. 4273 King Street East, Suite 102 Kitchener, Ontario, N2P 2E9	(519) 837-1881
Kemptville District Hospital P.O. Box 2007 2675 Concession Rd. Kemptville, ON K0G 1J0	(613) 258-6133

3.2 Internal

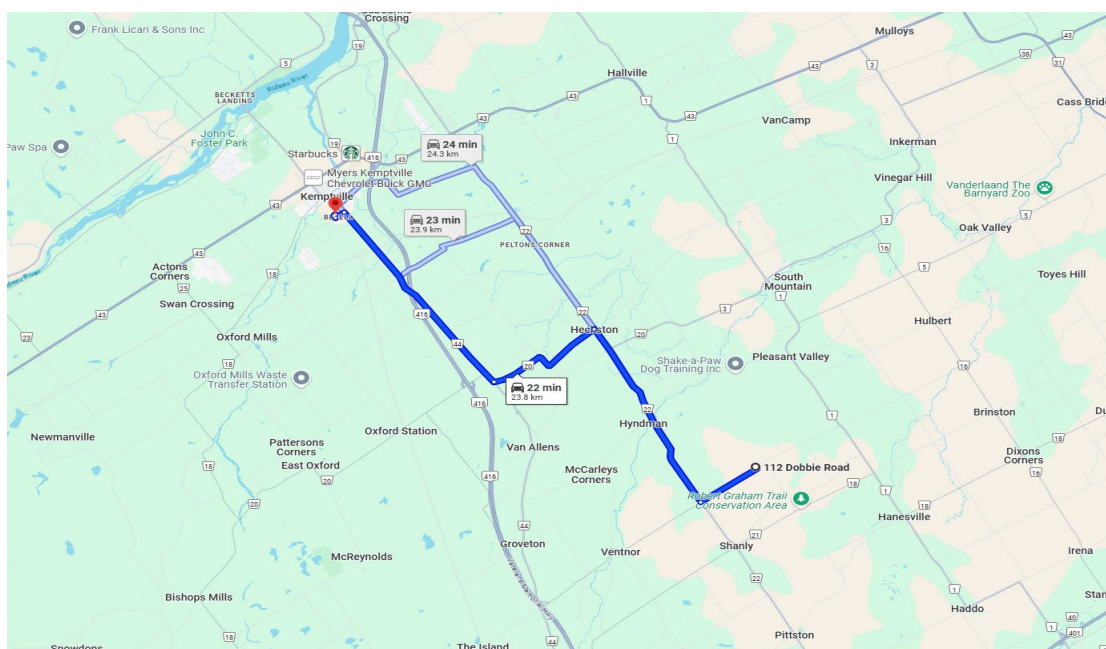
Title	Name	Phone Number
Director, Health and Safety	Joseph Card	W - (416) 602-7074 P - (519) 330-0754
Emergency Response Lead	TBD	
Regional Manager	Ben Hurlburt	(647) 262-3171
Field Technician	TBD	
e-Storage Manager	TBD	
Director, Environment and Community Consultation	Sarah Palmer	(416) 844-9701



3.3 Location

Civic Address	Land Location O&M
Closest Address: 112 Dobbie Road, Spencerville, Ontario K0E 1X0	Closest Coordinates: 44.920057794920844, - 75.46308032914766

3.4 Hospital Route



112 Dobbie Rd Spencerville, ON K0E 1X0

↑ Head southwest on Dobbie Rd toward Shanly Rd/Route 22 2 min (2.3 km)

Continue on Route 22. Take 44 to Concession Rd in Kemptville 17 min (20.9 km)

↪ Turn right onto Shanly Rd/Route 22

Continue to follow Route 22 7.9 km

↪ Turn left onto Leeds and Grenville Rd 20/County Rd 20 km 4.5 km

↪ Turn right onto 44/Leeds and Grenville Rd 20 (signs for Ontario 416/County Road 44/County Road 20)

Continue to follow 44 8.5 km

Continue on Concession Rd to your destination 2 min (600 m)



↩ Turn left onto Concession Rd 350 m

↩ Turn right 100 m

↩ Turn right 81 m

↩ Turn right 31 m 2675 Concession Rd

Kemptville, ON K0G 1J0

4 Plan Administration

4.1 Plan Objectives

To establish a pre-planned set of actions that are to be taken when an emergency occurs that will minimize health risks to plant personnel and people in the surrounding community, as well as minimize adverse impacts to the environment. It is intended that this plan will make clear to all plant personnel the actions that they are required to take if an emergency develops.

This plan was developed for the following plausible contingencies that could transpire at the facility:

- Fire/Smoke
- Explosions
- Bomb Threats
- Floods
- Spills and Releases
- Medical Emergencies
- Power Outages
- Severe Weather
- Shelter-in-Place
- Vehicle Incidents
- Violence/Assaults

4.2 Administration

A copy of this plan is to be made available to all current employees, as well as to all newly hired employees. All recipients of this plan are required to study the procedures outlined and be prepared to follow these procedures in case of fire or any other emergency.

Paper copies of this plan shall be maintained in the facility of Operations and Maintenance (O&M) Building. The paper copy will be included in the site Emergency Response Manual.

An electronic copy of this plan will also be accessible on the facility's LAN. This plan will be reviewed upon implementation, whenever revisions are made, and at least annually by Skyview 2 BESS Inc. personnel.



4.3 Regulatory References

This plan has been developed to ensure compliance with *Occupational Health and Safety Act* R.S.O. 1990. Skyview acknowledges awareness that any significant changes in types or quantities of materials or hazards on the site will necessitate review of this plan. Any such revisions to this plan will be communicated with appropriate agencies and organizations.

4.4 Training & Exercises

The purpose of emergency drills is to confirm that staff are familiar with emergency evacuation procedures, resulting in orderly evacuation with efficient use of exit facilities, and the site as required by the Fire Code.

- All workers must be trained on the plan; training should include drills to practice response to an emergency. Emergency response training appropriate to the employees' role will also be required.
- Contractors and visitors who will enter the operating areas of the facility will be trained on plant alarms, mustering locations and evacuation procedures before they enter the facility for the first time, at least annually thereafter. A listing of contractors with current training on this plan will be maintained at the facility for reference purposes.
- Drills should be conducted on a regular basis, at minimum annually, and should not create any hazards in the process.
- Records of training and drills must be created, maintained, and stored for a minimum of 2 years.
- Any gaps identified in ERPs during drills will be recorded, with action plans for correction, prepared and completed; these will be shared with the JHSC and/or HSR. Recommendations and corrective actions resulting from period drills or plans, and emergency procedures are to be incorporated into the next edition of this plan.

4.5 Facility Location for Fire Department Access

The Skyview BESS is located near 112 Dobbie Road, Spencerville, Ontario K0E 1X0.

5 Emergency Preparedness

This section outlines the systems that are in place for mitigation of risks, early detection of hazardous conditions, and design-based prevention of emergency escalation.

5.1 O&M Building Description

Skyview BESS Operations and Maintenance Building (O&M) is an existing above grade single story building.



The Facility Layout Plan shows (as applicable):

- General layout of the site and exit and entrance routes.
- Location of amenities including:
 - Emergency Exits
 - Muster Point
 - Fire Extinguishers
 - Safety Data Sheets (SDS)
 - First Aid / AED Station

All building personnel should know at least two evacuation routes.

See **Appendix A**, for floor plans and emergency diagrams.

5.1.1 Building System Control Locations

Natural Gas Control

TBD

Main Electrical Control

TBD

Main Water shut off

TBD

5.1.2 Emergency Equipment

Emergency Lighting – Emergency lighting ensures that exits, corridors, and principal routes providing access to exits are illuminated in the event of loss of electrical power to the building.

Emergency Power – There is a backup Generator connection, but it is not automatic, generator is not permanently installed.

Emergency power is required to ensure the continued operation of fire and life safety systems in case of loss of normal power.

Exits – An exit is that part of a means of egress that leads from the floor area it services to a public thoroughfare or to an approved open space. Walls, floors, doors, or other means provide a protected path necessary for occupants to proceed with reasonable safety to the outside.

Fire Alarm System – The purpose of a fire alarm system is to alert all the occupants of the building that a fire emergency exists, so that such occupants may put the measures required by the ERP into practice. All fire alarm systems shall be always maintained in a fully operational condition.



5.1.2.1 Fire Department Access

Fire department access allows fire fighters and their equipment to gain access to the building. Vehicles parked in a fire route, excessive vegetation, snow, and other forms of obstructions to access routes, fire hydrants, and fire department connections are not permitted. Maintaining Fire Department Access is an ongoing matter. In addition, access into a building requires consideration (e.g., with a key box, through preplanning etc.).

5.1.2.2 Portable Extinguishers

Portable extinguishers are intended as a first aid measure to cope with fires of limited size. The basic types of fires are Class A, B, and C. Portable extinguishers are rated for the corresponding class of fire.

5.1.3 Material Inventory

The SDS's for materials in use that pose a potential danger to the environment or to public health and safety have not been attached but are available at the facility. The following tables provide lists of materials that may be a risk to human health and the environment, the quantities, specifications, and maintenance intervals where appropriate.

5.2 BESS Fire and Explosion Protection

During normal operation, the SolBank 3.0 will be under control of a site Emergency Management System (EMS). The EMS in turn will communicate with, and be controlled by, an offsite fleet controller, SCADA operations center, or other third-party dispatch and monitoring entity. SolBank alarms will be forwarded to such remote operations, and in turn, remote operations personnel can shut down the SolBank if determined to be necessary.

The e-Storage SolBank 3.0 unit includes multiple redundant safety systems to detect and respond to potential fire or explosion risks inside the battery enclosures. These systems are integrated into every SolBank 3.0 unit and are designed to prevent incidents before they occur, while also minimizing risk if an event takes place. The system includes:

- Explosion prevention via ventilation and gas control.
- Smoke, heat, and combustible gas detection.
- Emergency-stop and remote shutdown capabilities.
- Battery system enclosures with no interior walk-ins (non-occupiable).
- Dedicated Fire Alarm Control Panel (FACP) and backup power

The SolBank 3.0 can be shut down either locally or remotely. A system shutdown will result in electrical isolation of the battery strings and cessation of battery charging or discharging. A system shutdown will not de-energize the battery bank, nor will it guarantee that a fault or thermal runaway event has been stopped.



5.2.1 Explosion

Each SolBank 3.0 enclosure is equipped with an explosion prevention system designed to exhaust the flammable byproducts of cell off-gassing that may be generated during a potential failure condition. Flammable gases will be detected by 2 combustible gas detectors within the enclosure. There are two distinct alarm levels initiated by the gas detection system, each triggering specific actions:

Level 1 Alarm (10% LEL)

- Signal to fire alarm control panel
- Activate alarm bell
- Activate explosion prevention system
- Stop battery charging and discharging

Level 2 Alarm (20% LEL)

- All level 1 alarm actions
- Open BMS contactors
- Turn off auxiliary power

The explosion prevention system includes an 820 CFM exhaust fan and fresh air louvers. When gas detectors activate the system, the louvers open, and the fan expels flammable gas concentrations from the enclosure. Additionally, the system will engage if a heat detector inside the enclosure is triggered. A Level 2 Alarm condition does not interrupt auxiliary power to the explosion prevention system. Each container is also equipped with a battery backup to ensure continued operation in the event of auxiliary power loss. A flowchart illustrating system operation is provided in Figure 1- Explosion Prevention System Flowchart.

WARNING: Risk of Explosion, Deflagration, or Overpressure

An explosion, deflagration, or overpressure event is a critical hazard, and all on-site emergencies should be managed with full awareness of potential contributing factors. Any system failure or alarm conditions should be treated as an assumed explosion risk.

WARNING: Electrical Shock Hazard

If flooding occurs, avoid contact with the water if any part of the SolBank unit or its wiring is submerged.

WARNING: Risk of Reignition

Do **NOT** assume the fire is fully extinguished as the event unfolds. A lithium-ion battery fire that appears to be extinguished may reignite if all cells within the enclosure have not been fully consumed. The risk of reignition can persist for hours or even days after the initial detection of smoke and flames.



Skyview BESS

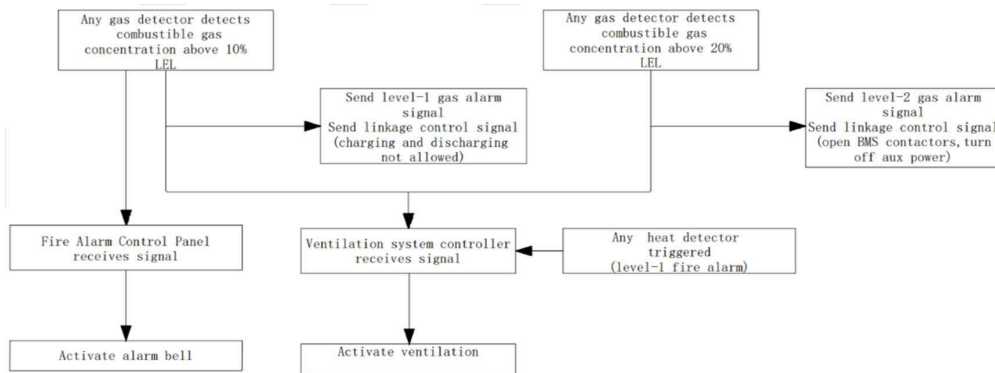


Figure 1 – Explosion Prevention System Flowchart

5.2.2 Fire

In addition to gas detection, each SolBank 3.0 enclosure is equipped with 2 smoke detectors and 2 heat detectors. Smoke detectors are calibrated to an alarm sensitivity of 3.5%/ft and heat detectors are calibrated to an alarm threshold of 85°C. Backup power to the detectors is provided via batteries within the enclosure fire alarm control panel.

There are two alarm levels initiated by the smoke and heat detectors, each triggering specific actions:

Level 1 Alarm – Smoke or Heat

- Signal to fire alarm control panel
- Activate alarm bell
- Stop battery charging and discharging

Level 2 Alarm (20% LEL)

- All level 1 alarm actions
- Activate horn/strobe (30 sec delay)
- Open BMS contactors
- Turn off auxiliary power



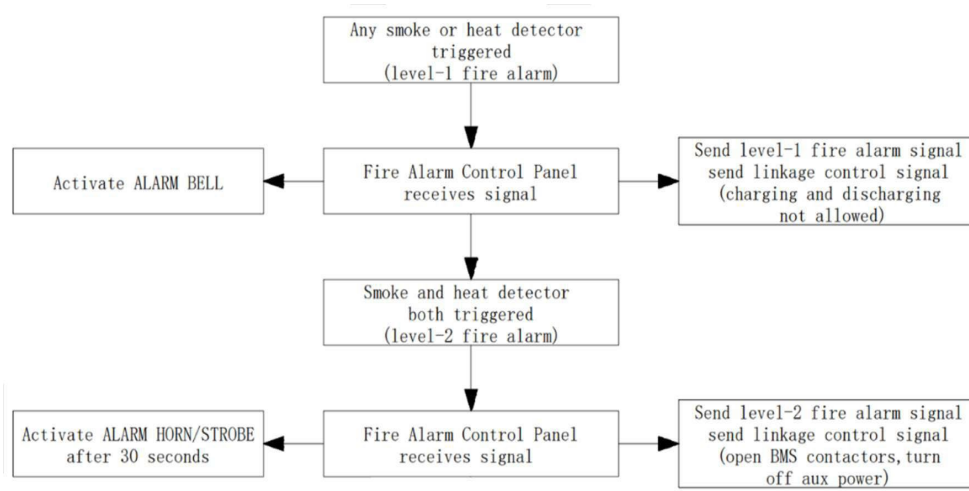


Figure 2 – Fire Detection System Flowchart

WARNING: Electrical Hazard

The fire department should not independently engage with emergency shutdown buttons, as BESS shutdown may adversely affect the electrical grid. Any interaction with local emergency shutdown should only be initiated in coordination with the system owner / operator and other SMEs, as deemed necessary.

The SolBank 3.0 can be shut down either locally or remotely. A system shutdown will result in electrical isolation of the battery strings and cessation of battery charging or discharging. A system shutdown will not de-energize the battery bank, nor will it guarantee that a fault or thermal runaway event has been stopped.

5.3 Fire Department Water Supply

The surrounding area is not served by a pressurized fire hydrant system. As part of the project, a 90,850 L (24,000 gal) fire suppression water tank is installed along the main access driveway, just outside the main vehicle entrance gate.

5.4 Nearby Exposures

The BESS units are sited outdoors at grade level and the separation distances between enclosures within the secure facility meet or exceed the manufacturer's recommended separation distances.

The area around the site is rural farmland. A barn is located more than 450 m (1,476 ft) away. Two single family homes located 600 m (1,968 ft) and 800 m (2,625 ft) respectively have been purchased by the



developer and will no longer be residential occupancies. The nearest public road and residential occupancy during operation is over 1,000 m (3,280 ft) away.

6 Roles and Responsibilities

Personnel assigned to these Projects have a duty to protect health, safety, and the environment as defined by their job descriptions.

6.1 Management

- Ensure sufficient resources are available for staff to receive adequate training to fulfill their responsibilities.
- Establishment of emergency procedures to be followed at the time of an emergency.
- Ensure that the building and facilities comply with provisions of local legislation, codes, and best practices.
- Appointment and organization of designated supervisory staff to carry out emergency response duties.
- Instruction of supervisory staff and other occupants so that they are aware of their responsibilities for emergencies, fire safety, and environmental protection.
- Assure that checks, tests, and inspections as required by the Fire Code are completed on schedule and that records are retained and maintained.
- Attend emergency drills as they occur.
- Notification of the Chief Fire Official regarding changes to the ERP.
- Make sufficient resources available for spill response personnel to receive adequate training to fulfill their responsibilities (e.g., scheduled training sessions/exercises, review and testing of the ERP).
- Report a spill to the regulatory authority and follow up where required.

6.2 Supervisors

- Participate in the identification of potential emergency scenarios, as required.
- Educate and train all site personnel and building occupants in the use of the existing fire safety as well as in actions to be taken under the approved ERP.
- Provide training to staff on spills response equipment, actions, and roles.
- Ensure control of fire hazards in the building.
- Ensure spills response kits are available and staged appropriately on site.
- Provisions of alternative measures for safety of occupants during shutdown of fire protection equipment.
- Ensure that fire drills and other emergency response measures are carried out regularly, as required.

6.3 Worker

- Report all emergencies.



- Attend training, as required.
- Follow emergency instructions.

6.4 Emergency Response Lead/Incident Commander

- Attending required training.
- Order evacuation/trigger emergency response plan.
- Ensure ERPs are followed during an emergency.
- Assume overall command, as per the plan.
- Notify workers, contractors, and visitors when the emergency is complete.
- Create and submit a report to the Health & Safety Designate outlining the details of the emergency, plan implementation, and identified gaps within the plan.

6.5 Health and Safety

- Ensure ERP is reviewed annually
- Ensure risk assessments are conducted to identify all potential emergency situations.
- Ensure that controls are in place to mitigate any potential emergencies that have been identified.
- Ensure status of controls and list of potential emergencies are shared with Senior Management, as part of their annual review.

6.6 Environment Lead

- Confirm that the Spills Response Plan addresses the facility and permit requirements.
- Support Facility Manager in development of training for staff.
- Provide expert opinion on spills response, clean up, and mitigation.
- Support the Facility Manager in communications to regulators and the local community.

6.7 Facilities Designate

- Participate in the identification of potential emergency scenarios, as requested.
- Ensure all necessary equipment is available to assist with mitigation or potential emergencies.

6.8 Joint Health and Safety Committee (JHSC)/Health and Safety Rep. (HSR)

- Review, at least annually, this procedure and provide feedback/recommendations to the Health and Safety Designate and Senior Management, as required.

6.9 Contractors

- Contractors must be briefed in the plant's evacuation plan. Among the minimum requirements in the plan are emergency egress procedures, primary and alternate evacuation routes, assembly areas, accountability procedures, and contractor responsibilities.



- Contractors must review the evacuation routes for their designated work areas and associated assembly locations prior to commencing work.
- Contractors must meet the requirements in the Spills and Release Management Plan.
- Upon receiving notification of an emergency, contractors should:
 - Inform other contractors within the immediate work area.
 - Shutdown any operating equipment and machinery (place it in a safe condition)
 - Follow the evacuation plan and route for the work area. Proceed (walk) to the designated assembly location. If the primary route is blocked or involves an emergency, then follow the alternate evacuation route.
 - Contractor foreman / supervisor conducts a headcount and provide this information to a plant representative when requested. Missing persons should be immediately reported to a plant representative.
 - The ERP will be reviewed separately if required.

7 Skyview 2 BESS | Emergency Response Plan

7.1 The Incident Command System (ICS):

Should be established immediately and should include designation of roles. The Incident Command Post (ICP) should be located at the Fire Department Staging Area. If additional public safety agencies are summoned to the incident, the ICS should incorporate a Unified Command (UC).

7.2 On-site staff (if applicable):

Shall promptly proceed to the designated muster point, typically at the ICP location unless otherwise directed by the Incident Commander. Incident Command shall assign a personnel accountability officer to track and report accountability as soon as possible. If available, another designated individual shall manage traffic control and guide first responders to the scene.

At the same time as these activities are occurring, the designated SME shall immediately contact the Remote Operations Centre to obtain available data from the BMS and communicate this to the Incident Commander or other appropriate individual.

8 Emergency Response

8.1 Emergency response:

If any threat to life or property exists, call 911 immediately to summon public safety responders.

In the event of an emergency the following protocol should be enacted.

8.2 Scene assessment:

Should include the following in plain language (no codes or terms) and shared with 911 Dispatcher:



From a safe distance, arriving personnel should conduct a 360-degree scene assessment if possible and provide a clear, concise report to incoming responders. All potential hazards should be communicated, including high risk voltage areas and other electrical risks, to ensure responder safety.

- Incident location
- What has happened
- What is occurring
- Any injuries or unaccounted for individuals
- Additional needs or other resources that may be necessary

8.3 Life Safety

If there is no immediate threat to life safety:

1. Allow the BESS to burn in a controlled fashion until all fuel sources inside are depleted.
2. A defensive approach should be considered, utilizing water to cool and protect adjacent exposures and to mitigate the potential spread of fire to areas outside of the fenced installation.
3. Manage the fire incident by utilizing the reach of the hose stream to protect exposures and control the off-gassing and smoke from the enclosure.
4. Remember that, even after the BESS is isolated from the electric grid, there may still be considerable stored energy in the batteries that poses a potential electric shock hazard to anyone in the nearby vicinity.

Additionally, chemicals released during a fire or explosion event will be in a gaseous form and primarily pose an inhalation hazard. A fog pattern from a handline or monitor nozzle may provide an effective means of controlling any off gases outside of the battery enclosure from migrating to unwanted areas such as public muster points, emergency responders, building intakes, etc.

Hose streams may be also applied to adjacent exposures for cooling purposes. BMS data for the adjacent system(s) – available via the ROC – should be closely monitored for any indications of heat impact or water damage to any adjacent BESS units and relayed to the appropriate individual within the Incident Command System.

Following partial or complete consumption of the system by fire, batteries may continue to emit flammable and toxic gases for an extended period. Continuous monitoring of gas levels in and around the incident location is recommended. Full firefighter PPE and SCBA shall be utilized until gas levels are confirmed to be at a safe level. A fire watch should be provided to ensure the continued safety of the site after the situation appears stable.

Remember that, even after the BESS is isolated from the electric grid, there may still be considerable stored energy in the batteries that poses a potential electric shock hazard to anyone in the nearby vicinity.

Additionally, chemicals released during a fire or explosion event will be in a gaseous form and primarily pose an inhalation hazard. A fog pattern from a handline or monitor nozzle may provide an effective



means of controlling any off gases outside of the battery enclosure from migrating to unwanted areas such as public muster points, emergency responders, building intakes, etc.

Hose streams may be also applied to adjacent exposures for cooling purposes. BMS data for the adjacent system(s) – available via the ROC – should be closely monitored for any indications of heat impact or water damage to any adjacent BESS units and relayed to the appropriate individual within the Incident Command System.

WARNING: Risk of Reignition

Following partial or complete consumption of the system by fire, batteries may continue to emit flammable and toxic gases for an extended period. Continuous monitoring of gas levels in and around the incident location is recommended. Full firefighter PPE and SCBA shall be utilized until gas levels are confirmed to be at a safe level. A fire watch should be provided to ensure the continued safety of the site after the situation appears stable.

8.4 Personal Protective Equipment (PPE)

- Firefighters must wear full protective gear, including SCBA, when responding to any fire or explosion event, or if there is any indication that a fire is present or could occur during the event.
- If there is no risk of fire or explosion present, arc-rated (AR) protective clothing to protect against arc flash and electrical shock should be worn. Jewelry such as necklaces shall be removed to avoid contact with any electrical hazard.

8.5 Fire/Smoke

8.5.1 WARNING

WARNING: Risk of Explosion or Deflagration

An explosion, deflagration, or overpressure event is a critical hazard, and all on-site emergencies should be managed with full awareness of potential contributing factors. Any system failure or alarm conditions should be treated as an assumed explosion risk.

WARNING: Toxic Gases

Large quantities of toxic smoke and gas may be emitted from the BESS during battery off-gassing or fire situations. Proper PPE including SCBA should be worn by first responders.

8.5.2 Fire Incident – BESS

A safe stand-off distance should be maintained between individuals and the BESS enclosure(s) exhibiting fire conditions.

Upon discovery of a fire: **RACE**

Rescue = Remain calm. Help anyone in immediate danger and evacuate the area.



Alert – Shout FIRE and call 911 to notify the fire department.

Contain – contain or confine the fire when safe to do so to prevent the spread of fire by closing doors and windows to eliminate further spread and damage.

Evacuate– Leave the site immediately using the safest, nearest exit, and gather at the “Muster Point 2” area. If in the O&M building XXXXX

Emergency Responders have been trained by experts to safely assess and manage fire situations at the facility. A specialised Emergency Response Plan has been developed for First Responders and is provided in an Appendix for reference.

Staging of personnel and equipment should be located at angles relative to the BESS enclosure(s) to stay out of the potential blast radius of any enclosure doors or other possible projectiles. Attempt to extinguish the fire only if an imminent threat to life safety exists.



8.5.2.1 BESS





8.5.3 O&M Building

Lay out required

(Drawing to be inserted when engineering is completed)

Upon Discovery of a Fire in the O&M Building ONLY: RACE

Rescue = Remain calm. Help anyone in immediate danger and evacuate the area.

Alert – Shout FIRE and call 911 to notify the fire department.

Confine – Close all doors near the fire to slow its spread as you leave the area.

Evacuate and Extinguish – Trained staff may extinguish the fire if safe to do so.

All others should leave the building immediately using the safest, nearest exit, and gather at the “Muster Point 2” area. (TBD)

Fighting a fire with a portable extinguisher is a **voluntary** act.

Never fight a fire if one of the following is true:

- The fire is spreading beyond the immediate area where it started.
- The fire is already a large fire.
- The fire could spread to block your escape route.
- You are untrained in the proper operation of the extinguisher.
- You are not sure you have the right type of extinguisher.
- You are not sure if the extinguisher is large enough to fight the fire.

If you cannot leave your area or have returned to it because of fire or heavy smoke:

- Remain in the area.
- Close the door.
- Call the Fire Department, dial 911 and tell them exactly where you are.
- Seal all cracks around the door with a wet towel or sheet to prevent smoke from entering.
- If there is a window, signal to the fire fighters by waving a bright colored object, towel, or sheet.
- Protect yourself from smoke by crouching low to the floor.
- Remain calm and wait to be rescued.

8.6 Explosion Incident

Lithium-ion batteries release flammable off-gases during thermal runaway which, if allowed to accumulate within the enclosure, may create an explosive atmosphere, posing serious risk to first responders and nearby exposures. Furthermore, it may be difficult to discern conditions within the enclosure if smoke and gas are not visible outside of the unit.



Upon Discovery of a Fire in the O&M Building ONLY: RACE

Rescue = Remain calm. Help anyone in immediate danger and evacuate the area.

Alert – Shout FIRE and call 911 to notify the fire department.

Confine – Close all doors near the fire to slow its spread as you leave the area.

Evacuate and Extinguish – Trained staff may extinguish the fire if safe to do so.

All others should leave the area immediately using the safest, nearest exit, and gather at the “Muster Point 2” area. (TBD)

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- The fire is spreading beyond the immediate area where it started.
- The fire is already a large fire.
- The fire could spread to block your escape route.
- You are untrained in the proper operation of the extinguisher.
- You are not sure you have the right type of extinguisher.
- You are not sure if the extinguisher is large enough to fight the fire.

In the case of a fire or thermal runaway event, an explosive or deflagration event may occur, potentially subjecting personnel to overpressure and projectile hazards. An initial exclusion zone should be established to guard against any blast overpressure, based on the discretion of the Incident Commander. Fire department staging and operations should not be in direct alignment with the BESS units and should be established at angles relative to the sides of the enclosures, if possible. If available, shielding via the built environment should be utilized to protect against high temperatures, overpressure events, or projectile hazards.

A safe stand-off distance should be maintained between individuals and the BESS enclosure(s) exhibiting fire conditions. Staging of personnel and equipment should be located at angles relative to the ESS enclosure(s) to stay out of the potential blast radius of any enclosure doors or other possible projectiles.

If your building has been impacted by an explosion, you must evacuate the building immediately and contact 911.

If you are trapped in the building, remain calm and call 911:

- Assess your personal health (injuries, severity, etc.).
- Try to make noise or bang on an object to signal your location.
- Follow the directions of emergency responders.



8.7 Bomb Threat

8.7.1 Bomb threat by Phone:

- Remain calm.
- Keep the caller on the line as long as possible to collect information:
 - What is the gender of the caller?
 - What emotional state can you hear in their voice?
 - Can you hear any background noise?
- Ask the caller the following questions, if possible:
 - Where are you calling from?
 - Why are you doing this?
 - What is your name?
- Signal a co-worker to notify your supervisor of the situation or notify your supervisor as soon as the caller hangs up.
- If the threat was left on your voice mail, do not erase, and immediately contact your supervisor.
- Once the call is over, sit down in a quiet area by yourself, and write down everything you remember about it.

8.7.1.1 Bomb threat by Mail:

- Do not touch any suspicious-looking or unknown package. Get away from the package and instruct others not to go near it.
- Remain calm.
- Put the letter or package down immediately, and cordon off the area where it is.
- Notify your supervisor immediately so that they can call 911 and notify the Emergency Response Lead/Incident Commander.
- Do not allow anyone to handle the letter or package.

8.7.1.2 Bomb threat by E-Mail:

- Remain calm.
- Do not close your email.
- Notify your supervisor immediately so that they can call 911 and notify the Emergency Response Lead/Incident Commander.



8.8 Building Impacted

If your building has been impacted by an explosion, you must evacuate the building immediately and contact 911.

If you are trapped in the building, remain calm and call 911:

- Assess your personal health (injuries, severity, etc.).
- Try to make noise or bang on an object to signal your location.
- Follow the directions of emergency responders.

8.9 Flood

In the event of a flood:

- DO NOT attempt to shut off electricity if any water is present. Water and live electrical wires can be lethal.
- DO NOT use flooded appliances or electrical outlets until they have been checked by the local power authority.
- If the flood is outside, avoid the flooded area as the ground below may be unsettled and could cave in.
- Never cross a flooded area. If you are on foot, fast water could sweep you away.
- If you are in a car, do not drive through flood waters. The water could be deeper than it looks.

8.10 Spill and Releases

Organization	Expected Response Time	Contact Number
Clean Harbours	4 Hour - Response 48 Hour - Remediation	800-645-8265

Spills and releases include any substance that is harmful to the environment or human health. In the event of a catastrophic spill requiring evacuation:

In the event of a spill or release:

- Stay calm.
- Identify the hazard.
- Immediately stop the work that caused the situation.
- Do not switch lights on or off, electrical equipment or any device that may emit a spark as this could cause an explosion.
- Take actions to protect personnel or assist injured.
- Cease all operations in the area and evacuate.



- Contact the Facility Manager once at a safe distance.
- The Spill Response Team will manage the spill in accordance with the Spills and Release Management Plan (Appendix B).

8.11 Medical Emergency

Medical emergencies may arise that require the assistance of a first-aid responder or an ambulance.

Heat and Cold related injury and symptoms must be treated as an emergency.

General medical emergency information:

- Stay calm.
- Contact the on-site First Aid Responder and call 911.
- Provide as much information about the person as possible to the First Aider/Emergency Responders.
- Keep the person as comfortable as possible.
- Do not move the person unless it is for safety reasons.
- Do not administer any medications unless it is the person's medication, and you are directed to do so by the individual.
- Notify your immediate supervisor as soon as practical.
- Ensure an investigation form is filled out as required.

8.12 Power Outage

Power outages can be local (a single building) or affect large areas in the community. During any outage, emergency lighting is available for a short duration.

In the event of a power outage:

- Remain calm.
- If you are in an unlit area, proceed cautiously to an area that has emergency or natural lighting.
- Aid others in your immediate area that may be unfamiliar with the space.
- If requested, accompany, and assist persons with disabilities who may need assistance.
- Do not use any open flames (i.e., candles, lighters, etc.); your mobile phone can be used as a light source.
- If instructed to evacuate, proceed cautiously to the nearest clear exit, and proceed to the designated meeting area.
- Contact a member of Senior Management to inform them of the power failure, if not already notified.
- Contact the local power authority to report the outage.



Upon restoration of heat and power:

- Electronic equipment should be brought up to ambient temperatures before energizing to prevent condensate from forming on circuitry.
- Fire and potable water piping should be checked for leaks from freeze damage after the heat has been restored to the facility and water turned back on.

8.13 Severe Weather

Severe storms can occur at any time of year and affect Potentia Renewables Inc. buildings and facilities. Thunderstorms, tornadoes, hail, blizzards, ice storms, high winds and heavy rain can develop quickly and threaten life and property. In the event of a weather emergency, listen to the local radio or television stations for severe weather warnings and advice prior to commuting to work.

In the event of a thunderstorm/lightning:

- Site Manager and/or Health and Safety Manager will notify supervisors to shut down operations until the lightning subsides.
- If you are outdoors, take shelter immediately, preferably in a building but, failing this, in a depressed area such as a ditch or culvert. Never wait it out under a tree.

Remember Environment Canada's **"30/30 Rule"** (you can be struck during 30 second intervals between lightning and thunder, resume activity 30 minutes after the last audible thunderclap).

Lightning Alerts

Distance Advisory (kilometers away from site) **Distances are given by Indji Watch software**	Protocol
40-80 km	• Supervisor to alert site staff. • Direction of storm is monitored. • Depending on direction of storm; tower evacuation will begin to give everyone enough time to exit
0-40 km	• Towers evacuated, no elevated work, crane work stopped • Foot traffic and workers begin assembling to head for shelter



In the event of a tornado, take shelter immediately:

- Go to the lowest level of the building.
- Do not go to your parked car.
- Seek shelter in small windowless rooms such as washrooms, or stairwells.
- Stay away from doors and windows. Flying glass is extremely dangerous.
- If you are caught outdoors and no shelter is available, lie flat in a ditch, ravine, or other low-lying area, and shield your head with your arms.

In the event of a blizzard or ice storm:

- If you go outside, dress for the weather.
- Pay attention to branches or wires that could break due to the weight of any ice or heavy snow.
- Never touch power lines. During an ice storm, a hanging power line could be charged (live) and you would run the risk of electrocution. Remember also that ice, branches, or power lines can continue to break and fall for several hours after the storm has passed.
- Freezing rain can make roads and sidewalks extremely slippery. Use caution when walking or driving.

8.14 Shelter-in-Place

Shelter-in-place is ordered when it is safer to remain inside than to go outside. This could be due to a fire or environmental hazard outside.

If instructed to shelter-in-place:

- Close and lock all windows and exterior doors. Turn off all fans, vents, and heating and air conditioning systems.
- If possible, take refuge in a small, interior room, with no or few windows. In case of a chemical threat an above ground location is preferable, as chemicals heavier than air may seep into the basement even with the windows closed.
- Although most shelter-in-place orders usually last only a few hours, take any emergency kits with you to have a supply of food, bottled water, first aid supplies on hand.
- Have a working radio available so you can listen to the media to know when it is safe to come out or if you will need to evacuate the area.
- Try to have a hard-wired telephone inside the room in which you are seeking shelter. This will provide a backup to any cellular equipment you may have.



- Avoid using the telephone unless you are reporting an emergency, or it is necessary. Emergency responders and those who need immediate emergency assistance will need all available lines.
- Do not leave the building or go outside until advised that it is safe to do so.
- You can still move around inside the building and continue your normal activities. If you see someone outside your building invite them to come inside until the shelter-in-place order is lifted for their safety.

8.15 Vehicle Incident

During a collision resulting in injury:

- Stay at the scene.
- Turn off the engine and turn on flashers.
- Move to a safe distance from the vehicle and oncoming traffic.
- Call for help or have someone else call 911.
- If trained in First Aid, treat injuries.
- Calmly wait for assistance.
- During vehicle trouble:
 - At the first sign of trouble, begin to pull over.
 - Check your mirrors, put on your hazard lights.
 - Never stop in the driving lanes.
 - Exit vehicle through the door away from traffic.
 - Call for help. While you wait for help, stay in your vehicle with the doors locked unless you deem it to be safer to wait outside of your vehicle (e.g., if there is smoke coming from the vehicle).

8.16 Violent Person/Assault

Should you discover that there is a violent or potentially violent person in your building or area, take the following steps:

- DO NOT CONFRONT THE PERSON. If safe to do so, remove yourself from the situation and go to a safe place.
- Call 911 as soon as possible. 911 operators need specific information: be prepared to listen and answer their questions as quickly as possible to the best of your ability.
- Request an ambulance for anyone who is injured.
- If possible, notify others in the immediate area to leave if possible.
- When it is safe to do so, contact a member of Senior Management and make an official report.



9 Control of Fire Hazards/General Practices

A high standard of housekeeping and building maintenance is one of the most important factors in the prevention of fire. Listed below are some specific directions to avoid fire hazards:

- Combustible materials shall not be permitted to accumulate in any part of an elevator shaft, ventilation shaft, stairways, landings, hallways, or other routes to exits.
- ENSURE clearance is always maintained to 'fire protection equipment', (e.g., hydrants, standpipe connections, fire routes and hose cabinets). Refer to the floor plans in **Appendix A** for guidance.
- Store and use flammable and combustible liquids and gases in small quantities and only in approved containers and locations.
- Greasy or oily rags or materials subject to spontaneous heating shall be deposited in a proper safety container or be removed from the premises.
- Do not use unsafe electrical equipment, frayed extension cords or over-load outlets.

10 Persons Requiring Assistance

- If you have a disability and require assistance, it is recommended that you self-identify with your direct Supervisor, Human Resources or the Health and Safety Designate. Refer to the Health and Safety Guideline for further guidance.
- In circumstances where an individual has not self-identified but has a visible apparent need, workers may ask the individual directly if they require assistance in an emergency.
- If you are a visitor in the building, notify your host that you may require assistance during an emergency.
- If you are in a life-threatening situation — always call 911 first.

11 Building Maintenance

- Emergency response equipment must be purchased and installed so that all requirements under the Fire Code and all relevant standards are met.
- Spills response materials and equipment should be purchased and located to best address the materials used and activities taking place on site.
- All equipment and materials must be maintained in good working condition, and to manufacturer and legislative requirements.
- Records of inspection and maintenance must be retained for a minimum of 2 years. Inspections are performed monthly, with all records of inspection retained in Upkeep.
- Smoke detectors security system annual maintenance performed by certified third parties.



12 Emergency Contact Numbers

External

Contact	Phone Number
Police/Fire/Ambulance	Call 911
OPP 200 Development Drive Prescott, Ontario, K0E 1T0	Non Emergency - +1(888) 310-1122
Edwardsburgh Cardinal Fire Station 1 6055 County Road 44 Spencerville, ON K0E 1X0	Non-Emergency - +1 (613) 658-3001
Poison Control	1-800-332-1414
e-Storage 4273 King St. East, Suite 102 Kitchener, Ontario N2P 2E9	(917) 819-1900
Canadian Solar Inc. 4273 King Street East, Suite 102 Kitchener, Ontario, N2P 2E9	(519) 837-1881
Clean Harbours (4 Hour - Response 48 Hour - Remediation)	800-645-8265
Kemptville District Hospital P.O. Box 2007 2675 Concession Rd. Kemptville, ON K0G 1J0	(613) 258-6133

Internal



Title	Name	Phone Number
Director, Health and Safety	Joseh Card	W – (416) 602-7074 P – (519) 330-0754
Emergency Response Lead	TBD	
Regional Manager	Ben Hurlburt	(647) 262-3171
Field Technician	TBD	
e-Storage Manager	TBD	
Environment Lead	Sarah Palmer	(416) 844-9701

Responsibilities

Witness

The witness to identify the spill or near miss is the first person aware of the potential spill. If this person is equipped with the confidence and ability to respond to the situation, they will follow the actions below. If this person is not appropriately trained for the situation, they will be responsible to engage the next immediate person in the chain of command.

The initial responsibility of the witness must be the safety of personnel. If necessary, evacuation from the affected area to the closest muster point may be required. The next priority is to notify the Facility Manager to provide an initial assessment of the situation. The witness should not attempt to deal with a situation that represents a potential immediate danger to his/her own health.

The witness should take the following actions:

- Identify immediate hazards.
- Take actions to protect personnel or assist injured.
- Immediately stop the work that caused the situation.
- If safe to do so, stop nearby work activities and equipment, engaging immediate (support) personnel for assistance.
- Assess the size and severity of the emergency.
- If the spill falls within the training of the witness, initiate basic response actions (outlined below).
- Initiate the response chain of command (Facility Manager).

It is the policy of the facility that plant personnel will not respond to spills/releases but will instead call for trained outside responders to perform this function. For clarification to plant personnel, the term



“respond” in this context refers to actions taken to perform cleanup operations of spilled substances, and in some cases may even take the meaning of stopping the source of a spill.

Taking basic response actions to a spill such as setting up barricades, placing containment media and stopping spills in situations such as example 1 below should not be construed to be acting in the role of a “responder”, as it is defined in OSHA HAZWOPER regulations.

If the spill or release is the direct result of an operational action performed on the system from which the release has originated, the person who performed the action should attempt to stop the release (if possible) if it can be stopped without incurring additional personal exposure to the substance. An example of this might be the following:

Example 1: A person opens the drain valve on a line that results in an unexpected release. If the person can immediately stop the release by closing the valve, this action should be taken if no additional exposure to the chemical will occur by doing so.

When reporting the spill to the Facility Manager, the witness should provide the following information where possible:

- Time of the event.
- What type of chemical has spilled/released and quantity.
- The location(s) of the spill/release.
- If the source of the spill/release has been stopped.
- If any injuries or chemical exposure has occurred to personnel.
- Boundaries describing the affected area.
- Whether or not the spill is contained.
- Environmental Impacts (water bodies, wildlife, streams, ground, roadway)

Facility Manager

The Facility Manager is responsible for implementing and maintaining the Spills and Response Management Plan. In the event of a spill or release, the Facility Manager’s responsibilities include:

- Take control of the scene and assess if further assistance is required to contain and manage the incident.
- Determine if a third-party contractor is required to address the spill and clean up.
- Coordinate site evacuation (if required).
- Determine if there is a threat to the surrounding community or the environment and contact the appropriate emergency responders where required.
- Establish if the spill requires reporting to the regulator and the required timeline for reporting.
- Coordinate with the Director of Environment regarding requirements for reporting to the Regulator, clean up, and required studies.
- Report the spill in the Corporate Spills Reporting system, tracking of outcomes, remediation, and improvements.
- Coordinate external reporting with the Director of Environment and Management.



Spills Response Team

When required, it is the Spills Response Team responsibility to:

- Take action in case of the emergency situations.
- Lock out the area affected and keep it locked out until the issue is addressed.
- Remove employees and rescue and help victims immediately.
- Make arrangements so that access ways are kept free and unobstructed.
- Prevent people from entering emergency areas, except for people involved in and/or requested to participate in the emergency response.
- Assist Emergency Vehicles or the Fire Department (outside) accessing the location.
- Request electricity disconnection.
- Deploy booms, sorbents and/or other equipment and materials as required, if it is safe to do so.
- Assist in clean up and reclamation of a spill site under the direction of the Facility Manager.
- Contract confirmatory sampling prior to reclamation.
- Confirm waste disposal requirements and maintain confirmation documentation.
- Register the occurrence and assist in developing spills report.

Third Party Spills Response Contractors

When a spill exceeds the trained capabilities of the facility staff the Facility Manager will engage a third party to respond. Third Party contractors must either be familiar with the site or have appropriate training for the type of facility and location of the spill. The Facility Manager is responsible for confirming the capabilities of the contractor.



Appendix A: Building Floor Plans and Evacuation Diagrams

Exits		
FA		
AED Defibrillators		
Extinguishers		
Spill Kit		
Gathering Point		
Smoke Detectors		
Eye Wash Station		



Designated Egress Routes and Muster Areas for Evacuations

Skyview BESS Operations Building (TBD)



Skyview BESS Substation (TBD)

-  First Aid Kit
-  Muster Location
-  AED
-  Fire Extinguisher
-  Electrical Panel and Disconnect
-  Emergency Eye Wash and Shower



Appendix B: Spills and Release Management Plan

The spill or release of any substance is a potentially serious event, and appropriate responses must be taken to minimize health hazards to personnel, as well as potential impacts to the environment.

All personnel assigned to these Projects have environmental protection duties and responsibilities. Each person is responsible for protecting the environment.

In the event of a spill, the Spills and Release Management Plan provide the protocols for response and follow-up. The chain of command provides an outline of duties from the first witness of the potential spill through to the management level.

Below is an outline of the responsibilities of the various parties and a general outline of the process for identification and management of spills as well as contact information in the event of an emergency.



Appendix C: ESRG Emergency Response Plan





e-STORAGE
A subsidiary of Canadian Solar

Skyview 2 Battery Energy Storage System (BESS)

EMERGENCY RESPONSE PLAN

Rev. 0 | 03/31/2025

Summary

This document serves as a site-specific Emergency Response Plan (ERP) for the Skyview 2 Battery Energy Storage System (BESS) located in Edwardsburgh/Cardinal, Ontario.

This ERP provides information and instructions to guide first responders in preparing for, and safely responding to an incident, fire, or other emergency associated with the Skyview 2 BESS.

NOTICE



ENSURING LIFE SAFETY SHOULD BE THE HIGHEST PRIORITY DURING ANY INCIDENT

Prepared For:

e-STORAGE

4273 King St. East, Suite 102
Kitchener, Ontario N2P 2E9

Energy Safety Response Group
PO Box 12639
Columbus, OH 43212
www.energyresponsegroup.com
1-833-SAFE-ESS

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EMERGENCY CONTACT INFORMATION

IN CASE OF EMERGENCY CALL 911

FD DISPATCH / COMMUNICATIONS

TBD

Phone: (XXX)XXX-XXXX

Address: XXX

LOCAL FIRE STATION

Edwardsburgh Cardinal Fire Station 1

Phone: +1 (613) 658-3001

Address: 6055 County Road 44
Spencerville, ON K0E 1X0

LOCAL POLICE DEPARTMENT

Ontario Provincial Police (OPP)

Phone: +1(888) 310-1122

Address: 200 Development Drive
Prescott, Ontario, K0E 1T0

SYSTEM OWNER / OPERATOR

e-Storage

Phone: (917) 819-1900

Address: 4273 King St. East, Suite 102
Kitchener, Ontario N2P 2E9

PROPERTY OWNER

TBD

Phone: (XXX) XXX-XXXX

Address:

SUBJECT MATTER EXPERT

TBD

Phone: (XXX) XXX-XXXX

Address:

REMOTE OPERATIONS CENTER (24/7)

TBD

Phone: (XXX) XXX-XXXX

Address:

ESS MANUFACTURER

Canadian Solar Inc.

Phone: +1(519) 837-1881

Address: 4273 King Street East, Suite 102
Kitchener, Ontario, N2P 2E9

CENTRAL STATION

TBD

Phone: (###) ###-####

Address:

SKYVIEW 2 BESS SYSTEM INFORMATION



Energy Storage System

Make / Model: SolBank 3.0

Total MW / MWh: 390 MW / 1,560 MWh

kW /kWh per Unit: 1,200 kW / 4,800 kWh

of Units: Initial Installation: 387

Water Supply

Municipal fire hydrants are not present in the area. A 24,000-gallon fire suppression water tank will be installed at the entrance to the facility.

Fire Detection System

The SolBank is equipped with spot-type smoke detectors, heat detectors, and combustible gas detection.

Explosion Protection

Integrated explosion protection system includes gas detectors, exhaust fans, and fresh air intake

Project Name	Skyview 2 BESS Emergency Response Plan
Project No.	25-20245
Prepared For	e-STORAGE 4273 King St. East, Suite 102 Kitchener, Ontario N2P 2E9
Revision No.	Rev. 0
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Initial Document Preparation By:

Shawn Morris
Senior Consultant
ESRG

Initial Document Review By:

Nick Petrakis
Director of Engineering
ESRG

REVISION HISTORY

Revision No.	Date of Issue	Substance of Change
Rev. 0	03/31/2025	Preliminary Report

Note 1: The information in this document is subject to change while in DRAFT status and may be subject to change in the event of modifications to equipment or other factors impacting the design of the system or overall installation.

Note 2: During the operating life span of the project, it is expected that this document shall be reviewed annually, and that all pertinent information shall be appropriately updated as necessary. This ERP is compiled based upon current design and usage at the time of this writing.

Note 3: **Highlighted** information is “to be determined” and will be finalized prior to construction.

IMPORTANT NOTICE AND DISCLAIMER

Energy Safety Response Group LLC (ESRG) is providing an as-built final revision of this document based on an “as-built” system. This document should not be provided externally until agreed by all responsible parties.

The industry, related technology, and best practices are rapidly evolving and changing regularly. It has been observed that changes often occur to a project through the construction phase, be they to the battery itself or to the balance of system. As such, an “as-designed release” document should be considered final only if no changes are made to the system from design to construction to completion. If it is 100% accurate it will be released unchanged. However, should ESRG encounter deviations from the design, the document will be amended accordingly per the design changes and then released as a final document.

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DEFINITIONS

ACRONYMS

AR	Arc-Rated
AHJ	Authority Having Jurisdiction
BMS	Battery Management System
COD	Commercial Operations Date
E-Stop / EPO	Emergency Stop / Emergency Power Off
ERP	Emergency Response Plan
EMS / ESMS	Energy Management System / Energy Storage Management System
ERG	Generic, Product-Level Emergency Response Guide
ESRG	Energy Safety Response Group
ESS / BESS	Energy Storage System / Battery Energy Storage System
FACP	Fire Alarm Control Panel
FCC	Fire Command Center
FDC	Fire Department Connection
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
kW	Kilowatt(s)
kWh	Kilowatt-hour(s)

LFL / LEL	Lower Flammability Limit / Lower Explosive Limit
LFP	Lithium Iron Phosphate
LOCA	Letter of Conditional Acceptance
MW	Megawatt(s)
MWh	Megawatt-hour(s)
NCA	Nickel Cobalt Aluminum Oxide
NMC	Nickel Manganese Cobalt Oxide
O&M	Operations and Maintenance
PCS	Power Conversion System
PPE	Personal Protective Equipment
SCBA	Self-Contained Breathing Apparatus
SDS	Safety Data Sheet
SME	Subject Matter Expert
SOC	State of Charge
UC	Unified Command
UFL / UEL	Upper Flammability Limit / Upper Explosive Limit

ROLES AND RESPONSIBILITIES

Site Owner	The owner of the premises upon which the battery system is installed.
System Owner/Operator	The entity responsible for operation of the BESS.
Incident Commander (IC)	The person responsible for the overall management of the emergency incident and determines which Command or General Staff positions to staff to maintain a manageable span of control and ensure appropriate attention to the necessary incident management functions.
Subject Matter Expert (SME)	A person appointed by the site owner or operator to respond to the Fire Department technical requests or questions about the battery system.
Remote Monitoring Facility / Operations Center	Facility providing 24/7 remote monitoring of the battery Energy Storage Management System (ESMS) and provides notification to the System Owner and battery manufacturer.

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1. INTRODUCTION

1.1 Scope and Purpose

This Emergency Response Plan (ERP) is designed for the Skyview 2 Battery Energy Storage System (BESS) in Spencerville, Ontario—a rural community in eastern Ontario within the Edwardsburgh/Cardinal township in the United Counties of Leeds and Grenville. The document serves as a comprehensive guide outlining the roles, responsibilities, and communication protocols for the system owner/operator, property owner, and relevant subject matter experts (SMEs). It provides essential information to ensure preparedness and a coordinated, safe response in the event of a fire, explosion, or any other battery-related incident requiring public safety intervention at the energy storage facility.

On-site personnel will be designated during the construction phase, with responsibility transitioning to designated operations personnel upon the project's Commercial Operation Date (COD). "On-site personnel" refers to all individuals present on the facility property who are either direct employees of the owner/operator or affiliated contractors. Both the owner/operator and contractors are responsible for developing and maintaining contractor-specific Emergency Response Plans (ERPs) and reporting procedures that integrate seamlessly with the facility's overall energy storage safety plan.

NOTICE	
	ENSURING LIFE SAFETY SHALL BE THE HIGHEST PRIORITY DURING ANY INCIDENT

1.2 Timeframe

This ERP covers the timeframe beginning at final approval of the local permitting Authority Having Jurisdiction (AHJ) to the finalization of decommissioning and removal of the energy storage system. During the time period prior to final approval, safety systems may not yet be full operable. The Incident Commander should consider this while developing their incident action plan.

1.3 Activation

This ERP shall be activated during any emergency response to a battery-related incident on site.

1.4 Agency Jurisdiction

This plan has been strictly developed for the responding Fire Department(s) and does not cover multi-agency response.

1.5 Incident Command System (ICS)

The Subject Matter Expert (SME) shall integrate into the Incident Command System (ICS) during an emergency, ensuring seamless coordination. All SMEs, remote monitoring facility staff, and personnel associated with the energy storage system must adhere to the directives of the Incident Commander (IC) and the command staff.

1.6 Operations and Maintenance (O&M)

Routine operations and maintenance (O&M) procedures for the energy storage facility and its associated equipment fall outside the scope of this document. However, this Emergency Response Plan (ERP) applies to the facility during construction, commissioning, and throughout its operational lifespan. Before performing any work on this installation, refer to the manufacturer's O&M manuals for all site-related equipment.

1.7 ERP Update Process

1.7.1 Issuance and Revisions

Dates for draft issuance, revisions, and final issuance of this ERP are provided on page 5 of this document.

1.7.2 Updates and Document Maintenance

Updates to this ERP based on any major material changes to the installation are the responsibility of the system owner / operator and any other relevant entities. All revisions to this ERP shall be recorded in alignment with [Section 1.7.1](#) above.

1.7.3 Annual Review

During the operating lifespan of this installation, it is expected that this document shall be reviewed annually, with all pertinent information updated as required. A log of regularly scheduled annual reviews is provided in [Appendix C](#) of this document.

1.7.4 Plan Retirement

All decommissioning procedures must be carried out by trained and qualified personnel in accordance with the Decommissioning Plan for this installation. The process shall be conducted under the supervision of the system owner/operator. Additionally, the system owner/operator and/or the designated Subject Matter Expert (SME) must notify the fire department prior to decommissioning.

2 SITE DESCRIPTION

2.1 Site Location

The Skyview 2 BESS facility address is **yet to be designated**. The closest address is 112 Dobbie Road, Spencerville, Ontario K0E 1X0. Spencerville, Ontario is a rural community in eastern Ontario within the Edwardsburgh/Cardinal township in the United Counties of Leeds and Grenville.

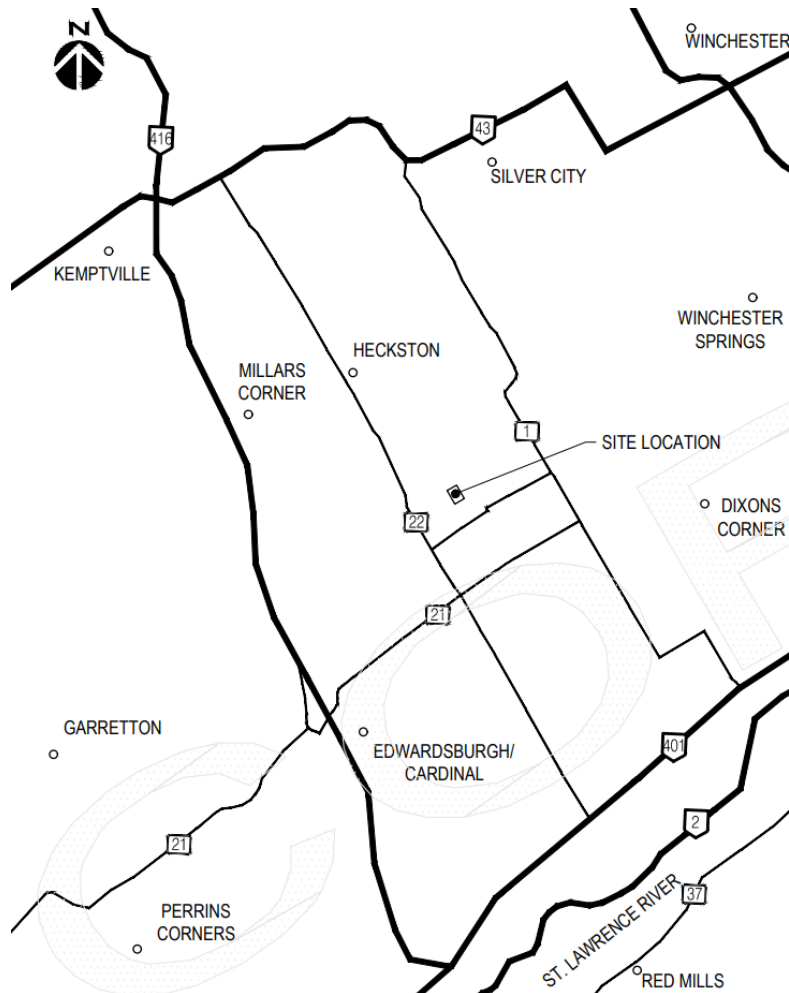


Figure 1 - Skyview 2 BESS Site Location

SITE INFORMATION

Site Address: Adjacent to 112 Dobbie Road, Spencerville, Ontario K0E 1X0

GPS Coordinates: 44.926086 N
75.470030 W



Figure 2 - Skyview 2 Site Plan

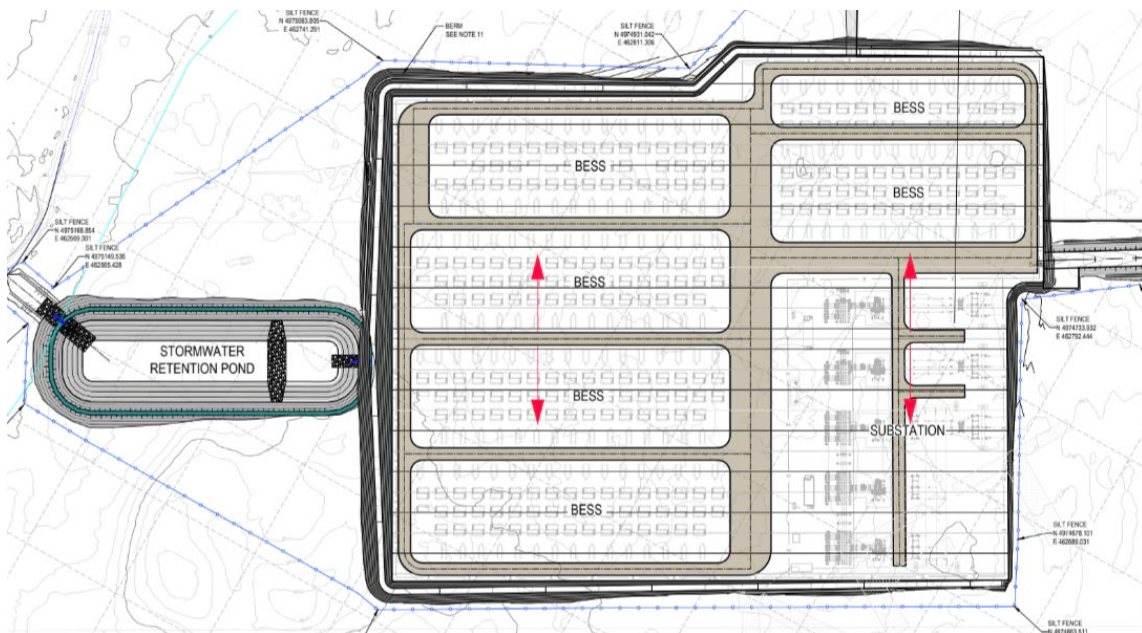


Figure 3 - Skyview 2 BESS Layout

2.2 Fire Department Access and Staging Area

Responding fire department units should begin staging at least 30 m (~100 ft) from the powered equipment until an assessment of incident severity demonstrates that such a separation distance can be reduced. If there is no visible flaming or smoking, responding units may proceed to the predetermined Fire Department Staging Area.

NOTICE



The fire department should not attempt to approach the BESS enclosures unless there is a clear imminent threat to life safety

The Primary Fire Department Staging Area is located on the access driveway, just south of the entrance gate, providing a designated entry point for initial fire response. This positioning ensures that responding fire apparatus have clear access while maintaining a minimum distance of 100 feet from any battery enclosure.

The Secondary Fire Department Staging Area may be deemed necessary by the Incident Commander during a fire event if the conditions render the Primary Fire Department Staging Area untenable. The long access driveway provides an opportunity for a Secondary Fire Department Staging Area close to the intersection with Dobbie Road.

Fire Department access into the Skyview 2 BESS is provided via Knox Box at the gate. Additional specific information will be available prior to construction.

2.3 Site Security Perimeter

The site perimeter is secured by a 2 m (6.6 ft) chain link security fence topped with not less than 3 strands of razor-sharp security wire. Fence design meets the requirements of electrical code section 26-300. Main access and vehicle gates are provided with a minimum width of 6.1 m (20 ft). Additionally multiple 1.5 m (4.9 ft) man gates are provided throughout the site. "HIGH VOLTAGE", "NO TRESPASSING" AND "AUTHORIZED PERSONNEL ONLY" signage is mounted on the main gate, personnel gate and entire security perimeter fence. Additional fencing and gates surround the non-battery electrical substation equipment.

2.4 Emergency Response Plan Access

Physical copies of the ERP, operational permits, O&M logs, product manuals, and other pertinent documents are provided to the fire department. Additional copies will be provided on site in a weatherproof enclosure in a manner approved by the AHJ.

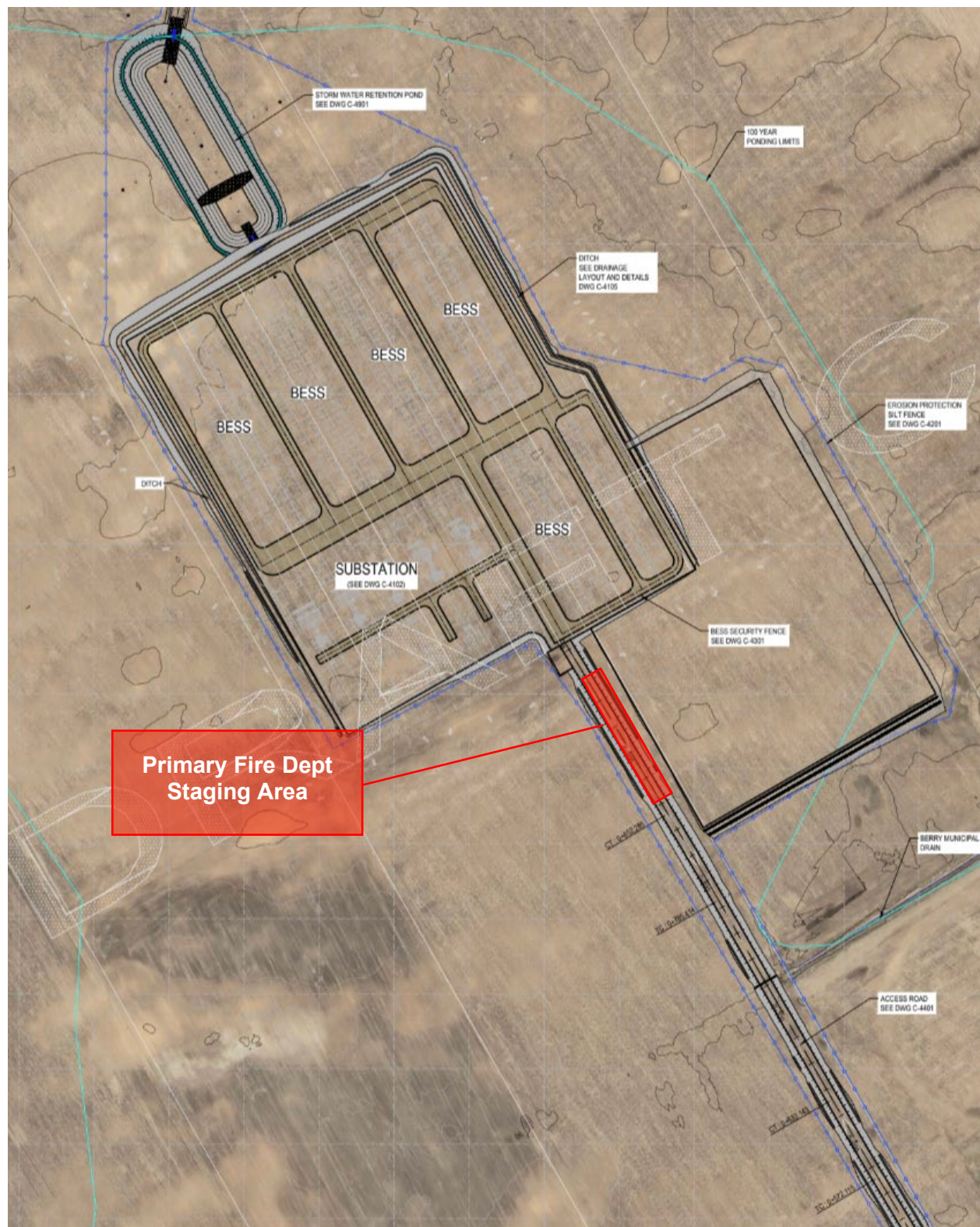


Figure 4 - Primary Fire Department Staging Area

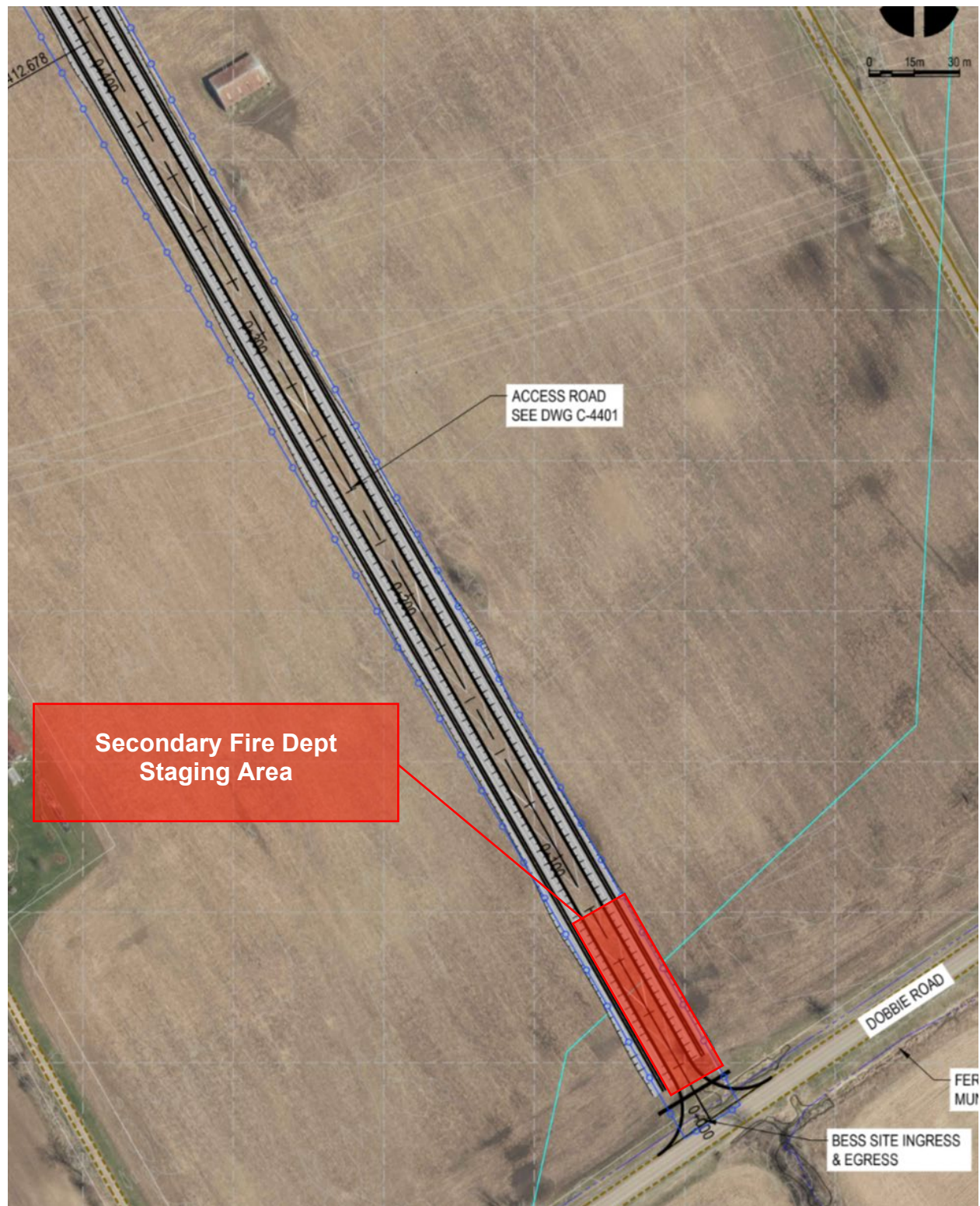


Figure 5 - Secondary Fire Department Staging Area

2.5 Equipment Access

The BESS enclosures are only accessible for maintenance purposes via cabinet-style enclosure doors and cannot be physically entered by personnel at any time.

NOTICE



The fire department should not attempt to approach the BESS enclosures unless there is a clear imminent threat to life safety

2.6 Fire Department Water Supply

The surrounding area is not served by a pressurized fire hydrant system. As part of the project, a 90,850 L (24,000 gal) fire suppression water tank is to be installed along the main access driveway, just outside the main vehicle entrance gate.

2.7 Nearby Exposures

The BESS units are sited outdoors at grade level and the separation distances between enclosures within the secure facility meet or exceed the manufacturer's recommended separation distances.

The area around the site is rural farmland. A barn is located more than 450 m (1,476 ft) away. Two single family homes located 600 m (1,968 ft) and 800 m (2,625 ft) respectively have been purchased by the developer and will no longer be residential occupancies. The nearest public road and residential occupancy during operation is over 1,000 m (3,280 ft) away.

2.8 Site Maintenance

The facility's access gate and interior access pathways shall be maintained to guarantee accessibility to the site for emergency personnel, especially during inclement weather. The system owner / operator shall ensure that applicable, ongoing upkeep activities are in place prior to construction (e.g., snow removal, landscaping, etc.).

3 ENERGY STORAGE SYSTEM

3.1 SolBank 3.0 BESS

The Skyview 2 BESS facility will initially install 387 of the SolBank 3.0 BESS units. Current plans are for the addition of another 107 units during years 3-17 for a total of up to 494 BESS units. The initial install will provide a total of approximately 390 MW / 1560 MWh of facility energy storage power and capacity to the electrical grid.

The SolBank 3.0 is fully factory integrated and tested at e-STORAGE's facility, arriving on site with battery racks populated and subsystems installed. The SolBank 3.0 integrates all power electronics, controls, and safety features required to support the DC side of the BESS. Each SolBank 3.0 unit contains 48 battery modules, each consisting of 104 Lithium-Iron Phosphate (LFP) battery cells.



Figure 6 - SolBank 3.0 BESS Unit

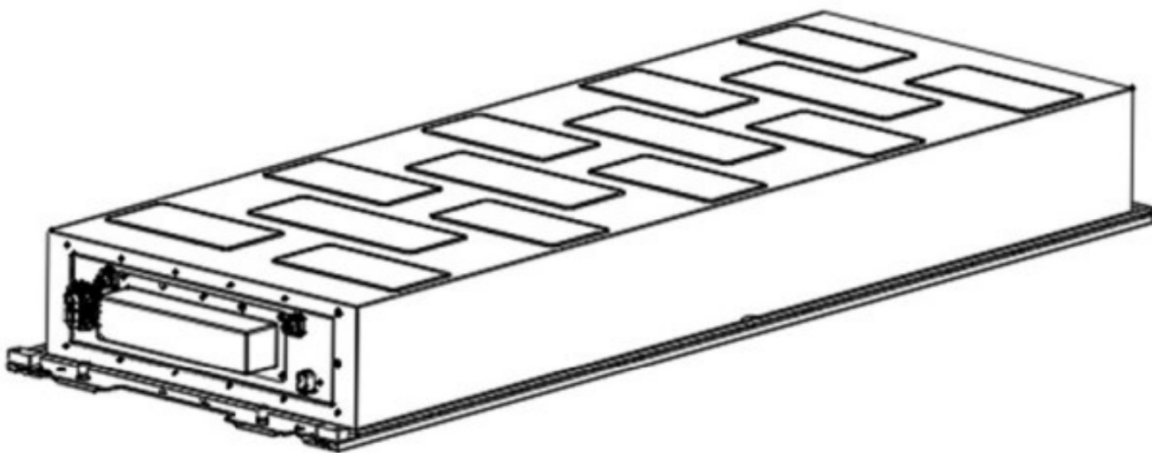


Figure 7 - Single SolBank Battery Pack Containing 104 Battery Cells



Figure 8 - Layout and Features of SolBank 3.0

Layout and Features of SolBank 3.0 BESS Enclosure		
Number	Name	Remarks
1	20' Enclosure	All models of the SolBank 3.0 utilize a standard IP55 rated 20'ft container and battery rack design allowing for enhanced system modularity.
2	Pack	The SolBank 3.0 contains 48 Lithium Iron Phosphate (LFP) battery packs, each consisting of 104 series wired battery cells.
3	Fire Protection System	The SolBank 3.0 combines heat, smoke and gas detection with an explosion-proof ventilation system.
4	BMS Box	The SolBank 3.0 contains 12 BMS boxes. These are easily accessed for installation and maintenance within the middle line of the container. The BMS ensure optimal battery functionality and safety.
5	Liquid Cooling Piping	The liquid-cooled piping connecting the chiller to the packs.
6	Cable & Wire	High-voltage connection and low-voltage communication power cable.
7	DMC	The Distribution Management and Control Cabinet (DMC) houses all aux power distribution equipment including 2-hour backup UPS; system communication, control and monitoring hardware including network switch, and SolBank controller, and all required customer communication, signal, and aux power interfaces.
8	Chiller	The SolBank 3.0's liquid cooling/heating system facilitates improved battery temperature management efficiency relative to traditional forced air systems. Each battery pack is liquid cooled, allowing for greater heat dissipation and uniform cell temperature management. During charge and discharge, cell temperature is maintained between 20°-35°C.

SolBank 3.0 Specifications	
System	e-STORAGE SolBank 3.0 S-5016-4h
Discharge Duration	4-hour
Charge/Discharge P-rate	0.25P
BOL Cell Energy (kWh)	5016
Usable Energy (kWh)	5000 (String PCS) / 4800 (Central PCS)
Operating DC Voltage Range (Vdc)	1164.8~1497.6
Recommended Discharge Power (kW)	1250 (String PCS) / 1200 (Central PCS)
# of LFP Battery Pack	12
# of BMS	12
Output Short-circuit Current (Icc)	110.12kA

4 FIRE PROTECTION FEATURES

4.1 Gas Detection and Explosion Protection

Each SolBank 3.0 enclosure is equipped with an explosion prevention system designed to exhaust the flammable byproducts of cell off-gassing that may be generated during a potential failure condition. Flammable gases will be detected by 2 combustible gas detectors within the enclosure. There are two distinct alarm levels initiated by the gas detection system, each triggering specific actions:

<u>Level 1 Alarm (10% LEL)</u> • Signal to fire alarm control panel • Activate alarm bell • Activate explosion prevention system • Stop battery charging and discharging	<u>Level 2 Alarm (20% LEL)</u> • All level 1 alarm actions • Open BMS contactors • Turn off auxiliary power
--	--

The explosion prevention system includes an 820 CFM exhaust fan and fresh air louvers. When gas detectors activate the system, the louvers open, and the fan expels flammable gas concentrations from the enclosure. Additionally, the system will engage if a heat detector inside the enclosure is triggered. A Level 2 Alarm condition does not interrupt auxiliary power to the explosion prevention system. Each container is also equipped with a battery backup to ensure continued operation in the event of auxiliary power loss. A flowchart illustrating system operation is provided in Figure 9 - Explosion Prevention System Flowchart

WARNING: Risk of Explosion, Deflagration, or Overpressure



An explosion, deflagration, or overpressure event is a critical hazard, and all on-site emergencies should be managed with full awareness of potential contributing factors. Any system failure or alarm conditions should be treated as an assumed explosion risk.

WARNING: Electrical Shock Hazard



If flooding occurs, avoid contact with the water if any part of the SolBank unit or its wiring is submerged.

WARNING: Risk of Reignition



Do **NOT** assume the fire is fully extinguished as the event unfolds. A lithium-ion battery fire that appears to be extinguished may reignite if all cells within the enclosure have not been fully consumed. The risk of reignition can persist for hours or even days after the initial detection of smoke and flames.

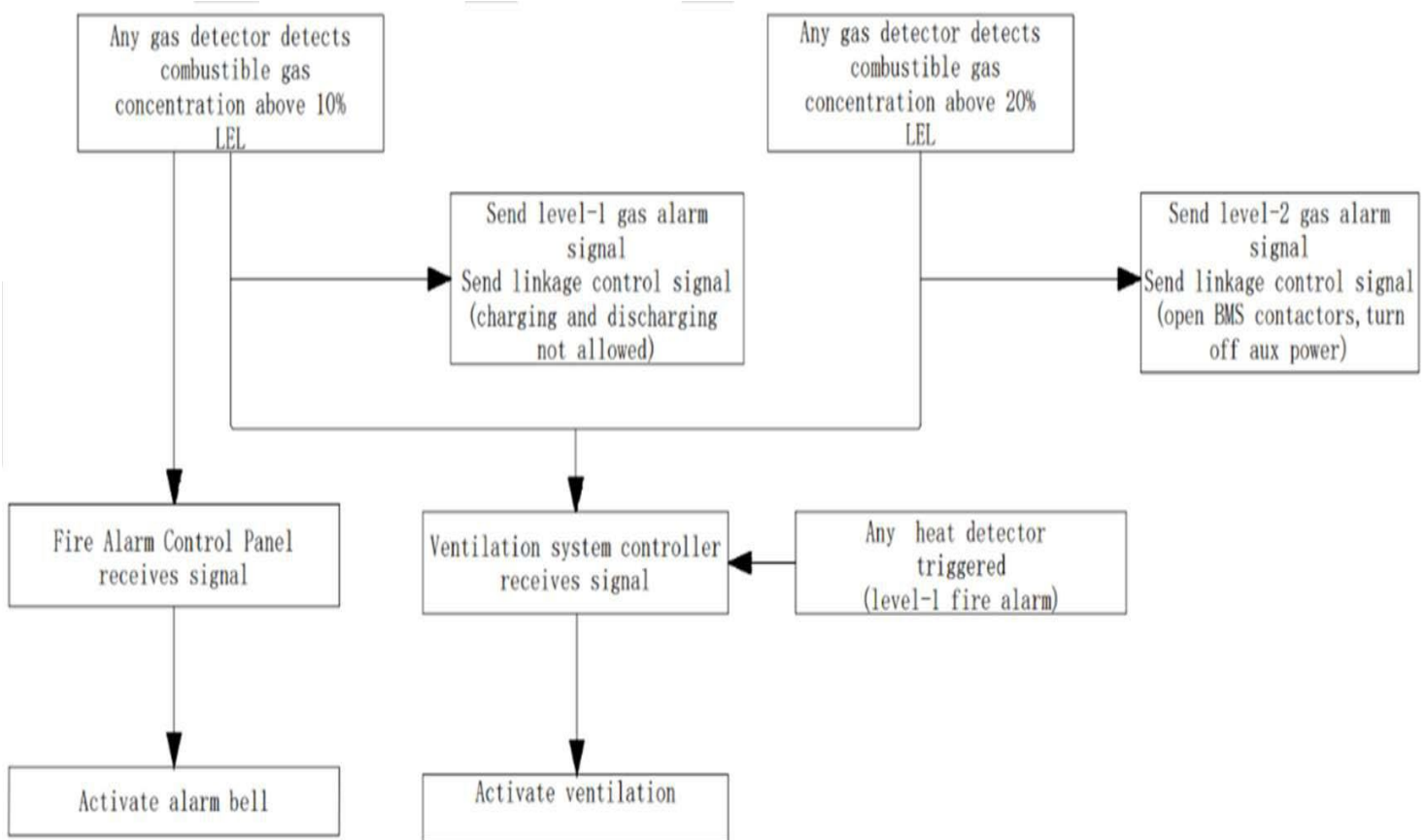


Figure 9 - Explosion Prevention System Flowchart

4.2 Fire Detection

In addition to gas detection, each SolBank 3.0 enclosure is equipped with 2 smoke detectors and 2 heat detectors. Smoke detectors are calibrated to an alarm sensitivity of 3.5%/ft and heat detectors are calibrated to an alarm threshold of 85°C. Backup power to the detectors is provided via batteries within the enclosure fire alarm control panel.

There are two alarm levels initiated by the smoke and heat detectors, each triggering specific actions:

<u>Level 1 Alarm – Smoke or Heat</u>	<u>Level 2 Alarm Smoke or Heat</u>
• Signal to fire alarm control panel • Activate alarm bell • Stop battery charging and discharging	• All level 1 alarm actions • Activate horn/strobe (30 sec delay) • Open BMS contactors • Turn off auxiliary power

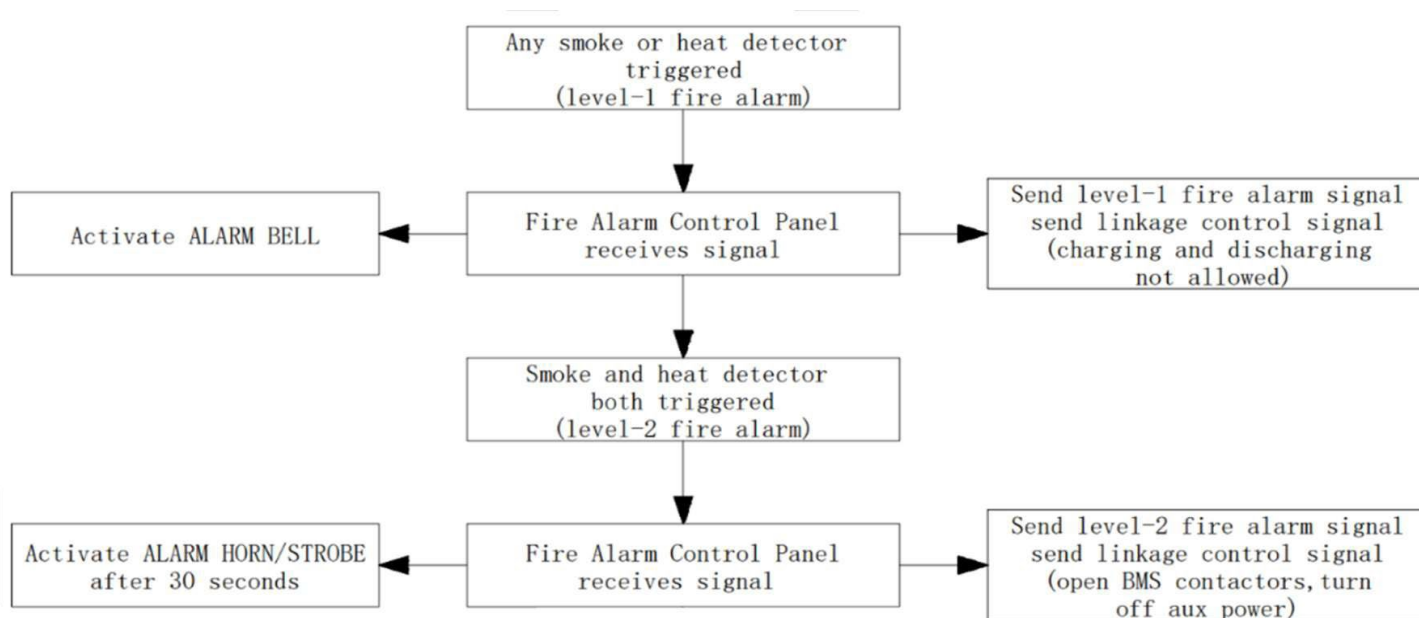


Figure 10 - Fire Detection System Flowchart

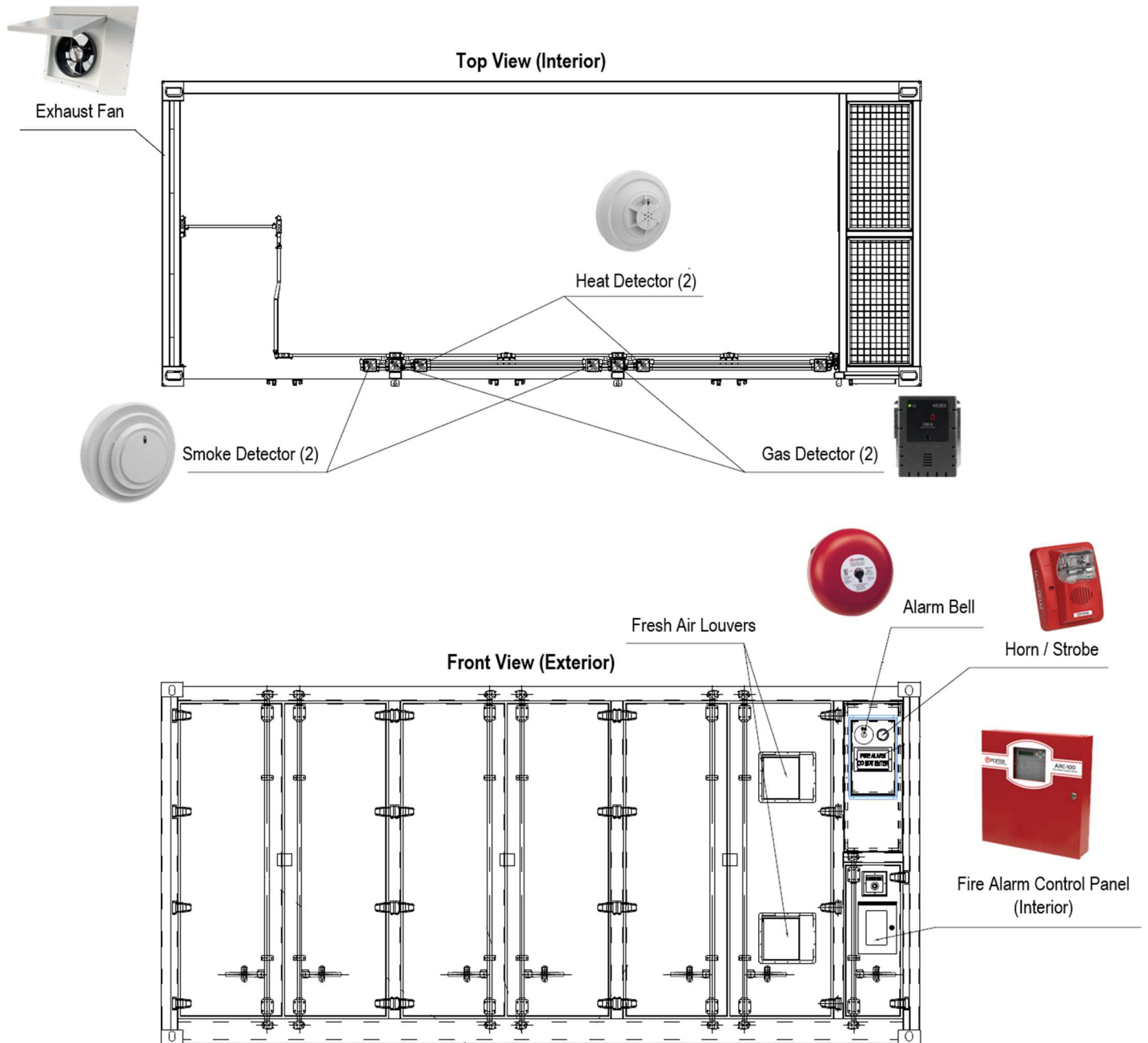


Figure 11 - SolBank 3.0 Fire Protection Systems

4.3 Emergency Shutdown

The SolBank 3.0 can be shut down either locally or remotely. A system shutdown will result in electrical isolation of the battery strings and cessation of battery charging or discharging. A system shutdown will not de-energize the battery bank, nor will it guarantee that a fault or thermal runaway event has been stopped.

WARNING: Electrical Hazard



The fire department should not independently engage with emergency shutdown buttons, as BESS shutdown may adversely affect the electrical grid. Any interaction with local emergency shutdown should only be initiated in coordination with the system owner / operator and other SMEs, as deemed necessary.

4.3.1 Automatic Emergency System Shutdown

Automatic shutdown is provided at different levels for the SolBank 3.0 BESS units, depending on the type of failure:

- Faults detected within battery cells, modules or strings result in automatic electrical isolation via the BMS.
- When system current and/or voltage are operating outside of permissible values the SolBank enclosure contains electrical fault protection devices. Additionally, the inverter/PCS includes protections and automatic disconnects.

4.3.2 Remote Emergency System Shutdown

During normal operation, the SolBank 3.0 will be under control of a site Emergency Management System (EMS). The EMS in turn will communicate with, and be controlled by, an offsite fleet controller, SCADA operations center, or other third-party dispatch and monitoring entity. SolBank alarms will be forwarded to such remote operations, and in turn, remote operations personnel can shut down the SolBank if determined to be necessary.

4.3.3 Local Emergency System Shutdown

Each SolBank contains three emergency stop (F-Stop) buttons on each end of the enclosure. When pushed, the SolBank will immediately commence shutdown, and all BMS will isolate their battery strings from the main system bus.

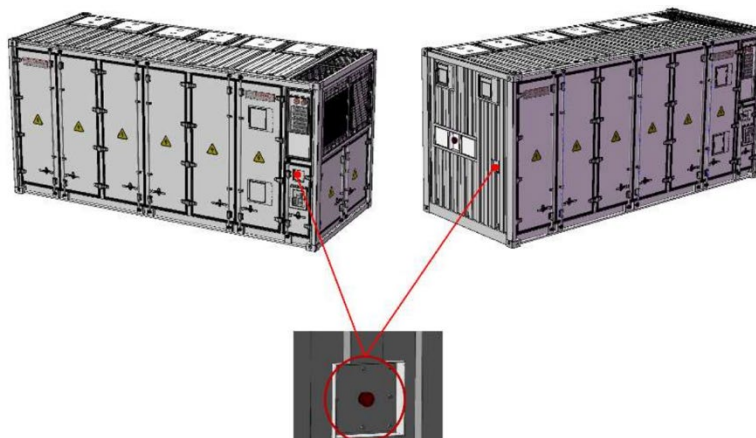


Figure 12 - F-Stop Location

CAUTION: Risk of Stranded Energy



Shutting off power to the SolBank 3.0 unit(s) does not de-energize the battery and a shock hazard may still be present. Always treat the batteries as energetic hazardous materials, as they may maintain their state of charge (SOC) long after the removal of power to the overall BESS.

WARNING: Electrical Shock Hazard



If flooding occurs, avoid contact with the water if any part of the SolBank 3.0 unit or its wiring is submerged.

4.4 Battery Management System (BMS)

An integrated Battery Management System (BMS) monitors key datapoints such as voltage, current, and state of charge (SOC) of battery cells and provides control of corrective and protective actions in response to any abnormal conditions. Each battery string – consisting of four battery modules each – is equipped with a dedicated BMS. A SolBank-level controller supervises BMS output from each individual string. In the event of any abnormal conditions, the BMS will generally first raise an information warning, and then trigger a corresponding corrective action should certain levels be reached. Critical BMS sensing parameters include:

- Over / under temperature limits
- Over / under voltage limits
- Over / under current limits
- Communications loss

4.5 Central Station Monitoring

In the event of smoke, heat, or gas detection within the SolBank enclosures, the FACP shall send alarm signals to the central station which shall then be relayed to the local responding fire department who shall coordinate dispatch of fire department units.

Central Station Monitoring Information

TBD

4.6 Remote Monitoring Facility

In addition to central station monitoring, remote monitoring of BMS operation is provided by a remote operations center. In the event of a battery-related failure transmitted by the BMS, alarm

notifications and other pertinent information on the state of the BESS shall be sent to the system owner / operator and battery manufacturer to inform potential emergency response procedures, as needed.

Additionally, if more detailed information on the state of the SolBank units is required, the remote operations center should be contacted.

Remote Monitoring Facility Information

TBD

5 HAZARDS ASSOCIATED WITH LI-ION BATTERY ESS

Lithium-ion battery failures pose several major risks, as are briefly described in the sections below. Specific response procedures for different incident scenarios are provided in [Section 8](#) of this document.

5.1 Thermal Runaway

The defining characteristic of lithium-ion battery failures is an event known as thermal runaway. Thermal runaway is a chemical process where self-heating in a battery exceeds the rate of cooling causing high internal temperatures, melting, off-gassing, venting, and in some cases, fire or explosion. Thermal runaway can be caused by thermal, mechanical, and electrical abuse; an internal short circuit from manufacturing defects; or the development of metallic dendrites over time that form an internal short circuit.

Flammable and potentially explosive gases – generally white in color – typically evolve when a BESS goes into thermal runaway and may be released in large quantities from battery cells or modules. Fire and explosive incidents may result, and precautions described in the following sections should be observed.

5.2 Fire and Reignition

Lithium-ion battery fires can reach extreme temperatures of 1,000–1,500°C and are notoriously difficult to extinguish. Their growth rate varies, ranging from slow to rapid, or even ultra-fast in the case of a deflagration event. These fires can burn for several hours until the battery modules are entirely consumed. Moreover, even after the flames appear to be extinguished, there remains a significant risk of reignition, which can occur hours or even days later, despite no visible signs of fire.

Application of water directly onto burning battery modules is not recommended and may potentially prolong the incident. In the event of a non-battery related fire or incipient fire, the decision to apply water should be made in coordination with the system owner / operator and other SMEs.

NOTICE



Indicators which may provide insight into what is happening or about to happen during an incident may include:

- Smoke or flames
- Changes in smoke color
- Changes in velocity or volume of smoke production
- Sounds such as popping or hissing

WARNING: Risk of Reignition



Do **NOT** assume the fire is fully extinguished as the event unfolds. A lithium-ion battery fire that appears to be extinguished may reignite if all cells within the enclosure have not been fully consumed. The risk of reignition can persist for hours or even days after the initial detection of smoke and flames.

5.3 Explosion

Lithium-ion batteries release flammable off-gases during thermal runaway which, if allowed to accumulate within the enclosure, may create an explosive atmosphere, posing serious risk to first responders and nearby exposures. These gases may accumulate within the BESS enclosure at levels above the lower explosive limit (LEL). At sufficiently high accumulations, gases can also exceed their upper explosive limit (UEL), at which point ventilation may bring the environment back into flammable limits, creating a new explosion risk.

It may be difficult to discern conditions within the enclosure if smoke and gas are not visible outside of the enclosure. Furthermore, a single battery cell may release enough flammable off-gas to generate an explosive atmosphere within the enclosure. Therefore, any failure or alarm condition should always result in the assumption of a potential explosion risk.

WARNING: Risk of Explosion or Deflagration



An explosion, deflagration, or overpressure event is a critical hazard, and all on-site emergencies should be managed with full awareness of potential contributing factors. Any system failure or alarm conditions should be treated as an assumed explosion risk.

5.4 Electric Shock

Even if a battery appears to be destroyed by fire or other damage, it may still contain stranded energy and remain energized. De-energization or the removal of the battery and its components should only be performed by trained professionals equipped with appropriate PPE.

Fire departments should never attempt routine overhaul of the ESS enclosure, as handling damaged batteries requires specialized equipment and expertise not readily available on-site. Once the scene is secured, these tasks should be carried out by qualified experts under strict supervision.

WARNING: Risk of Stranded Energy	
	Always treat batteries as energetic hazardous materials, as stranded energy is likely to remain present. Traditional fire department overhaul should not be conducted due to the ongoing risk of stranded energy.

5.5 Arc Flash

All BESS components and related electrical equipment should always be treated as energized energetic hazardous material.

Appropriate PPE and training are required when working or accessing equipment within an arc flash boundary. In general, when in direct proximity of the battery enclosure, wear a non-melting or untreated natural fiber long-sleeve shirt, long pants, safety glasses, hearing protection, and leather gloves. AR plant clothing is also acceptable. Maintain the arc flash boundary until the completion of any task.

5.6 Toxic Smoke and Gas Emission

Lithium-ion batteries may release large quantities of flammable and toxic gas when undergoing failure and pose an inhalation hazard. Materials and chemicals consumed during a thermal runaway event will produce copious amounts of smoke. The LFP cell vent gas composition will depend on a number of factors including state of charge and the cause of cell venting. Testing has demonstrated that LFP cells may release the following compounds when undergoing thermal runaway:

- Hydrogen (H₂)
- Carbon Monoxide (CO)
- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Ethene (C₂H₄)
- Ethane (C₂H₆)
- Propene (C₃H₆)
- Propane (C₃H₈)

While some or all these compounds may be emitted during thermal runaway or a fire event, current data from a wide range of tests, as well as real world incident metering, reveal that these gases are comparable to those released from most structure or commodity fires and do not pose a greater risk than those events. Additionally, studies have shown that toxic gas concentrations drop rapidly within a short distance from a failure location in low wind conditions.

The BESS site perimeter should not be entered during a fire or off-gassing event unless there is an imminent threat to life safety, at which time only properly trained and equipped public safety personnel may enter. This entry shall be with full firefighter protective gear including a self-contained breathing apparatus (SCBA).

A fog pattern from a handline or monitor nozzle may be an effective way to control the off-gassing event on the exterior of the battery container from migrating to unwanted areas. However, if water is used in extinguishing flames, these gases can become acids which may cause skin irritation.

WARNING: Toxic Gases



Large quantities of toxic smoke and gas may be emitted from the ESS during battery off-gassing or fire situations. Proper PPE including SCBA should be worn by first responders.

NOTICE



Typical composition of a battery off-gassing event may include:

- High concentrations (>10%) of Hydrogen, Carbon Monoxide, and Carbon Dioxide
- Lower concentration (<10%) of Methane, Ethane, or other flammable hydrocarbons

5.7 Chemical Hazards

5.7.1 Ethylene Glycol Coolant

The SolBank 3.0's liquid cooling and heating system circulates an ethylene glycol solution from the chiller cabinet to each battery pack in the system. The solution consists of 40% water and 60% ethylene glycol. This mixture which is not combustible but does pose a health risk when exposed to personnel in sufficient quantity.

5.7.2 R134a (R513a Optional) Refrigerant

The SolBank 3.0's air conditioning system circulates R134a (R513a optional) refrigerant to the entire chiller system. These refrigerants can be combustible under certain circumstances and do pose a health risk when exposed to personnel in sufficient quantity.

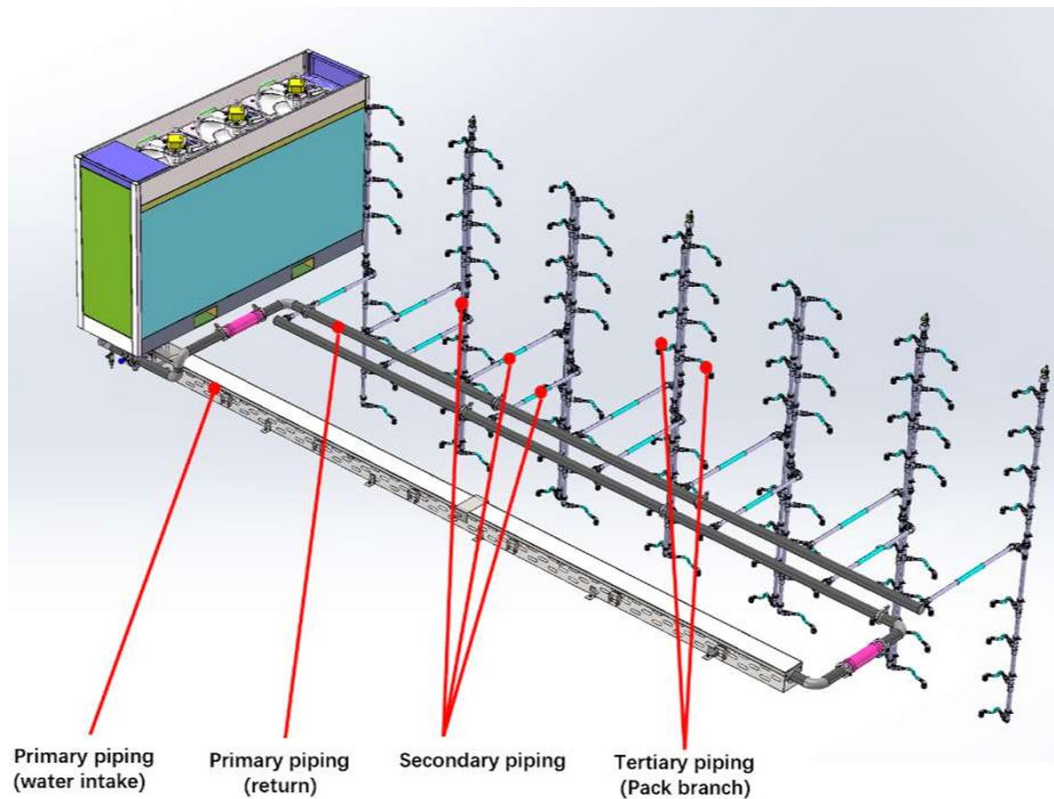


Figure 13 - Ethylene Glycol Distribution Schematic

5.7.3 Lithium-Ion Electrolyte

The electrolyte contained within the SolBank 3.0 battery packs consist of a volatile hydrocarbon-based liquid and a dissolved lithium salt such as lithium hexafluorophosphate. The electrolyte solution can be combustible under certain circumstances and does pose a health risk when exposed to personnel.

5.7.4 Lead Acid Electrolyte

The electrolyte contained within the SolBank 3.0 uninterruptable power supply and fire panel consist of a sulfuric acid electrolyte. The electrolyte solution does not combust easily but does pose a health risk when exposed to personnel.

6 EMERGENCY RESPONSE CONSIDERATIONS

6.1 Emergency Contacts

A list of emergency contacts associated with this installation is provided on page 3.

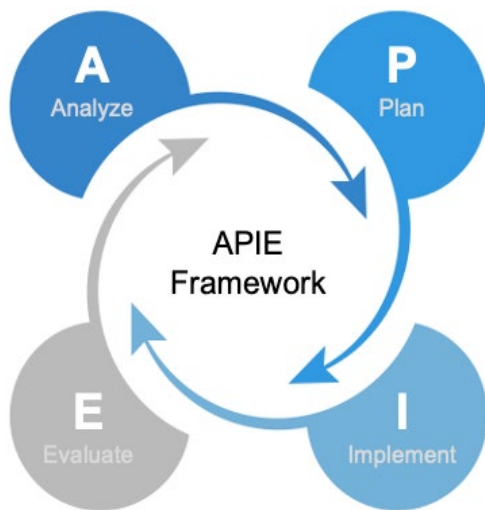
6.2 Personal Protective Equipment (PPE)

Firefighters must wear full protective gear, including SCBA, when responding to any fire or explosion event, or if there is any indication that a fire is present or could occur during the event.

If there is no risk of fire or explosion present, arc-rated (AR) protective clothing to protect against arc flash and electrical shock should be worn. Jewelry such as necklaces shall be removed to avoid contact with any electrical hazard.

6.3 APIE (Analyze, Plan, Implement, and Evaluate) Framework

APIE is a framework commonly used for emergency incidents to prepare and develop appropriate response protocols. The four elements of the framework are: analyze, plan, implement, and evaluate. An example APIE framework with simplified sample details pertaining to an emergency incident is provided below:



Analyze: For first responder awareness, provide signs and monitoring signals that indicate a fire or explosion may take place.

Plan: Delineate an exclusion zone to mitigate risks to first responders and civilian bystanders.

Implement: Implement protective measures, including street closures, minimizing pedestrian and first responder exposures, and addressing other high-risk areas with life safety concerns, as needed.

Evaluate: Provide continuous incident monitoring and feedback and adjust accordingly to ensure ongoing safety of any bystander or responder in the impacted area.

6.4 General Size-Up

Emergency response should be initiated per current protocol. If any threat to life or property exists, call 911 immediately to summon public safety responders. From a safe distance, arriving personnel should conduct a 360-degree scene assessment if possible and provide a clear, concise report to incoming responders. All potential hazards should be communicated, including high-voltage areas and other electrical risks, to ensure responder safety.

The scene assessment should include the following in plain language (no codes or terms):

- Incident location
- What has happened
- What is occurring
- Any injuries or unaccounted for individuals
- Additional needs or other resources that may be necessary

The Incident Command System (ICS) should be established immediately and should include designation of roles. The Incident Command Post (ICP) should be located at the Fire Department Staging Area. If additional public safety agencies are summoned to the incident, the ICS should incorporate a Unified Command (UC).

On-site staff (if applicable) shall promptly proceed to the designated muster point, typically at the ICP location unless otherwise directed by the Incident Commander. Incident Command shall assign a personnel accountability officer to track and report accountability as soon as possible. If available, another designated individual shall manage traffic control and guide first responders to the scene.

At the same time as these activities are occurring, the designated SME shall immediately contact the ROC to obtain available data from the BMS and communicate this to the Incident Commander or other appropriate individual.

WARNING: Risk of Explosion or Deflagration



An explosion, deflagration, or overpressure event is a critical hazard, and all on-site emergencies should be managed with full awareness of potential contributing factors. Any system failure or alarm conditions should be treated as an assumed explosion risk.

WARNING: Toxic Gases



Large quantities of toxic smoke and gas may be emitted from the ESS during battery off-gassing or fire situations. Proper PPE including SCBA should be worn by first responders.

6.5 Determine Fire Protection Approach

The decision to provide thermal cooling via hose lines should be made in coordination with the system owner / operator and any other required SMEs.

Caution should be exercised if water is applied directly to the exterior of an affected BESS enclosure, as this will not stop a thermal runaway event and may potentially delay eventual combustion of the entire BESS unit. Defensive firefighting tactics are generally recommended, with water being applied to nearby exposures for cooling, as necessary. Any hose line operations should be limited to hose and master stream application from outside of the site perimeter, as far back as hose stream ranges allow.

A fog pattern from a handline or monitor nozzle may potentially be utilized to control smoke and gases released from the affected enclosure and prevent them from migrating to unwanted areas.

In all instances, power shutdown and isolation involving any high voltage feeder lines must be confirmed before any defensive measures are taken involving application of water to the site.

WARNING: Risk of Reignition



Do **NOT** assume the fire is fully extinguished as the event unfolds. A lithium-ion battery fire that appears to be extinguished may reignite if all cells within the enclosure have not been fully consumed. The risk of reignition can persist for hours or even days after the initial detection of smoke and flames.

6.6 Incident Monitoring and Evaluation

Continuous incident monitoring and feedback should be provided as the situation evolves. Consultation with the system owner / operator, and any other required SMEs, should be ongoing to guide incident response and determine appropriate next steps.

If available, real-time BMS data from the ROC should be utilized (e.g., temperature, voltage, or other critical measurements) to monitor the spread of failure and assess the health of adjacent BESS units. This data will help guide response procedures as the event unfolds.

7 INCIDENT SCENARIOS

7.1 Explosion Incident

Lithium-ion batteries release flammable off-gases during thermal runaway which, if allowed to accumulate within the enclosure, may create an explosive atmosphere, posing serious risk to first responders and nearby exposures. Furthermore, it may be difficult to discern conditions within the enclosure if smoke and gas are not visible outside of the unit.

In the case of a fire or thermal runaway event, an explosive or deflagration event may occur, potentially subjecting personnel to overpressure and projectile hazards. An initial exclusion zone should be established to guard against any blast overpressure, based on the discretion of the Incident Commander. Fire department staging and operations should not be in direct alignment with the BESS units and should be established at angles relative to the sides of the enclosures, if possible. If available, shielding via the built environment should be utilized to protect against high temperatures, overpressure events, or projectile hazards.

A safe stand-off distance should be maintained between individuals and the BESS enclosure(s) exhibiting fire conditions. Staging of personnel and equipment should be located at angles relative to the ESS enclosure(s) to stay out of the potential blast radius of any enclosure doors or other possible projectiles.

WARNING: Risk of Explosion / Deflagration



An explosion, deflagration, or overpressure event is a critical hazard, and all on-site emergencies should be managed with full awareness of potential contributing factors. Any system failure or alarm conditions should be treated as an assumed explosion risk.

7.2 Fire Incident

A safe stand-off distance should be maintained between individuals and the BESS enclosure(s) exhibiting fire conditions. Staging of personnel and equipment should be located at angles relative to the BESS enclosure(s) to stay out of the potential blast radius of any enclosure doors or other possible projectiles. Attempt to extinguish the fire only if an imminent threat to life safety exists.

If there is no immediate threat to life safety:

1. Allow the BESS to burn in a controlled fashion until all fuel sources inside are depleted.
2. A defensive approach should be considered, utilizing water to cool and protect adjacent exposures and to mitigate the potential spread of fire to areas outside of the fenced installation.
3. Manage the fire incident by utilizing the reach of the hose stream to protect exposures and control the off-gassing and smoke from the enclosure.

4. Remember that, even after the BESS is isolated from the electric grid, there may still be considerable stored energy in the batteries that poses a potential electric shock hazard to anyone in the nearby vicinity.

Additionally, chemicals released during a fire or explosion event will be in a gaseous form and primarily pose an inhalation hazard. A fog pattern from a handline or monitor nozzle may provide an effective means of controlling any off gases outside of the battery enclosure from migrating to unwanted areas such as public muster points, emergency responders, building intakes, etc.

Hose streams may be also applied to adjacent exposures for cooling purposes. BMS data for the adjacent system(s) – available via the ROC – should be closely monitored for any indications of heat impact or water damage to any adjacent BESS units and relayed to the appropriate individual within the Incident Command System.

Following partial or complete consumption of the system by fire, batteries may continue to emit flammable and toxic gases for an extended period. Continuous monitoring of gas levels in and around the incident location is recommended. Full firefighter PPE and SCBA shall be utilized until gas levels are confirmed to be at a safe level. A fire watch should be provided to ensure the continued safety of the site after the situation appears stable.

WARNING: Risk of Reignition



Do **NOT** assume the fire is fully extinguished as the event unfolds. A lithium-ion battery fire that appears to be extinguished may reignite if all cells within the enclosure have not been fully consumed. The risk of reignition can persist for hours or even days after the initial detection of smoke and flames.

7.3 Thermal Runaway or Off-Gassing Incident

A thermal runaway incident, as described in [Section 6.1](#), is the characteristic failure mode of lithium-ion batteries. A thermal runaway event may begin suddenly, and the nature of the situation may evolve rapidly depending on several different factors. Combustion of flammable gases may result in fire or explosion, and considerations in [Section 8.1](#) and [Section 8.2](#) should be implemented based on the nature of the event as it unfolds.

A thermal runaway event may result in large quantities of smoke and gas being released, which may or may not be visible outside of the ESS enclosure itself. Therefore, it is critical that any failure or alarm condition results in the assumption of an explosion or fire risk.

Under normal conditions, venting of electrolyte should not occur in an LFP cell. However, if subjected to abusive conditions or external heating an LFP cell can vent its electrolyte and electrolyte decomposition products as vapor. Each LFP cell contains a safety vent to provide a controlled release of internal pressure during abnormal conditions.

Vented gasses may be flammable and may ignite upon contact with a competent ignition source such as an open flame, spark or hot surface.

In the event of a thermal runaway or suspected off-gassing event, the following actions should be taken:

1. Remove personnel to a safe location at a sufficient distance from the troubled enclosure.
2. If the alarm system has not already signaled the Fire Department, immediately call 911.
3. Call the Subject Matter Expert (SME) designated for the site.
4. Call the ROC listed on page 3.
5. Establish a safety perimeter around all sides of the BESS and remain outside the fenced area. Based on conditions, the safety perimeter may extend beyond the boundary of the fenced area. Stay upwind of any smoke or off-gassing. Do not allow personnel other than firefighters in proper PPE to enter the safety perimeter.
6. As the incident evolves, a fire or explosion event may occur. Procedures outlined in [Section 8.1](#) and [Section 8.2](#) should be followed based on the situation as it progresses.

WARNING: Risk of Explosion / Deflagration



An explosion, deflagration, or overpressure event is a critical hazard, and all on-site emergencies should be managed with full awareness of potential contributing factors. Any system failure or alarm conditions should be treated as an assumed explosion risk.

WARNING: Risk of Re-ignition



Do **NOT** assume the fire is out as the fire event unfolds. A lithium-ion battery fire, which has seemingly been extinguished, may flare up again if all cells within the enclosure have not been completely consumed. The risk of battery re-ignition can remain present for hours or even days after the smoke / flame is initially detected.

WARNING: Toxic Gases



Large quantities of toxic smoke and gas may be emitted from the ESS during battery off-gassing or fire situations. Proper PPE including SCBA should be worn by first responders.

NOTICE



Indicators which may provide insight into what is happening or about to happen during an incident may include:

- Smoke or flames
- Changes in smoke color
- Changes in velocity or volume of smoke production
- Sounds – popping and / or hissing
- Smell – sweet odor

7.4 Alarm Incident

In the event of an alarm activation, the following actions should be taken:

1. Remove personnel to a safe location at a sufficient distance from the troubled enclosure.
2. If the alarm system has not already signaled the Fire Department, immediately call 911.
3. Call the Subject Matter Expert (SME) designated for the site.
4. Call the ROC listed on Page 3
5. Establish a safety perimeter around all sides of the BESS and remain outside the fenced area. Based on conditions, the safety perimeter may extend beyond the boundary of the fenced area. Stay upwind of any smoke or off-gassing. Do not allow personnel other than firefighters in proper PPE to enter the safety perimeter.

Note: Depending on prevailing weather conditions, the safety perimeter may have to be adjusted. The Incident Commander may determine a secondary safety perimeter depending on the severity of the event and wind impact.

7.5 External Fire or Thermal Exposure Incident

Any type of external heat source or fire impingement not originating from the battery system itself should be treated as a BESS emergency. The Incident Commander should be advised to obtain information on BESS state of health from the BMS data (e.g., increasing temperature in exposed BESS units) – available from the ROC – to evaluate the severity of the incident. All precautions previously noted for fire and explosion incidents should be followed.

7.6 Emergency Response During Construction, Commissioning, and Maintenance

The SolBank 3.0 is shipped with battery modules installed and partially charged. This is not uncommon throughout industry but poses some challenges to emergency response which may not exist during normal operations. Once the batteries arrive, there will be some period until the fire protection system is fully commissioned, tested and verified.

During this period, fire service personnel should expect to interface with an SME, but no data regarding the conditions inside the enclosures may be available. As such, fire service personnel should take extreme caution when approaching any system which may be experiencing adverse conditions during this phase. Further, information regarding involved and adjacent containers may not be available. Fire service personnel should lean on their own experience and stakeholder expertise to determine risks to adjacent containers and assume direct fire impingement poses an enclosure-to-enclosure propagation risk.

Between delivery and commissioning of the fire protection system, safety features of the SolBank 3.0 may not all be fully functional. In cases where an adverse condition exists inside the system, it should be assumed an explosive condition exists until proven otherwise.

7.7 External Impact Incident

If an enclosure is severely impacted, causing crushing or puncturing of the outer shell of the enclosure, treat this as an emergency – notify 911 and any other required parties.

8 POST-INCIDENT / HANDOFF PROCEDURES

8.1 Handoff Procedures

When an energy storage site is deemed safe, upon determination by the Incident Commander (IC), the SME shall ensure that the site is safeguarded until the damaged system is removed, repaired, or replaced based on the approved Decommissioning Plan filed with this installation. Return of facility control from First Responders to an owner/operator for the purpose of commercial operation should occur only after damaged cells have been removed and a hazard analysis completed.

8.2 Activation of Decommissioning Plan

Decommissioning of the system shall take place in accordance with the approved Decommissioning Plan filed with this installation. Deactivation, de-energizing, dismantling, and removal of the system shall be conducted by trained and knowledgeable persons in accordance with manufacturer's specifications.

APPENDICES

APPENDIX A

Additional Site Photos

Figure A1 – Additional Site Photos



APPENDIX B

Signage / Placarding / IO Matrix

Figure B1 – Facility Signage / Placarding



Figure B2 - I/O Matrix



APPENDIX C

Annual ERP Review Log

The following table provides a log of reviews to be conducted on an annual basis for this Emergency Response Plan (ERP).

Date Conducted	System Owner Sign-Off	SME Sign-Off	Notes / Comments