Draft Emergency Response Plan

Tesla Megapack 2XL
Williamsville, New York



Revision Draft REV02

October 27, 2026

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1. EMERGENCY CONTACTS

1.1 Emergency Contact

The Tesla Local Operations Center (LOC) can be reached at **650.681.6060** for any emergency that may occur at the Renaissance BESS.

Table 1: Emergency Services Contact Information

Emergency Services Agency	Phone Number	Address
All Emergencies	***Call 911***	**--**
Main Transit Fire Department	716.632.9710	6777 Main Street, Amherst, NY 14221
Amherst Police Department	716.689.1311	500 John James Audubon Pkwy, Buffalo, NY 14228
Amherst Dept of Emerg. Services & Safety	716.631.7122	4220 Bailey Ave, Amherst, NY 14226
Millard Fillmore Suburban Hospital	716.568.3600	1540 Maple Rd, Williamsville, NY 14221

1.2 Site Owner

Site Owner: Renaissance BESS A LLC, Renaissance BESS B LLC, Renaissance BESS C LLC, and Renaissance BESS D LLC, c/o Carson Power

Owner Address: 39 Broadway Floor 32, New York, NY 10006

HQ Telephone: 585.645.9739

1.3 Location

370 Youngs Rd, Williamsville, NY 14221

42°57'15.21"N, 78°43'25.88"W

1.4 Existing On-Site Operations

The existing facility is currently used as a call center and wholesale distribution facility. Existing on-site operations are summarized as follows:

Current Use: The existing facility operates as a call center and wholesale distribution operation.
Business Hours: Monday through Friday, from 8:30 a.m. to 5:00 p.m.
Staffing: Approximately 30 employees are on-site.
Public Access: The business is closed to the general public and serves local account holder only.
Customer Activity: Approximately five to ten order pickups per week.

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2. GENERAL INFORMATION

2.1 Scope

This document is an emergency response plan (ERP) for the Renaissance battery energy storage system (BESS) facility. The ERP provides a facility overview, site design, type of equipment, safety features, suppression, and detection information along with response recommendations for potential BESS facility failure scenarios.

2.2 Purpose

The purpose of this ERP is to provide information to BESS subject matter experts (SME) and fire department personnel about potential hazards at BESS facilities. This guidance outlines the size-up and response tactics necessary to ensure safety and mitigate risks during emergency operations.

2.3 Limitations

At the request of Carson Power, FRA developed an ERP for the Renaissance BESS facility. The scope of the ERP may not comprehensively address all scenarios and events that may occur at the facility. Users of this document should reference and adhere to applicable jurisdictional standard operating procedures/guidelines for the basis of response. Users of this report and any reuse of this report and recommendations herein are at the sole risk of the user. The recommendations and tactics formulated in this document are based on observations, industry best practices, and information available at the time of development. No guarantee or warranty as to future performance of any reviewed condition is expressed or implied.

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3. SITE OVERVIEW

3.1 General Site Overview

The BESS facility will be located at 370 Youngs Road, Williamsville, New York. The Renaissance BESS site is situated within a developed, urban area and is surrounded by commercial properties. The site is bounded by Youngs Road to the west and Wehrle Drive to the north. Access to the Renaissance BESS will be provided via a proposed access road connecting Wehrle Drive to a 20-ft wide swing gate located on the north side of the facility. Immediately across Wehrle Drive is a State University of New York (SUNY) community college campus. Adjacent to the campus is the St John Mason Parish. Residential areas are located in the vicinity of the proposed Renaissance BESS location, beyond the surrounding commercial areas, as seen in Figure 1.

The proposed BESS facility includes the installation of 24 Megapack 2XL (MP2XL) cabinets manufactured by Tesla. During normal operation, the BESS facility will be unstaffed and monitored by the Tesla LOC.

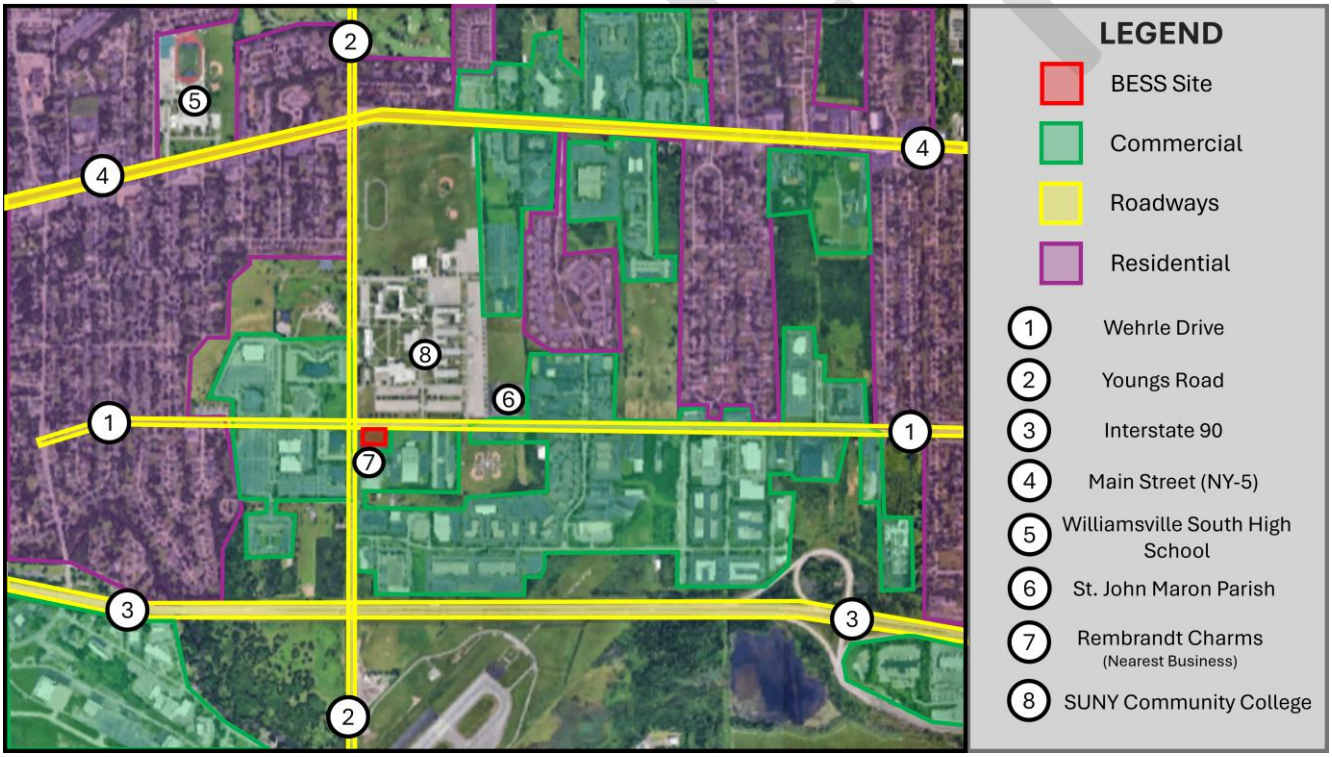


Figure 1: Area Overview

3.2 Energy Storage System Site Overview

The facility will contain twenty-four (24) MP2XL cabinets divided into four (4) blocks, as shown in Figure 2. Each battery block will contain six MP2XL battery cabinets and one-step-up medium-voltage (MV) transformer. Inverters are integrated within the MP2XL cabinet. The MP2XL outputs 480VAC to the associated MV transformer. The highest voltage within the BESS facility will be 13.2 kV from the MV transformers to the interconnection equipment.

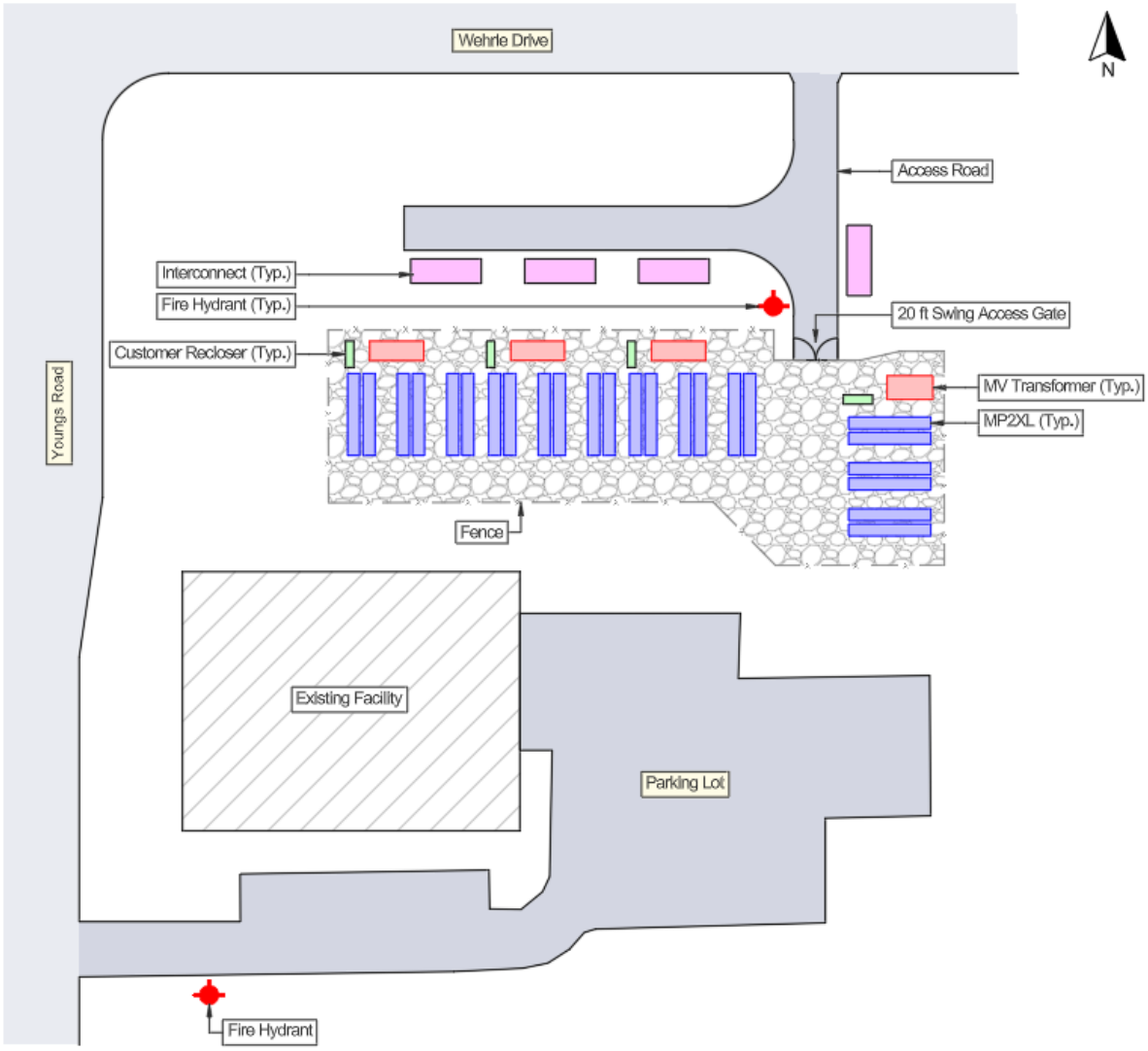


Figure 2: Renaissance BESS Facility Overview

4. EQUIPMENT AND SAFETY FEATURES

4.1 Cell

The basic functional electrochemical unit containing an assembly of electrodes, electrolyte, separators, container, and terminals. It is a source of electrical energy by direct conversion of chemical energy. Cells used in the MP2XL (Figure 3) are lithium iron phosphate (LFP) chemistry with a capacity of 280 Ah and a nominal voltage of 3.2 VDC. Cells are housed within battery trays, within each tray containing 112 cells.

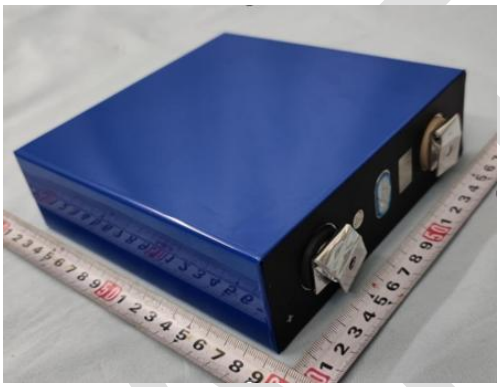


Figure 3: MP2XL Cell

4.2 Module

A module is subassembly of a BESS consisting of groups of cells or electrochemical capacitors connected either in a series and/or parallel configuration with or without protective devices and monitoring circuitry. Each MP2XL module (Figure 4) consists of three trays, and each tray contains 112 LFP cells. Each MP2XL module contains a total of 336 cells. The battery modules are installed within the MP2XL container and are monitored by the Battery Management System (BMS), which monitors cell operating conditions and provides protection functions at the system level.



Figure 4: MP2XL Module

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4.3 Cabinet

An enclosure containing components of the energy storage system where personnel cannot enter the enclosure other than reaching into access components for maintenance purposes. An external view of the MP2XL cabinet is provided in Figure 5.

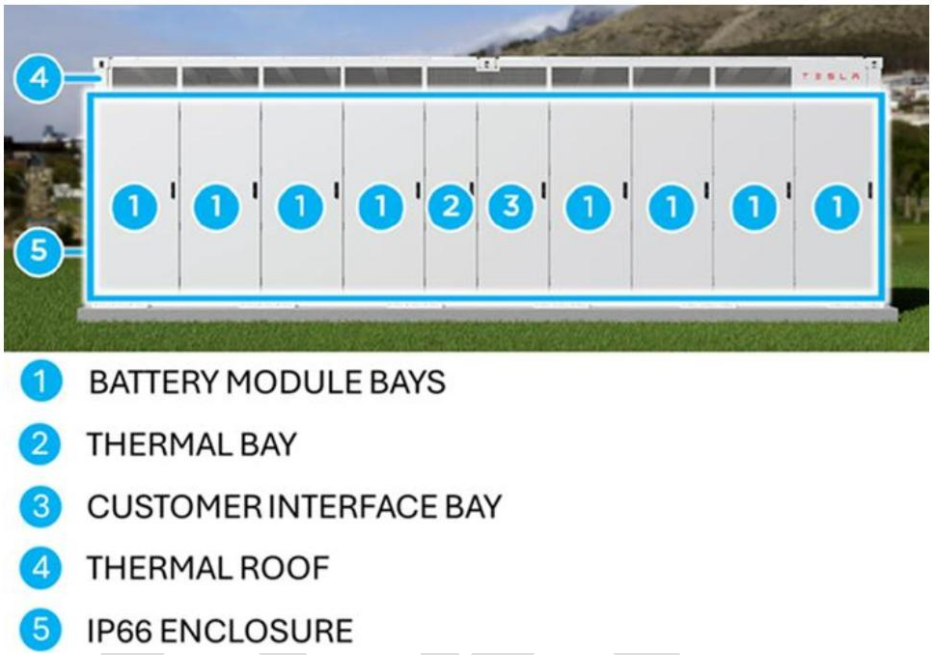


Figure 5. MP2XL Cabinet Components



Figure 6: MP2XL Cabinet Interior

Each MP2XL battery cabinet is IP66 rated and contains 8 battery module bays within one continuous enclosure, with each bay open to the adjacent bays, as seen in Figure 6. The thermal bay includes pumps that circulate a liquid coolant through the MP2XL, an in-line heater that can warm the coolant and a compressor that maintains thermal control for the cabinet. The thermal roof, located above the battery bays within its own IP20 enclosure, provides a ventilation airspace for the MP2XL. It contains fans and radiators that cool ethylene glycol-water solution. The customer interface bay (CIB) is a user-accessible area designed for operation and servicing. The

CIB includes the main AC breaker, a status panel and controller area network interface for service personnel, customer input/output terminals, and the keylock switch, which shuts down the AC bus to permit MP2XL maintenance by service personnel.

4.4 Battery Management System

The MP2XL has an integrated Battery Management System (BMS) that monitors, protects, and manages the BESS, ensuring battery health parameters are maintained for efficient and continual operation.

The BMS is a layered system, where each battery module has its own BMS and the MP2XL itself has a bus controller supervising the output of all the battery modules at the AC bus level. The BMS is engineered to react to fault conditions in an autonomous manner, with safeguards built into the firmware. These fault conditions include, but are not limited to, over-temperature, loss of communication, over-voltage, and isolation. For instance, to prevent a cell over-temperature the thermal management system is enabled by the BMS to cool the cells/module. This action by the BMS (which is just one example of many ways the BMS can respond to a fault condition) can either prevent thermal runaway from occurring in the cell or prohibit the propagation of thermal runaway to adjacent cells. Depending on the severity of the fault condition, the BMS can automatically isolate the affected battery module temporarily (less severe fault) or it can permanently disconnect the module.

Table 2: BMS Functions

Function	Description
Monitoring	The BMS continuously monitors key parameters such as voltage, current, temperature, and state of charge (SOC).
Protection	The BMS protects the battery from over-charging, over-discharging, over-current, over-temperature, and short circuits by isolating batteries that exceed predetermined operating parameters.
Balancing	The BMS helps to equalize the SOC across all cells.
Thermal Management	The BMS regulates the battery temperature by controlling heating or cooling systems, keeping the battery within the predetermined temperature range.
Power Control	The BMS regulates the power in and out of the batteries.
Communication	The BMS remotely communicates the status of monitored parameters and autonomously performed functions.

The Tesla MP2XL BMS is integrated into a power pack controller (PPC) SCADA system. The MP2XL BMS is monitored by the Tesla network, and the PPC SCADA system is monitored by an O&M provider.

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4.5 Explosion Control and Prevention System

The MP2XL includes an explosion control system to mitigate the risk of an uncontrolled deflagration. The system includes pressure-sensitive vents (overpressure vents) and sparkers installed throughout the battery module bay. The sparkers are designed to ignite flammable gases released early in a thermal runaway event, near their lower flammability limit (LFL), before they accumulate within the cabinet in greater volumes. They are installed at a variety of locations and heights throughout the battery module bays to ensure the flammable gases released during thermal runaway quicky meet an ignition source regardless of the initial release location. Sparks are operated from an independent power system and are designed to operate even if power is lost from the grid. Sparkers operate automatically at regular intervals over the life of the MP2XL.

The overpressure vents are installed on the roof of the sealed battery bay's IP66 enclosure. When pushed open, they release into the enclosure thermal roof, ensuring they do not create a projectile hazard. Figure 7 shows the location of the over pressure vents.

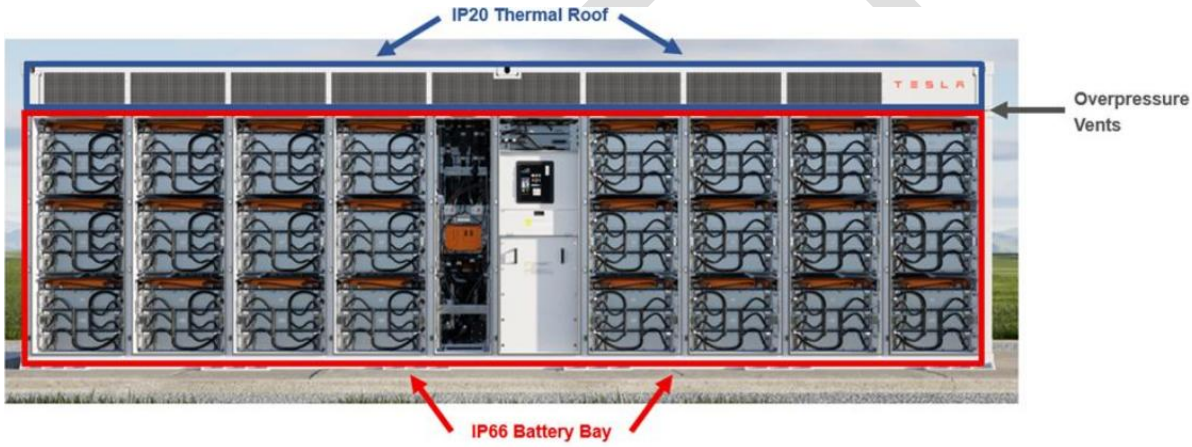


Figure 7: Explosion Control System

4.6 Emergency Stop

The MP2XL cabinet and MV transformers do not include physical emergency stop (E-stop) buttons. Although the MP2XL supports emergency shutdown, shutdown is initiated through integrated and site-level systems rather than a single button on the unit. Critical Battery Management System (BMS) alarms, including cell temperature, voltage, amperage, loss of SCADA communications, or thermal management system failure, will automatically operate the battery cabinet circuit breaker.

4.7 Transformer

Each battery block includes six MP2XL battery cabinets and one associated step-up MV transformer located adjacent to the MP2XL cabinets, as shown in Figure 2. The transformers increase the battery cabinet output from 480 VAC to the grid interface voltage of 13.2 kV.

5. FIRE PROTECTION OVERVIEW

5.1 Site Access

Access to the site will be provided via a proposed access road located on the north side of the facility. The Renaissance BESS will be contained by a fence, and access will be provided via one 20-foot-wide sliding gate located on the north side of the BESS facility. An area for turning around fire apparatus will also be provided, as seen in Figure 2. A Knox Box will be provided at an approved location near the site entrance for emergency responder access. The access road and gate area will be regularly plowed following snow events to maintain emergency access.

5.2 Fire Protection Water Supply

Fire protection water will be provided for the Renaissance BESS via existing public fire hydrants located along Youngs Road and Wehrle Drive. An additional private fire hydrant for the site will be installed near the entrance. The locations of the nearest public fire hydrant and private hydrant are provided in Figure 2. The recomended use of water should be limited to asset protection, not fire suppression.

5.3 Fire Alarm and Detection System

The MP2XL cabinets do not contain internal fire alarm or detection systems. The BMS is utilized to monitor the state of system health and generate notification for system behavior that exceeds the defined guardrail parameters. As described in Section 4.4 the BMS monitors battery and equipment operating conditions, while the site SCADA system provides site-level operational monitoring and control. Tesla monitoring through the Local Operations Center (LOC) provides remote equipment for diagnostics, fault monitoring, and troubleshooting support. These systems are primarily intended for equipment operation and system-health monitoring and are distinct from the dedicated fire detection and alarm systems.

Additionally, infrared (IR) cameras will be provided separately from the MP2XL cabinets and installed on site. Further details regarding the IR cameras will be provided as the site design progresses.

5.4 Fire Suppression System

The MP2XL is not equipped with any type of water sprinkler, gaseous agent, or aerosol-based fire suppression system. There are no listed agents or methods that can interrupt and contain a cell that is in thermal runaway. Other fire suppression methods, such as gaseous agents (CO_2, Halon), dry chemical suppressants, or foams, are unlikely to be effective.

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6. BESS HAZARDS

6.1 Explosion Hazard

The failure of a cell will begin with the venting stage; this is the precursor to thermal runaway. Accumulation of flammable gases within a confined space, such as a BESS cabinet, can lead to an explosive atmosphere where the gas concentration falls within its upper and lower flammability limits. An explosion can occur when cell vent gases accumulate and contact a competent ignition source occurs. While safety features are present to decrease the risk of an explosion, always assume that they are non-operational. Maintain an exclusion zone from the distressed equipment for the duration of the incident.

6.2 Thermal Runaway and Fire Hazards

Thermal runaway occurs when an electrochemical battery cell's temperature increases at an accelerating rate in an uncontrollable fashion sufficient to result in damage to the cell. The thermal runaway progresses when the cell's generation of heat is at a higher rate than the heat it can dissipate.

During thermal runaway, flammable gas and heat is produced. Failure may spread to adjacent cells or modules and the gas may ignite. Due to the high pressure at which these gases vent and the lack of a listed suppression agent, no attempt should be made to suppress this fire.

6.3 Chemical Hazards

6.3.1 Products of Combustion

During a failure event, battery cells may release toxic gases that can harm site personnel and first responders. If the failure extends to other BESS components, additional toxic gases may be generated, similar to those produced during the combustion of ordinary manufactured products. Battery fires can produce chemical compounds comparable to those found in typical structure fires.

- Common Gas Byproducts:
  - Carbon monoxide (CO)
  - Carbon dioxide (CO_2)
  - Hydrogen (H_2)
  - Hydrogen fluoride (HF)
  - Hydrogen cyanide (HCN)
  - Hydrogen chloride (HCl)

Although outdoor BESS cabinets are not occupiable, site personnel and first responders can still be exposed to these toxic gases while operating near a BESS during a failure or fire event. In the event of a gas release, these toxic gases are expected to be diluted by the entrainment of outside air. Fire department personnel should wear the appropriate personal protective equipment (PPE), as outlined in Section 7.1 .

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6.3.2 Transformer Dielectric Fluid

Dielectric fluid is used to insulate and cool site transformers such as medium voltage transformers and auxiliary power transformers. During a transformer failure, arcing and sustained fire can lead to heat retention in the windings and metal cabinet of the transformer, making this a persistent fire.

6.4 Electrical Hazards

Shielded electrical hazards at the BESS facility include battery cabinets, inverters, and transformers. Outer covers around the equipment eliminate casual contact and locks prevent access to energized areas.

Unshielded electrical hazards at the facility include exposed bus within a substation or overhead electrical connections to the surrounding grid. OSHA regulations require a minimum standoff distance of 10 feet from equipment and power lines. The minimum clearance should be increased by 4 inches for every 10kV over 50kV.

BESS products contain batteries that are ALWAYS energized and present an electrical hazard even when disconnected from an electrical source. The operation of breakers or E-Stops will serve to isolate distressed equipment. However, the operation of these devices will not remove stranded energy. Class C electrical hazards constantly exist at BESS facilities.

NFPA 1970 structural firefighting ensemble is not rated for arc flash hazards. Maintain a 10-foot standoff distance from any open doors on BESS cabinets.

E-field detectors are commonly used to identify potential AC hazards. These devices do not have the ability to detect DC voltage from battery cabinets. Do not use E-field detectors within a BESS facility.

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7. RESPONSE

7.1 Recommended PPE

The recommended PPE is NFPA 1970 structural firefighting gear and the use of a self-contained breathing apparatus (SCBA) when exposed to respiratory hazards. All chemicals associated with the failure of BESS equipment and ancillary electrical components present dermal and respiratory hazards.

PPE decontamination should be done in accordance with NFPA 1581, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*.

Note: The PPE recommendation is for emergency response operations and life safety. PPE recommendations for the post-fire removal of damaged modules will be defined by conditions found at the time of decommissioning. In addition, structural firefighting ensembles are not designed to provide protection from arc flash hazards.

7.2 Responsibilities

Typically, a BESS SME is a person or group familiar with the MP2XL BESS equipment, the site layout and equipment, installation guides and manuals, the BMS architecture, passive and active protection systems, notification sequencing, and this ERP.

7.2.1 BESS SME Responsibilities

The BESS SME, equipment owner, and site operator play a critical role guiding fire department personnel responding to a BESS emergency. The BESS SME is responsible for the following:

- Accountability:
  - Determine amount and location of non-fire department personnel inside the facility.
- Equipment Isolation:
  - Identify, locate and isolate involved equipment in coordination with the LOC.
- Monitor Alarm System:
  - Fire Alarm System: Smoke, Heat, Hydrogen Gas, Fire Alarm, and Trouble Signals.
  - BMS: Cell temperature alarms, number of affected cells, potential propagation, SOC.
  - Relay changing condition information to fire department incident commander.
- Exclusion zone:
  - Establish an exclusion zone around the affected equipment.
  - Convey the presence of heat alarms or cell temperature alarms in surrounding cabinets.
  - Expand the exclusion zone if surrounding battery cabinets experience alarms.
- Explosion system assessment:
  - Evaluate the status of the deflagration vent panels.
  - Evaluate the status of the combustible concentration reduction system.

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7.2.2 Fire Department Responsibilities

The fire department plays a critical role in responding to a BESS emergency. The fire department is responsible for the following:

- Accountability:
  - Determine amount and location of non-fire department personnel inside the facility.
- Exclusion Zone:
  - Establish an exclusion zone around the affected equipment.
  - Expand the exclusion zone if surrounding battery cabinets experience alarms.
- Air Monitoring:
  - Utilize available air monitoring equipment to evaluate conditions outside the facility.
- Explosion system assessment:
  - Evaluate the status of the deflagration vent panels.
  - Evaluate the status of the combustible concentration reduction system.
- Condition Monitoring:
  - Visually and audibly evaluate conditions of affected equipment.
- Exposure Assessment:
  - Visually and audibly evaluate conditions of adjacent equipment.
- Exposure Protection:
  - Establish water supply.
  - Provide exposure cooling.

7.3 BESS Failure Response Tactics

DO NOT FORCE ENTRY

Fire department personnel should not encroach within 100 feet of the facility opaque acoustic fence line or equipment until the affected battery cabinet has been identified by the BESS SME.

Upon arrival, the fire department incident commander should contact LOC at 650.681.6060 to obtain an initial status briefing

- Accountability
  - Amount and location of non-fire department personnel inside the facility.
- Affected equipment
  - Location
  - Type
  - Isolation status
  - Fire and BMS alarms
- Conditions and alarm status of surrounding equipment

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7.3.1 Life Safety

BESS facilities are normally not staffed and are observed and controlled remotely. However, facility personnel may be on-site periodically for inspection, testing and maintenance of equipment. The fire department should confirm accountability with Carson Power.

Obvious line of sight rescues are the priority for responding fire department personnel. Fire department personnel shall not enter the facility for recovery operations. Fire department personnel should consider the risks associated with rescue of potential victims at BESS facilities utilizing a risk reward assessment based on equipment location as follows:

- Victim greater than 100 feet from affected equipment – Lower risk
- Victim less than 100 feet from affected equipment – Highest risk
- Victim in contact with equipment – Do not attempt

7.3.2 Air Monitoring

The fire department should establish air monitoring in accordance with the following guidelines:

- Overview: Decisions regarding shelter-in-place orders or evacuations should be guided by direct air monitoring data. Action thresholds for public displacement are established in accordance with the Environmental Protection Agency (EPA) Acute Exposure Guideline Levels (AEGLs) for airborne chemicals. This list emphasizes high-risk, volatile industrial chemicals known or suspected to cause significant health effects following short-term accidental exposure.
- Products of Combustion: Battery cells encased in plastic can release toxic gases such as HF during fires due to thermal decomposition. Plastics and surfactants with fluoride compounds, freon, and electrolyte solutions containing LiPF6 can all contribute to HF production. Acid gases like HCN may result from burning nitrogen-containing materials, while HCl forms from chlorinated plastics, especially PVC.

  Note: These hazards are not limited to battery fires; common household and commercial plastics and cellulose materials also produce HF, HCl, HCN, and similar combustion products.
- Process: Start air monitoring 100 feet downwind from the facility fence line during active fires. If readings exceed AEGL action thresholds, expand monitoring by 50-foot intervals until levels drop below threshold limits.
- Metering Devices: CO meters are commonly utilized by fire departments for gas detection. The capacity to identify various acid gases, as detailed below, is typically restricted to hazardous materials units within the fire service due to their specialized training and advanced equipment required for comprehensive air monitoring. During BESS fires, CO is the predominant gas encountered, often detected in substantial quantities—expressed as percentages—while acid gases generally appear only in trace concentrations, measured in parts per million (PPM). CO may serve as an early indicator to assess whether public evacuation is necessary.

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- Action Levels: AEGL standards are designated at three threshold levels. Exposure at AEGL 1 presents no permanent health consequences; AEGL 2 may result in significant or prolonged effects; and AEGL 3 has the potential to cause life-threatening outcomes. AEGL 1 will determine public displacement.

Table 3: AEGL 1 Levels for Common Products of Combustion

AEGL 1	10 min (PPM)	30 min (PPM)	60 min (PPM)	4 hr (PPM)	8 hr (PPM)
Carbon Monoxide*	420	150	83	33	27
Carbon Dioxide	-	-	-	-	-
Hydrogen	-	-	-	-	-
Hydrogen Fluoride	1.0	1.0	1.0	1.0	1.0
Hydrogen Cyanide	2.5	2.5	2.0	1.3	1.0
Hydrogen Chloride	1.8	1.8	1.8	1.8	1.8

*Note: CO follows AEGL 2 thresholds.

7.3.3 Exclusion Zone

Once the affected equipment is identified, the fire department in coordination with the BESS SME should establish a 100-ft exclusion zone measured from the affected equipment. Expand the exclusion zone if failure conditions spread to adjacent equipment. A representation of a 100-ft exclusion zone is provided in Figure 8.

Note: The exclusion zone is established as a conservative measure should the deflagration prevention system fail to operate as designed.

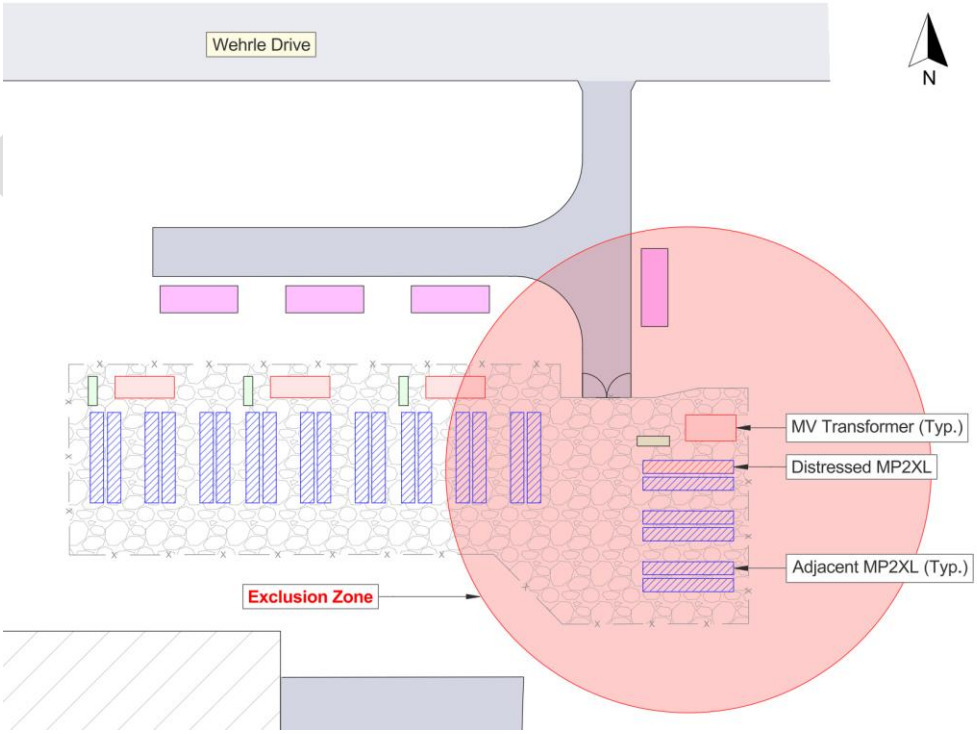


Figure 8: 100’ Exclusion Zone

7.3.4 Alarm Monitoring

The BESS SME should monitor input alarms from the BMS for the affected and surrounding equipment. Receipt of additional alarms can indicate deteriorating conditions within the affected equipment. A review of the BMS can indicate the possible origin location and further impacted internal equipment.

Note: If BMS data points are unavailable, the BESS SME and fire department must rely on direct observations of the affected equipment to make incident-specific tactical decisions.

7.3.5 Isolation of Affected Equipment

The BESS SME should confirm if affected equipment has been autonomously isolated. If equipment has not been autonomously isolated, the BESS SME should direct remote isolation of affected equipment.

Fire Department personnel should never operate equipment or controls within the site. The BESS SME will coordinate all operational requests.

7.3.6 Continuous Size-Up

From outside the exclusion zone, the BESS SME and fire department should visually and audibly monitor the conditions of the affected equipment regularly. Look for the presence of white gas, smoke, fire, and damage to the equipment. Even if there are no visible or audible indications of failure, hazards may still be present.

7.3.7 Exposure Assessment

The BESS SME and the fire department should assess the adjacent equipment to determine if exposure protection is necessary. Evaluate the following:

- Alarms in adjacent equipment.
  - Expand exclusion zone if alarms are generated in adjacent equipment.
- Radiant heat exposure measured by an increase in temperature on adjacent equipment based on thermal imaging camera readings.
  - Establish a baseline temperature reading for unaffected equipment.
  - Establish a baseline temperature reading for affected equipment.
  - **Note:** 345F is vent temperature of a cell. The application of water should occur on surrounding battery cabinets whose façade temperature exceeds 172 F with a thermal imaging camera.
- Direct flame impingement on adjacent equipment.

7.3.8 Exposure Protection

The fire department should consider exposure protection if conditions warrant or if recommended by the BESS SME. Conditions that warrant consideration of exposure protection are:

- New alarms in adjacent equipment.
- Upward temperature trend in adjacent equipment when compared to baseline readings.
- Direct flame impingement on adjacent equipment.

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From outside the exclusion zone, establish a continuous water supply. Utilize a rain down method to apply water in a fog pattern to cool the exposure equipment or to establish a water curtain between the effected and at risk equipment. Do not use a solid or straight stream to limit water intrusion into uninvolved equipment.

7.4 Incident Stabilization

The incident may be considered “stabilized” or “under control” when all of the following conditions are met:

- Fire is contained to the equipment involved with no exposure concerns.
- No new alarms have been generated in unaffected equipment.

Once the incident has been placed “under control” at the discretion of the incident commander, site control and incident responsibility is transitioned to the owner/operator, who should establish continuous fire-watch for the facility until decommissioning is completed.

7.5 Additional Equipment Considerations

7.5.1 Transformer Fire

Following a transformer fire, the presence of sustained arcing is a sign that the fault condition has not cleared. This will present with a blue flame or electrical arc and may be a precursor to a catastrophic failure of the transformer. Oil insulated wet transformer fires are classified as Class B and C fires until power is disconnected. Once the electrical source is removed, a wet transformer fire can then be reclassified as a solely Class B fire. Dry insulated transformer fires are classified as Class C fires until power is disconnected. Once the electrical source is removed, dry transformer fires can then be reclassified as Class A fires.

The BESS SME should:

- Confirm the type of transformer involved (Wet or Dry).
- Confirm that the affected transformer is disconnected from the electrical source.
- Monitor for alarms in adjacent equipment.

The fire department should:

- Confirm that equipment is isolated with BESS SME.
- Evaluate exposure equipment utilizing the following:
  - Alarms in adjacent equipment.
  - Radiant heat exposure measured by an increase in temperature on adjacent equipment based on thermal imaging camera readings.
    - Establish a baseline temperature reading for unaffected equipment.
    - Establish a baseline temperature reading for exposed equipment.
  - Direct flame impingement on adjacent equipment.
- Intervention should be limited to scenarios where adjacent equipment is at risk.
  - If intervention is necessary, it should be focused on the following:
    - Protection of at risk equipment.

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    - Suppression should be limited to the use of carbon dioxide agents, which has a Class C rating.
- If BESS equipment becomes involved, utilize response tactics from Section 7.3 .

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8. RECOVERY

Once an incident has been brought under control, the process shifts from implementing the ERP to executing the decommissioning plan. As this transition occurs, it is important to carefully consider the necessary steps involved in ensuring safe and effective progression. Implementation of the recovery process is the responsibility of the facility owner/operator and should be overseen by the BESS SME. This section is provided for informational purposes only for the fire department.

Typical facility recovery process can include:

- Establish a continuous fire watch until the offsite transportation of damaged or defective cells has been completed.
- Conduct as assessment of site equipment to determine restoration, repair or replacement.
- Isolate and lock out / tag out any equipment identified for repair or replacement.
- Assess the following operational and safety features of equipment that is scheduled for restoration:
  - Grid connectivity
  - Battery Management System: Confirm telemetry data (temperatures, state of charge, voltage, isolation resistance) matches between the local battery management system (BMS) and the remote monitoring facility
  - IR Flame Detection: Devices should be tested to verify alarms are being received at the FACP.
  - Fire Alarm Control Panel: Verify that the panel is free of trouble and supervisory alarms. Test the panel to confirm that flame detection alarms are transmitted to the monitoring center.
  - SCADA: Verify the system status can be viewed remotely and demonstrate control capabilities through the operations of megapack breakers.
  - Explosion Control and Prevention Systems: Inspect the overpressure vents in the thermal roof and ensure the sparker system is operating to design criteria.
- Implement decommissioning plan.

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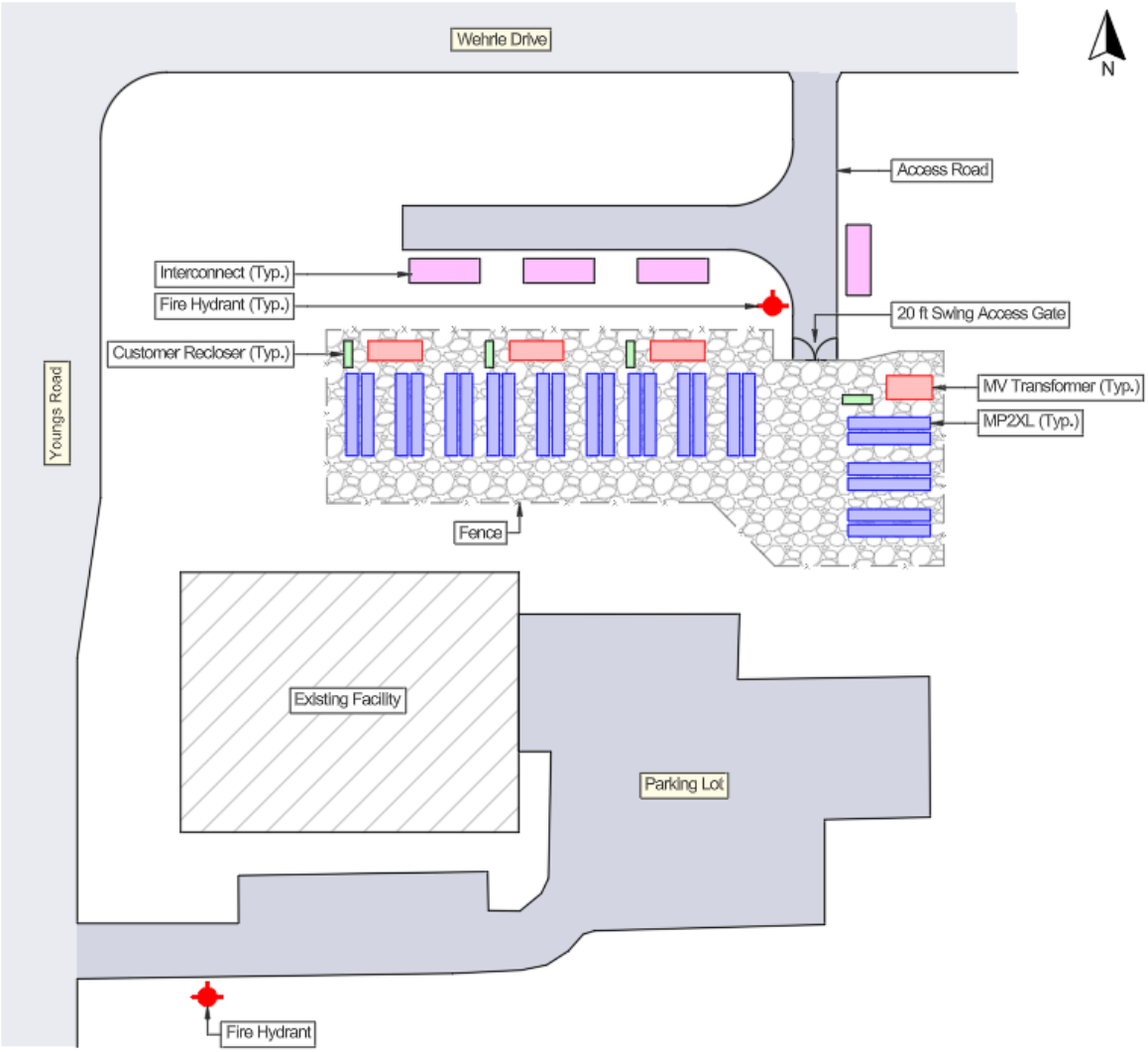
9. REVISIONS

Date	Revision	Reason for Issue	Developed By	Reviewed By	Approved By
07/06/2026	00	Initial Draft	JC	TL	AJN
08/05/2026	01	Client Comments	JC	TL	AJN
10/27/2026	02	Client Comments	JC	TL	AJN

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APPENDIX A: EMERGENCY RESPONSE ACTION PLAN

Megapack 2XL	Tesla LOC 650.681.6060
Facility Name	Renaissance BESS
Type of Facility	Outdoor Stationary Battery Energy Storage System
Facility Address	370 Youngs Rd, Williamsville, NY 14221
Facility Coordinates	42°57'15.21"N, 78°43'25.88"W



General Information

- **Site Information**: The Renaissance BESS is a battery energy storage facility that contains Megapack 2XL (MP2XL) BESS cabinets containing lithium iron phosphate batteries, medium voltage transformers, and other electrical infrastructure equipment.
  Suppression-Detection: The site will be provided with firefighting water via fire hydrants located along Wehrle Drive and Youngs Road. The MP2XLs does not have a fire and gas detection system, or an internal fire suppression system.
- **Explosion Control and Prevention**: The MP2XL cabinets incorporate explosion control through pressure-sensitive vents (overpressure vents) and sparkers installed throughout the cabinet. The sparkers are designed to ignite flammable gases released early in a thermal runaway event.

Hazards

- **Combustion Gases:** Thermal runaway can lead to the release of hot, flammable gases which can lead to **fire** or **explosion**.
  - Gases: hydrogen, carbon monoxide, carbon dioxide, hydrocarbons, and other toxic substances similar to the combustion of ordinary manufactured products.
  - Released gases are expected to be diluted by outdoor air, but exposure risk remains.
- **Deflagration or explosion:** Can occur when flammable gases accumulate in a battery cabinet.
- **Electrical Hazards**:
  - Batteries will maintain a state of charge presenting an energized electrical hazard, even after isolation.
  - Electrical conductors are shielded from casual contact.
  - Structural firefighting ensembles are not rated for **arc flash** hazards.

BESS Failure Response Tactics Checklist

- ☐ Do not force entry to facility entrance. Stage near the site entrance.
- ☐ If immediately available, coordinate with BESS SME to assist with response tactics
- ☐ Contact the Tesla LOC at **650.681.6060** to determine:
  - ☐ Site personnel accountability
  - ☐ Affected equipment location and type
  - ☐ Equipment isolation status
  - ☐ Fire and battery management system (BMS) alarm status
- ☐ Make obvious, visual, line of sight rescues
  - Victim greater than 100 feet from affected equipment – Lower risk
  - Victim less than 100 feet from affected equipment – Highest risk
  - Victim in contact with equipment – Do not attempt
- ☐ Conduct air monitoring starting 100 ft downwind of opaque acoustic fence line
- ☐ Establish a 100-foot exclusion zone around the affected equipment
  - ☐ Expand exclusion zone if conditions spread to adjacent equipment
- ☐ Confirm distressed equipment has been isolated with BESS SME
- ☐ Consider exposure cooling for adjacent equipment using a rain down method, applying water in a fog pattern, based on the following:
  - ☐ Alarms in adjacent equipment
  - ☐ Radiant heat exposure measured by an increase in temperature
  - ☐ Direct flame impingement
- ☐ Continuously monitor equipment conditions from outside exclusion zone until incident is under control
- ☐ Evaluate fire and BMS alarms to determine if condition has stabilized or propagation is occurring

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