

# **Emergency Rescue Use of New Zealand Battery Energy Storage Cabinet with Lightning Protection**



## **Overview**

This document describes the procedures to follow when dealing with a fire or physical damage to energy storage systems (ESS). These systems are modern storage batteries usually with a lithium or nickel base. These procedures must be followed for any incident which results in an emergency response. This outline draft Battery Storage Safety Management Plan (BSSMP) has been prepared on behalf of Waerenga Solar Farm Ltd (WSFL) in relation to a 190 MWp Solar Farm located in Waerenga, north Waikato. Therefore, it's important to understand how to safely use, store and erect equipment. This should include fire prevention, recognition of potential hazards, and proper response procedures in order to be vigilant. Avoid leaving batteries on continuous charge once they have reached their full capacity. Here's how our Li-Ion Battery Charging & Storage Cabinets mitigate these risks: HotWall Insulation: Rated at 1300°C, this extreme temperature insulation is sandwiched between the walls, roof, floor, doors and shelves to mitigate that initial powerful blast from melting through the steel walls of the cabinet. This article explains the importance of grid-scale batteries as New Zealand shifts towards a highly renewable electricity system. However, renewable generation (like wind and solar).



## Article Content

### NZ Battery Project

The NZ Battery Project was set up in 2020 to explore possible renewable energy storage solutions for when our hydro lakes run low for long periods. A pumped hydro scheme at Lake Onslow ...

### Lithium-Ion Batteries And Charging Fire Risk

In 2019, after six months of rigorous research and development, we discovered that containing the explosion and allowing batteries to expend their energy was crucial. Here's how our Li-Ion Battery ...

### Safe Storage for Lithium-ion Batteries

Whether from impact, overcharging, or internal fault, even small battery packs can pose a significant hazard — especially when stored in bulk. Our Lithium-ion Battery Cabinets are designed ...

### BATTERY STORAGE IN NEW ZEALAND

transferring and using energy. In New Zealand, our hydro lakes store energy on a large scale. However, until now we have had limited options to store electricity cost-effectively, close to where it is used. It ...

### Waerenga Solar Farm Limited Outline Draft Battery Storage ...

The final BSSMP will take into account the latest good practices for battery fire detection and prevention, along with the emergency response plan, as guidance continues to develop in New Zealand and ...

### Battery Installation Safety Requirements Under ASNZS ...

The list is a list of lithium-based energy storage devices that meet industry best practice requirements and is based on conformity to the Battery Best Practice guide (see below).

### Energy storage systems

These procedures must be followed for any incident which results in an emergency response by Fire and Emergency New Zealand. There has been an increasing number of incidents involving these ...

### Lithium battery L

Lithium fires can be difficult to extinguish, your goal should be preventing the fire from spreading, if safe to do so, and calling FENZ (Fire and Emergency New Zealand) as soon as possible.

### Unlocking the potential for batteries to contribute to security of ...

This article explains the importance of grid-scale batteries as New Zealand shifts towards a highly renewable electricity system. What is grid battery storage and why is it important? New ...

### Energy storage systems

At any fire where you believe a battery may be involved in the ignition, ensure you document make/model of battery and charger if being used, ask about the history of the battery (usage, ...

## Contact Us

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