

# BESS fire management

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We are in consultation with the local Fire Service to ensure appropriate fire prevention measures and emergency access procedures are in place. See below the four stages of control systems utilised within the BESS to firstly, prevent a fire and, secondly, provide an appropriate response.

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## BESS Management System (BMS)

A BMS prevents the battery cells from overcharging or overdischarging. It functions to prevent fires by shutting down the battery modules if the monitored conditions are outside of those permissible for safe operation.



## Gas detection

On the rare occasion the BMS malfunctions, the battery can become unstable, increasing the temperature and pressure, and producing carbon monoxide. A gas detection system will intervene and: shut down the power to the affected cell; activate an internal ventilation system; activate remote alarms; and provide an early warning to operators.



## Fire suppression

If the gas detection system fails and internal smoke is detected, the fire suppression system will activate, releasing a suppression agent (water mist or gaseous agents) to prevent and/or extinguish a fire.



## Action emergency response

If a fire is detected, an emergency services response will be activated. This response will be set out in an Emergency Plan, developed in consultation with the local fire service. Firefighters will utilise onsite fire management measures, including an on-site water tank and pump house, agreed access tracks, and an Emergency Information Container. The BESS drainage system would be designed to ensure no water utilised as part of an emergency response, and which could be contaminated, enters ground or surface waters.

