# Our approach to safety

## At RES, safety is of the utmost importance.

Our ambition is to continue to lead the market in delivering best-in-class health and safety performance, as we simultaneously look to the future in developing a zero-harm culture.

Health and safety is woven into every aspect of RES' battery energy storage systems. The Bishops Dal project will be developed to address and mitigate against the risk of fire ignition and propagation, in a number of ways.

#### **Equipment Spacing**

The site will be developed to include adequate spacing between the battery storage enclosures (BSE) to mitigate against the risk of fire spread in the event of a fire within one BSE.

#### **Protection Systems**

#### **Monitoring and Remote Access**

Unlike electric cars and scooters, for example, RES-managed battery energy storage systems are constantly monitored from our 24/7/365 control centre in Glasgow. Some controls can also be safely operated remotely from our control centre, such as the shutting down of an individual battery rack or the entire battery energy storage system, if required.

Each BSE will have a dedicated fire protection system, comprising flammable gas detection and venting, fire detection and alarm, and an automatic fire suppression system.

## **Access to Battery Enclosure and for Emergency Services**

All battery enclosures will be accessed via external doors only. The fenced compound will have a wide access route through north and south corridors and through the centre, allowing the fire service to access the site in the unlikely event of an incident. In addition, two site access points will be proposed to the battery energy storage compound.

#### **Battery Selection**

The proposed battery technology for the development is anticipated to be lithium iron phosphate (LFP). LFP has better stability against thermal runaway at higher temperatures compared to some other battery chemistries. All batteries must be tested and certified to an industry standard (UL9540A), demonstrating resistance to thermal runaway, and which ensures there is no likelihood of explosion, with any fire contained within the affected battery rack.

A Fire Risk Statement will accompany any planning application.



# **Bishops Dal Energy Storage Proposal** bishopsdal-energystorage.co.uk

