

Information to be provided for Battery Energy Storage System (BESS) Planning Applications

# Information to be provided for Battery Energy Storage System (BESS) Planning Applications

|     |                       | To include:   |
|-----|-----------------------|---|
| 1.  | Site Plans            | Full site plans   |
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| 2.  | Outline Fire Strategy | Legal requirements Reference to applicable legislation at the time of the application   |
|     |                       | Standards and guidance To include appropriate standards and guidance documents (this can include British and International documents)   |
|     |                       | Type of batteries and number in each enclosure To include battery capacity in kWh   |
|     |                       | Provisions for means of escape and early warning To include provisions for means of escape and early warning site wide  |
|     |                       | Construction details of battery and any support enclosures To include construction details for materials used, structural assessments and reaction to fire classifications  |
|     |                       | Site spacing Minimum site spacing achieved to buildings and site boundaries   |
|     |                       | Fire compartmentation Minimum fire compartmentation requirements with information on how this is to be achieved   |
|     |                       | Detection Early warning li-ion battery off-gas monitoring provision, and fire detection and control systems with cause-and-effect procedure, which meets the requirements of the site-specific emergency response plan and the fire safety strategy |

#### **Suppression systems**

Suppression systems third party accredited by a recognised national body. Systems should be tested, certified and designed to suppress and control thermal runaway events in addition to suppressing conventional hazards and risks. Type of medium to be stated with association additional impacts.

### Firefighting water supplies

Stating requirements for pressure and flow rates, water storage tank size, plus locations for breeching inlets and hydrant outlets, including any meter by-pass valves or similar flow restrictions.

## Firefighter access

Access from two directions and roadway load limits together with swept path analysis to demonstrate it is adequate for fire service vehicles

#### Deflagration

Deflagration system proposed if necessary, ensuring risks to any nearby vegetation and residents and other businesses are minimised

## **Drainage**

Drainage and prevention of contaminated firefighting water reaching water courses. Details of the containment system should be provided.

#### **Toxicity report**

Toxicity report detailing the risks to firefighters and residents/employees and decontamination requirements if there is a release of toxic gasses

### **Emergency and response plans**

Information on how emergency and response plans are to be developed

Taking into account:

- · How fire service will be alerted
- Safety for firefighters and other emergency responders
- Access provision for vehicles
- On site plans and information for detection and suppression

|    |                    | <ul> <li>Evacuation procedures, including for nearby residents and businesses</li> <li>Information on Dangerous goods that are located on site</li> <li>Detailed plan for safe removal of contaminated water.</li> </ul> |
|----|--------------------|--|
| 3. | Maintenance regime | Requirements for installed equipment including detection and suppression systems. Regular inspections for compartmentation to be stated.   |