



LANGDON MILLS SOLAR

Battery Energy Storage System Safety

1. What type of suppressants are used in battery storage systems?

A. Battery Energy Storage Systems (BESS) will incorporate a fire suppression system with the following safety precautions incorporated – fire alarm, smoke and heat detectors, heat activated sprinkler system, fire related insulation, strobe light, and a horn. Where needed, a supplementary fire suppression may be used for assistance in suppressing a potential fire. HVAC systems are also incorporated in the BESS to keep the batteries from experiencing overheating. The HVAC system will keep the batteries cool during the summer and at an appropriate temperature during the winter, to optimize the operation of the BESS.

2. What type of containers are used to protect the batteries from the elements and for additional fire protection?

A. All manufactured BESS have fire-rated enclosures to protect the battery systems from the elements and for the protection of adjacent properties in the unlikely event of a fire.

3. Are PFAS used in battery related fire suppression?

A. Per- and Polyfluoroalkyl Substances (PFAS) are not used as a suppressing agent for potential fires within a BESS. Although the BESS manufacturer has yet to be determined for the Project, the fire safety precautions the Project will take include: addressable fire panels (meaning all alarms work through a central monitoring location, allowing personnel to identify the location of the problem), smoke and heat detectors, heat activated sprinkler system, fire rated insulation, strobe lights, and a horn. A supplementary fire suppression system can be used as an additional fire safety precaution, but is not necessary for keeping a fire contained to the system.

4. What happens if a fire occurs in a battery system?

A. This may vary depending on the additional safety systems in the system. By design, the system automatically disconnects batteries from the electrical system and activates the fire suppression system to contain the fire. Additionally, there may be an automatic system that notifies first responders.

5. Who is responsible for taking care of the fire?

A. The local fire department will be educated by Langdon Mills Solar on how to respond to a fire at the BESS. After the fire is extinguished, the owner/operator of the system will be responsible for cleanup and repairs.

6. Do batteries leak?

A. Unlike flooded lead-acid batteries, lithium-ion batteries cannot leak acid because they do not contain acid. In rare cases, lithium-ion batteries can leak if they experience catastrophic failure and most of the leakage would be in the form of gasses.

7. What will the containers sit on? Will they rest directly on the ground, or will a concrete pad be poured?

A. There will be a properly engineered and installed concrete pad underneath the BESS.