# **Atura Power**

# **TESTED AND QUALIFIED FOR SAFETY**

The batteries used in Atura Power's Battery Energy Storage System (BESS) units are made by a battery system vendor that has demonstrated a strong safety record and continuous safety improvements in their products. The BESS facilities are designed to store each battery in individual cabinets to minimize their impact on the surrounding environment. These cabinets have been designed to prevent soil contamination, minimize noise, reduce the risk of battery fires, and safeguard against fire spread should an incident occur. The BESS facility is designed to meet numerous fire and safety codes (e.g., National Fire Code of Canada, National Fire Protection Association [NFPA] 855, and Underwriters Laboratories [UL] 9540), and has been rigorously tested (UL9540a) to ensure that it is as safe as possible.



## **RESILIENT BY DESIGN**

Considering the large number of installed BESS units, battery fire events are considered to be rare. Not only are battery fires rare, but each part of the facility is designed to minimize the spread of fire. The battery cells and cabinets are designed to allow the battery fires to burn out safely without escalating. Spacing between cabinets further reduces the likelihood of spreading to an adjacent cabinet. Although water is not recommended for extinguishing battery fires, a water-based fire protection system would be kept on site in the event of any other types of fire incidents (for example, a fire in a different part of the facility or external fire). In the extremely rare case that a battery fire would spread, water would be used to prevent or extinguish fire in the surrounding parts of the BESS unit, while allowing the battery units to burn themselves out.

Because the battery cabinets are self-contained and fires would be small, the emissions from a battery fire would be minimal. Gases released would contain only trace amounts of acids, similar to those found in a burning plastics fire. Any fumes produced would quickly disperse in the atmosphere, so there would be no negative impact to air quality in the surrounding area.



#### **MONITORED DURING OPERATIONS**

Atura Power is committed to continual monitoring during operations to ensure that the BESS units are working smoothly and safely. This means local operations and maintenance by staff, and remote monitoring by the battery system supplier to ensure that any system errors are detected and addressed early. Hardware and software are designed with safety features to keep BESS operations within safe performance ranges and a thermal management system maintains safe temperatures within each cabinet. Software is continually evaluated and updated to ensure that parameters affecting safety are maintained even as the system ages.



### PREPARED WITH SAFETY RESPONSE PROTOCOLS

Atura Power prioritizes relationship and open communication with the local Fire Department in any community containing one of its BESS units. This involves collaborating with the Fire Department on a comprehensive Emergency Response plan specific to that site, and ensuring that the Fire Department is trained on the proper safety procedures for battery fires. Atura Power has staff to monitor the facility and respond quickly to any incidents, and the battery vendor provides live technical support for first responders. In the event of a fire, the Fire Department would be immediately notified. Response would include setting up for defensive firefighting to allow the affected battery unit to burn itself out. Water suppression would only be used should a fire affect other parts of the facility. These protocols ensure that firefighters and the community are kept safe.



