

# BATTERY ENERGY STORAGE SYSTEM SAFETY – STANDARDS AND PRACTICES

## Small Business and Residential Customers

---



These **Battery Energy Storage System (BESS) safety practices** are for customers that either have or are considering installing systems smaller than 250 kWh.

### **For systems that are being considered:**

- Ensure that the energy storage system has been designed and certified per UL standards (e.g., UL 1741 SA and 9540)
- Ensure the system is installed by a licensed electrical contractor per National Electric Code (NEC) Article 706
- Make sure the Energy Storage system is Interconnected per SCE interconnection guidelines – see the [SCE Grid Interconnections website](#)

*Please note that your local Authority Having Jurisdiction (AHJ) may have additional requirements or special interpretations of these standards.*

### **For all systems:**

- Maintain per manufacturer's documentation and recommendations
  - Confirm smoke detectors are working
  - Keep area around the energy storage system clear
  - Confirm electrical disconnects are accessible and properly labeled
  - Always keep children and pets away
  - Avoid water spray
  - Always review fire and evacuation plans annually with occupants of your home or business
    - Consider developing an evacuation plan if one does not currently exist
-

# BATTERY ENERGY STORAGE SYSTEM SAFETY

- If the system is bulging, hissing, smoking, or if you see flames
  - Immediately notify the fire department and request a hazmat team
  - If safe to do so, open the electrical disconnect to isolate the system from the building
  - Potential off-gassing may be toxic and flammable depending on the type of system
  - There may be electrolyte leakage requiring containment
  - Do not attempt to disassemble or remove the energy storage system yourself; there could be energy remaining in the system that could pose an electric shock or fire hazard, even after the system is disconnected
  - The system could reignite after the initial fire is extinguished



The [National Fire Protection Association \(NFPA\) website](#) provides useful documentation and videos on BESS codes for installation, design and inspection, as well as BESS safety research.

- Click here for the [NFPA's Safety Tip Sheet](#) for consumers and [Quick Response Guide](#) for first responders
- The NFPA offers free online training and comprehensive instructor-led BESS and Solar classroom training featuring videos, animations, activities and case studies

This material has been prepared for informational purposes only. You should consult your own engineering, construction or legal advisors before engaging in the installation of any BESS, EV Charging System and/or solar power system. SCE makes no recommendations or representations regarding the quality or performance of any manufacturers, dealers, contractors, installers or materials.

ALL INFORMATION IS MADE AVAILABLE ON AN "AS IS" AND "AS AVAILABLE" BASIS. SCE MAKES NO WARRANTY AND HEREBY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION as to the completeness or accuracy of any information.