



ENERGY STORAGE SYSTEMS (ESS)



SAFETY & PPE

- ESS can store electrical energy at high voltages. Use extreme caution.
- Structural firefighting gear & SCBA.
- Treat all systems as energized.
- Do not enter any battery vault or dedicated enclosed battery storage area.
- Immediately contact building representative and request an ESS Company or system subject matter expert (SME) or a qualified individual to respond.
- Consider air monitoring in adjacent spaces.

RESOURCES

- Consult with subject matter expert (SME) for the ESS involved. This may be the installer, manufacturer, local building official, or a qualified individual.

TACTICAL CONSIDERATIONS

- Use the Identify, Shutdown and Watch Out process
 - Use signage, labels, and/or the presence of ESS equipment to identify the system.
 - Locate, and, if safe to do so, utilize system shutoffs or disconnects.
 - Watch out for stored energy hazards.
- If the ESS is not on fire, protect it from involvement with a hoseline(s).
- If ESS is involved in fire: Protect exposures with hoselines. Do not come in direct contact with the system.
- Do not touch or attempt to overhaul an ESS system. This should only be performed by Qualified Personnel.
- Initial phases of thermal runaway may result in the pressurized discharge of flammable gases that can rise above the UEL prior to reaching an ignition source. Use caution when investigating smoke coming from a structure such as a garage (especially when PV is installed or an EV is present). Opening doors or windows can bring the gas concentrations back within the flammable range.

ADDITIONAL INFORMATION

- Continuously evaluate the need for ventilation of the immediate & adjacent areas. Be sure to consider that released gases may initially be above the UEL.
- The structure should not be occupied, or ESS utilized until; properly evaluated by qualified personnel.
- Consider a fire watch until evaluated & cleared by a qualified ESS technician.
- Perform structural fire decontamination procedures.