Hiller™

TOTAL PROTECTION FOR ENERGY STORAGE SYSTEMS

Hiller is dedicated to providing both strategies and results for the challenges of fire protection in the ESS market.

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Energy Storage Systems Fire Solutions... Are you prepared?

Energy Storage Systems (ESS) utilizing lithium-ion (Li-ion) batteries are the primary infrastructure for wind turbine farms, peak shaving facilities, and solar farms. The electrical grid is overburdened and cannot support these demands.

Although Li-ion batteries are the prime concern regarding ESS, NFPA 855 code will also cover lead-acid batteries, nickel-cadmium batteries, sodium batteries, and flow batteries. The code covers energy storage whether electrochemical or electromechanical.

Hiller has a close relationship with the NFPA 855 code committee and is at the forefront of this rapidly evolving hazard.

Risk should be evaluated based on the upcoming NFPA 855 code.

- Can you support a catastrophic fire event such as a thermal runaway?
- Is the ESS in a remote location, in a dedicated use building, or in a container?
- Should your design include smoke or gas detection, chemical suppression, and/or water-based suppression?
- How does the local AHJ fit into the discussion?
- Is life safety a factor?

Solution:

- With our extensive design experience and technical understanding, Hiller can provide the proper equipment for a turnkey solution based on the acceptance of your level of risk.
- Hiller can analyze your risk, understand the upcoming NFPA 855 code, and develop a solution that best suits your needs.
- We provide support in educating the local and state authorities.

SERVICES

- Education
- Consultation (Site Specific Or Best Practices)
- Pre-Incident Planning
- Design
- Pre-Installation Review (Site Survey)
- FMEA (Failure Mode and Effects Analysis)
- HMA (Hazard Mitigation Analysis)
- Coordination With AHJ/ Support/Permit
- Integration – Existing and New Systems
- Turnkey Projects
- Global Support
- Knowledge Of Current Codes/Regulations
  - NFPA 855, UL 9540
  - California CFC 608
  - IFC Chapter 12
- Testing/Inspections
- Decommissioning/ Commissioning
- Explosion/Fire Modeling/ Deflag and Vent Calcs
- Fire Department Operations Planning/ Training
- Small Scale Abuse Testing and UL9540A Testing
- Li-Ion Battery Vent Gas Characterization
- Large Scale Safety Testing
- NFPA 70E AC and DC Arc Flash Risks Assessments
- Computational Fluid Dynamic Fire Modeling
- SFPE Fire Risk Assessments
- Fault Tree Analysis
- Reliability and Safety Integrity Level Analysis

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