

PANEL · LESSONS WRITTEN IN FIRE

Lessons in Fire Department Response to BESS Fires & Incidents

A fire service perspective on battery energy storage system incidents — what they cost, and what they teach.

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CODES · RESPONSE
TRAINING

Building safe response across jurisdictions

Our Response Doctrine Is Outpaced by Deployment

BESS capacity is scaling faster than the codes, pre-plans, and training that govern how we respond to it — and the gap lands on the first-due company officer.

THE INSIGHT

BESS fires aren't a fire problem we extinguish — they're a hazard we contain, isolate, and outlast.

Direct attack fails behind sealed steel. The decisive variables are set long before the alarm — by the code in force, the pre-plan on file, and whether the crew has trained for it.

1

A Widening Code Gap

The 2024 IFC and 2026 NFPA 855 set the modern baseline, yet many jurisdictions still operate under far older editions written before grid-scale BESS existed.

2

Hard Data to Obtain

It is difficult for any company to access what sets a safe posture: chemistry, capacity, disconnect locations, BMS access, and OEM emergency contacts.

3

An Evolving Hazard

Off-gassing, deflagration risk, and reignition behave unlike any fire crews trained on. Monitors and thermal imaging can mislead.

What the Incidents Are Teaching Us

Every major battery incident writes the same lessons in different ink. Three keep recurring and all three are preventable.

01

The Incident Starts Years Earlier

By the time we're dispatched, the outcome is largely decided by the code adopted, the pre-plan filed, and the training logged. Response is the last link in a chain forged upstream.

02

Patience Is a Tactic, Not a Failure

Restraint — isolate, defend exposures, let it burn out — saves more lives than aggression. The discipline to not attack runs against everything the fire service is built to do.

03

Sharing the Lesson Is the Hard Part

A lesson learned at one incident should reach the whole fire service globally. But department limits, liability concerns, and restrictions on releasing incident data keep hard-won lessons siloed.

The takeaway: *the fire writes the lesson our job is to read it before the next one starts.*