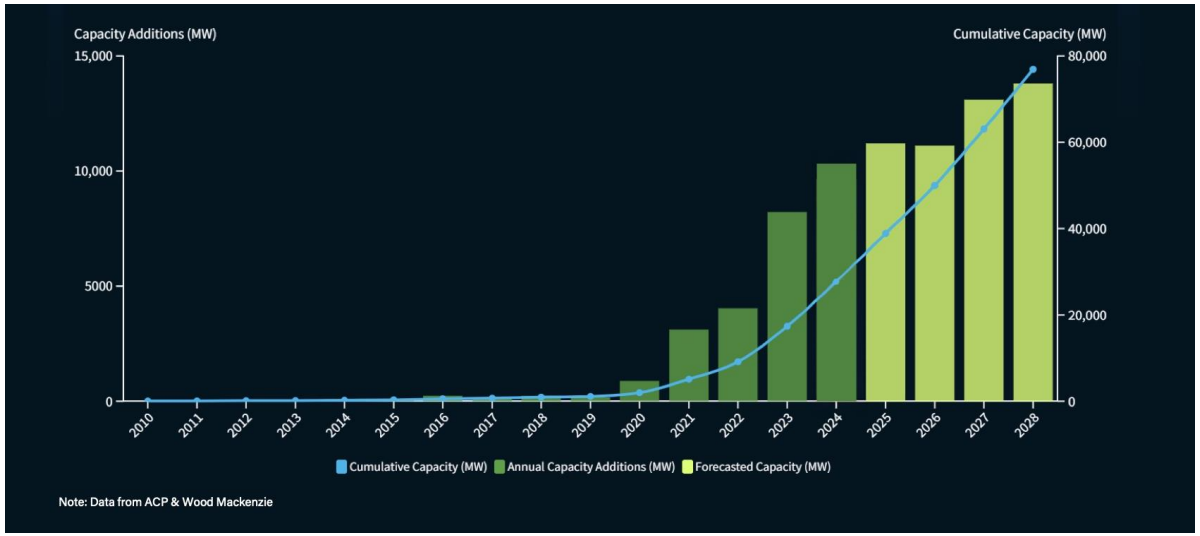
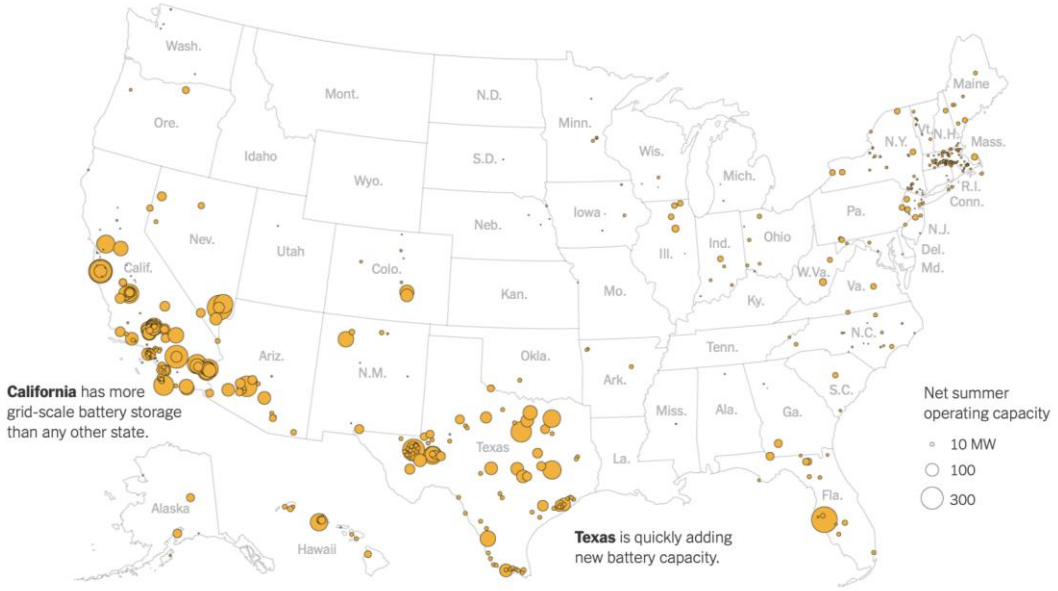
Battery Energy Storage is Needed and Rapidly Expanding in the US

Cumulative Energy Storage Capacity and Annual Capacity Additions



US Battery Storage Sites 2024



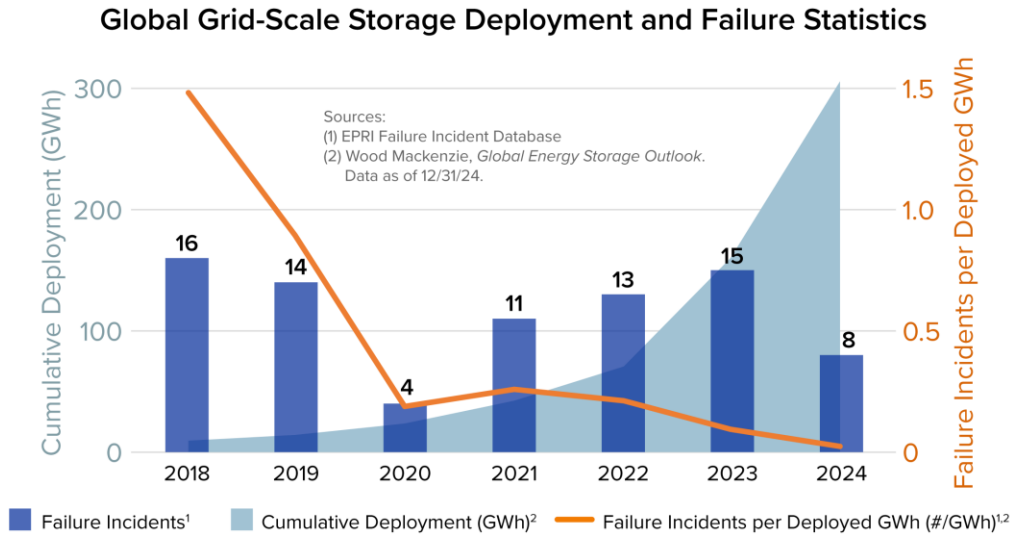
Battery Energy Storage Systems

- **Enhance grid stability and reliability**
- **Cost savings and power at peak demand (TX saved $750M in Summer 2024)**
- **Power at night**
- **PNM Request for Proposals stipulates “No stand alone solar”**

Sources: US Energy Information Administration (compiled by NY Times https://www.nytimes.com/interactive/2024/05/07/climate/battery-electricity-solar-california-texas.html
US Clean Power Association https://cdn.prod.website-files.com/666b00bb91a866df89c4f469/6810d166eebcadba84614e35_Explainer-Grid-Battery-Investment-4.28.25.pdf
PNM RFP https://www.pnm.com/documents/d/pnm.com/pnm-2029-2032-generation-resources-rfp-instructions-and-terms-pdf

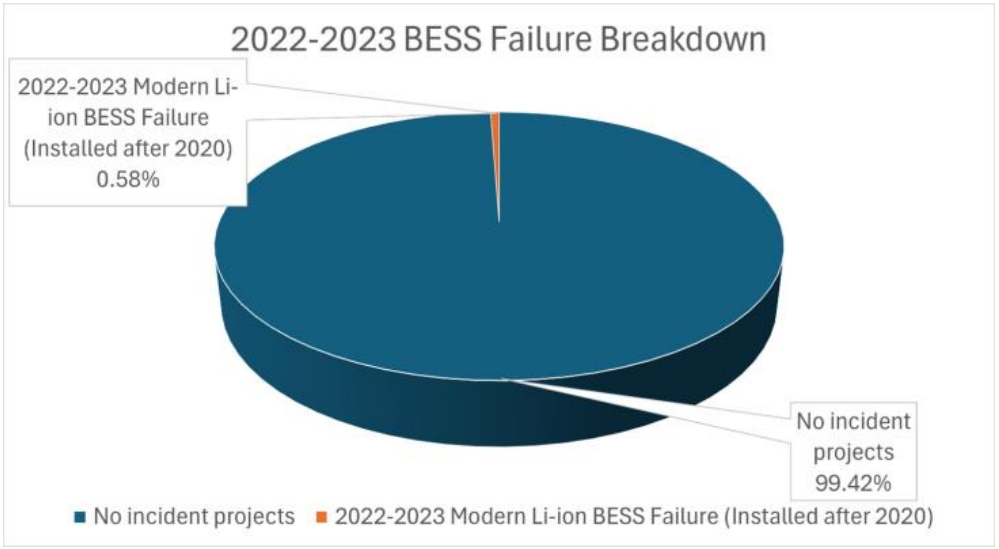
Battery Energy Storage System Safety

Electric Power Research Institute Failure Incident Database



Failure incident: An occurrence caused by a BESS system or component failure which resulted in increased safety risk

Camelot Energy Group Sub-Analysis of EPRI



Data filtered to include only modern US lithium-ion technology fires that occurred between 2022 and 2023 (10 total)

- **EPRI data show dramatic drop in BESS incidents**
- **0.3% annualized incidence of Li-ion fire 2022-2023, similar to house fires in US**
- **Safety codes, testing standards updated in 2023, 2025**

2025 Assessment of 35 BESS fires (US 2012-2024) by Fire and Risk Alliance LLC:

- **"Historical data and scientific studies indicate that BESS remains a relatively safe technology with minimal environmental contamination risks."**
- **"In none of the reviewed cases of environmental sampling related to the BESS fire events were contaminant concentrations found that would pose a public health concern"**

Note: Moss Landing data not available for this assessment

Sources: EPRI https://storagewiki.epri.com/index.php/BESS_Failure_Incident_Database
Camelot Energy https://www.linkedin.com/pulse/putting-bess-fires-everyday-context-camelot-energy-group-hvk4c
https://cleanpower.org/wp-content/uploads/gateway/gateway/2025/04/Safety-Executive_Summary_04-25-25.pdf