

# **The dangers of batteries storing energy in power stations**





## Overview

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What can go wrong with a battery energy storage system?

Figure 2: Example Battery Energy Storage System (BESS) What can go wrong?

Like all electrical systems operating at high voltage, a battery facility poses traditional hazards such as arc flashing, electrocution and electrical fires. These hazards are well-known, and the controls understood.

Are battery energy storage facilities safe?

FACTS: No deaths have resulted from energy storage facilities in the United States. Battery energy storage facilities are very different from consumer electronics, with secure, highly regulated electric infrastructure that use robust codes and standards to guide and maintain safety.

How does battery storage affect the environment?

While battery storage facilitates the integration of intermittent renewables like solar and wind by providing grid stabilization and energy storage capabilities, its environmental benefits may be compromised by factors such as energy-intensive manufacturing processes and reliance on non-renewable resources.

Are energy storage battery fires decreasing?

FACTS: Energy storage battery fires are decreasing as a percentage of deployments. Between 2017 and 2022, U.S. energy storage deployments increased by more than 18 times, from 645 MWh to 12,191 MWh<sup>1</sup>, while worldwide safety events over the same period increased by a much smaller number, from two to 12.



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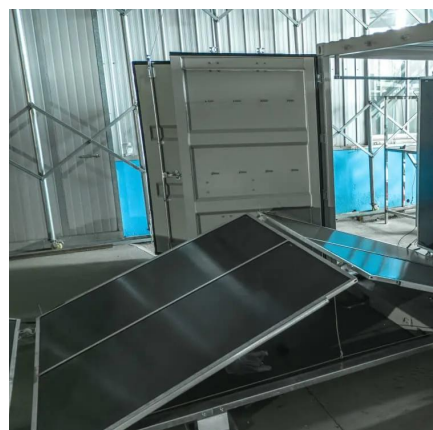
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Figure 2: Example Battery Energy Storage System (BESS) What can go wrong? Like all electrical systems operating at high voltage, a battery facility poses traditional hazards such as arc ...

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