



BUHLE POWER

How long is the service life of energy storage lithium batteries





Overview

How long does a lithium battery last?

The storage capacity of lithium (LFP) battery systems is typically measured in kWh (Kilowatt hours), while the most common metric used to determine battery lifespan is the number of charge cycles until a certain amount of energy is lost. This generally ranges from 3000 to 5000 cycles over a battery life of 10 to 15 years.

Why is lithium-ion battery energy storage important?

During the last decade, the rapid development of lithium-ion battery (LIB) energy storage systems has provided significant support for the efficient operation of renewable energy stations.

How long does a battery last?

This generally ranges from 3000 to 5000 cycles over a battery life of 10 to 15 years. A lesser-known metric of lifespan, often only specified in the warranty document, is the energy throughput per year in MWh (megawatt hours). There is some debate about which metric is the most critical, which we examine later in this article.

How long will energy storage systems last?

In the coming years, the service life demand of energy storage systems will be further increased to 30 years from the current 20 years on the basis of the equivalent service life of renewable energy stations. However, the life of the present LIB is far from meeting such high demand.



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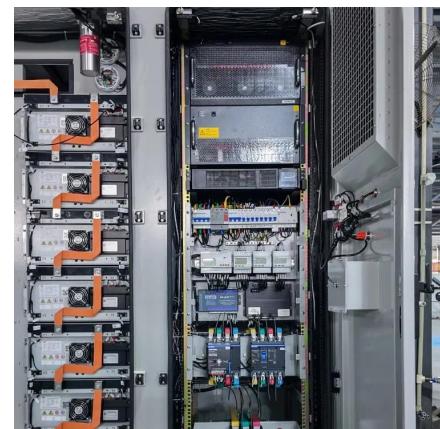
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Service Life of Energy Storage Batteries

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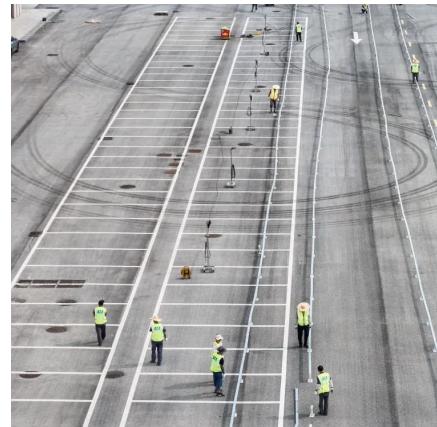
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