

SolarInvert Energy Solutions

Compressed Space Energy Storage Power Station



Overview

What is a compressed air energy storage project?

A compressed air energy storage (CAES) project in Hubei, China, has come online, with 300MW/1,500MWh of capacity. The 5-hour duration project, called Hubei Yingchang, was built in two years with a total investment of CNY1.95 billion (US\$270 million) and uses abandoned salt mines in the Yingcheng area of Hubei, China's sixth-most populous province.

What is energy storage No 1?

The "Energy Storage No. 1" project utilizes the caverns of an abandoned salt mine, reaching up to 600 meters of depth, as its gas storage facility. This allows for a gas storage volume of nearly 700,000 cubic meters, translating into a single unit power output of up to 300 MW and a storage capacity of 1,500 MWh.

How much energy does a gas storage system produce?

This allows for a gas storage volume of nearly 700,000 cubic meters, translating into a single unit power output of up to 300 MW and a storage capacity of 1,500 MWh. The system conversion efficiency is about 70%. It can store energy for eight hours and release energy for five hours every day, and generate about 500 GWh of electricity annually.

Where is CAES power station located?

A landmark CAES power station utilizing two underground salt caverns in Yingcheng City, central China's Hubei Province, was successfully connected to the grid at full capacity on Thursday, marking the official commencement of its commercial operations.

How much electricity can A CAES plant store?

Namely, the plant's storage capacity will allow for up to 2.8 GWh of electricity per full charge, with an estimated annual 330 charge-discharge cycles. CAES

is considered a mature technology for deep decarbonization and GW-level deployment with technological components that are proven and used in industry for decades.

How many GWh of electricity can A CAES facility provide?

The project plans to enable up to 2.8 GWh of electricity storage per full charge—more than any other CAES facility in the world.

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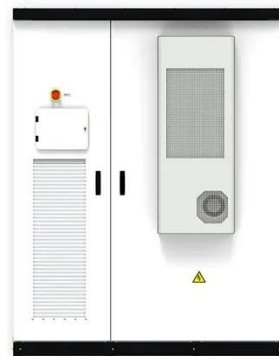
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