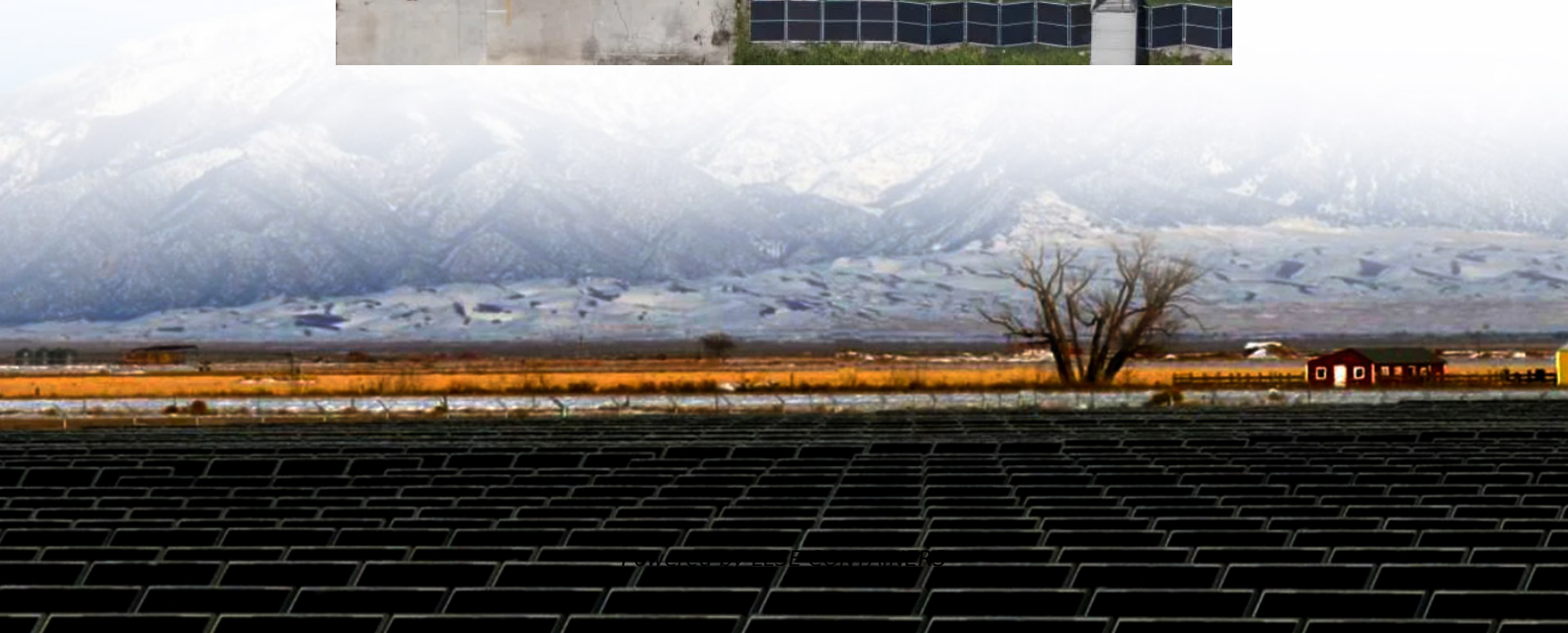


# **Cascade River Basin Energy Storage Power Station**





## Overview

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Can pumped storage power stations be built among Cascade reservoirs?

The construction of pumped storage power stations among cascade reservoirs is a feasible way to expand the flexible resources of the multi-energy complementary clean energy base. However, this way makes the hydraulic and electrical connections of the upper and lower reservoirs more complicated, which brings more uncertainty to the power generation.

What is a cascade hydropower plant & pump station?

The CESS is an integrated system of cascade hydropower plants and pump stations, whose main function is to consume excess energy from renewables, while satisfying water and energy demands for the public. Essentially, the CESS belongs to a kind of pumped storage power station.

What is the efficiency of a cascade hydropower system?

The efficiency is defined as a ratio of reduced renewable energy curtailment to increased hydropower production, and it is calculated based on two scenarios (i.e., optimal operations of the cascade hydropower system and CESS). A case study using China's Longyangxia-Laxiwa CESS was conducted.

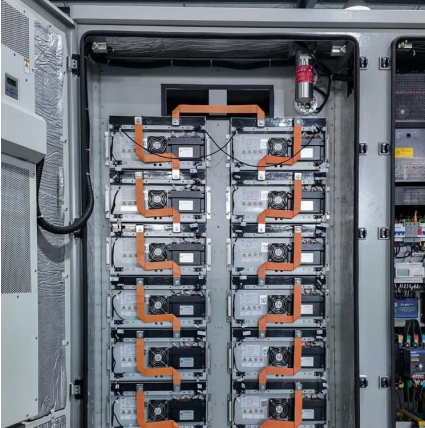
What are the key technologies of Cascade operation in river basins?

3. Key technologies of cascade operation in river basins technologies of joint dispatching, and dispatching decision support systems. snow, temperature, and the direction and strength of wind, as well as particular disastrous weather in a region or city in the future.



## Cascade River Basin Energy Storage Power Station

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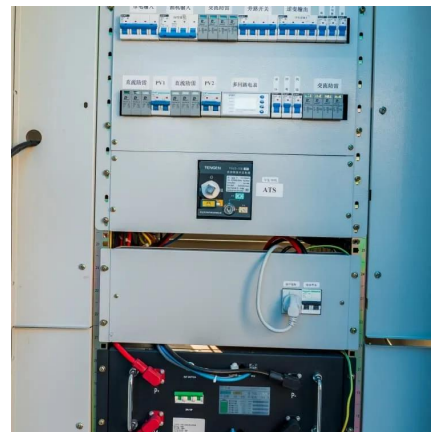


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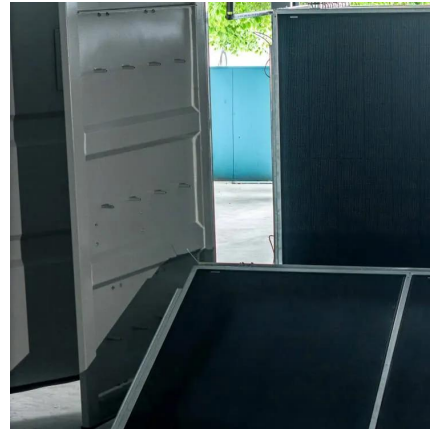
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