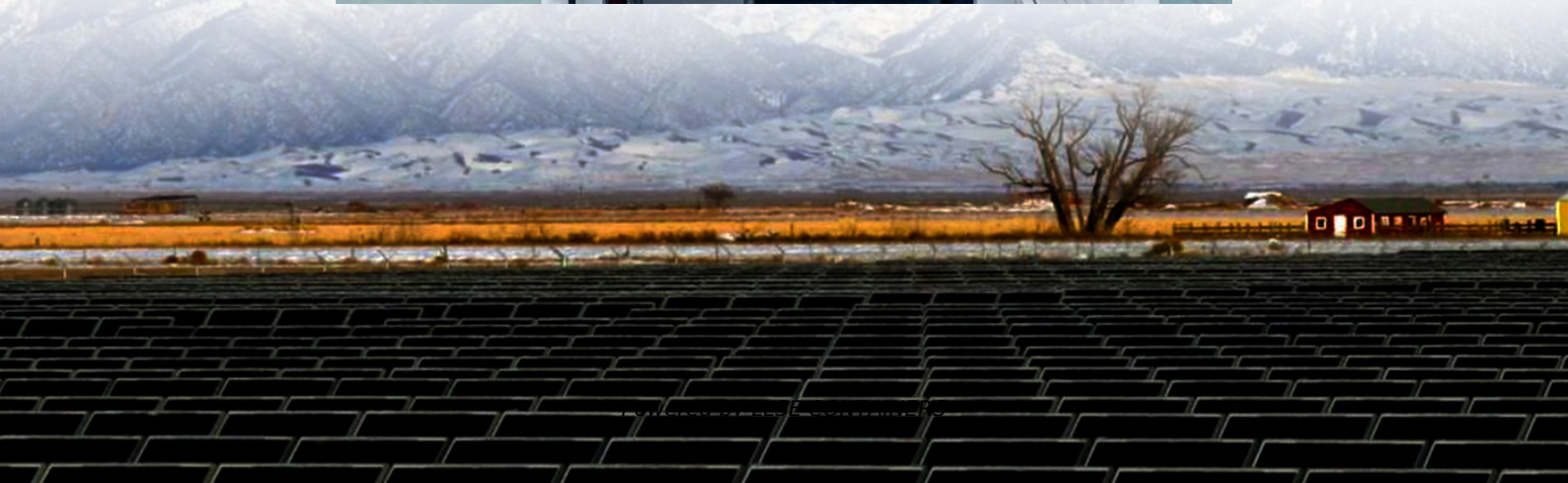


Peak-valley arbitrage scheme for Lobamba solar container energy storage system





Overview

How much does electricity cost in a valley?

Table 1 shows the peak-valley electricity price data of the region. The valley electricity price is 0.0399 \$/kWh, the flat electricity price is 0.1317 \$/kWh, and the peak electricity price is 0.1587 \$/kWh. The operation cycles (charging-discharging) of the Li-ion battery is about 5000–6000.

What happens if the peak-valley electricity price difference decreases?

As the peak-valley electricity price difference, annual average irradiance and annual average wind speed decrease, the optimal allocation capacity and the annual net revenue of the BESS also decrease.

What is the scale of the energy storage system and operation strategy?

The scale of the energy storage system and operation strategy was related to the technical and economic performance of the coupling system . In order to reduce the extra cost of the BESS, it is necessary to conduct the optimization research of the BESS and RE coupling system .



Peak-valley arbitrage scheme for Lobamba solar container energy s



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