

### **SolarInnovate Energy Solutions**

# Base station power distribution power supply





#### **Overview**

Does base station energy storage participate in the load power supply?

At this time, the base station energy storage not only participates in the load power supply, but also has certain absorption of wind-solar output when the wind-solar output is larger than the load demand (13:00,16:00). For scenario 3, it can be seen that the scenario has obvious complementary characteristics of the wind-solar power (5:00~20:00).

Why do base stations have a small backup energy storage time?

Base stations' backup energy storage time is often related to the reliability of power supply between power grids. For areas with high power supply reliability, the backup energy storage time of base stations can be set smaller.

What is the energy storage output of a base station?

The energy storage output of base station in different types. It can be seen from Fig. 20 that the energy storage of the base station is charged at 2-3h, 20h and 24h, when the load of the system is at a low level, and the wind power generation is at a high level.

What is a base station energy storage capacity model?

Based on the base station energy storage capacity model established in contribution (1), an objective function is established to minimize the system operating cost in the fault area, and the base station energy storage owned by mobile operators is used as an emergency power source to participate in power supply restoration.

Does a high power supply reliability increase base station energy storage capacity?

The case analysis done in this article verifies the effectiveness of the proposed method: places with high power supply reliability have more available base



station energy storage capacity. Where traffic is high, less base station energy storage capacity is available.

Does a base station energy storage model improve the utilization rate?

Where traffic is high, less base station energy storage capacity is available. Compared with the fixed backup time, the base station energy storage model proposed in this article not only improves the utilization rate of base station energy storage, but also reduces the power loss load and power loss cost in the distribution network fault area.



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