

# **Peak regulation ratio of energy storage power station**





## Overview

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Why is energy storage important in power system?

Energy storage is an important flexible adjustment resource in the power system. Because of its bidirectional flow of energy, it is very suitable to be used in power system as a peak regulation method.

What is the peak regulating effect of energy storage after parameter optimization?

According to the generator output curve and energy storage output curve, the peak regulating effect of energy storage after parameter optimization is better than that without parameter optimization.

What are the parameters of energy storage device?

The parameters of the energy storage device are set as follows:  $P_{LIMIT} = 0$ ,  $T_A = T_B = T_C = T_D' = 0.5$  s, power control gain  $K_{\Delta P} = 1$ , speed control gain  $K_{\Delta \omega} = 1$ .

Why is reverse peak regulation important?

The reverse peak regulation characteristics of new energy power generation increase the peak difference to the valley of the power grid, which makes the stable operation of the power grid difficult. In order to mitigate the above contradiction and reduce the peak-valley difference of power grid, peak regulation is needed.



## Peak regulation ratio of energy storage power station



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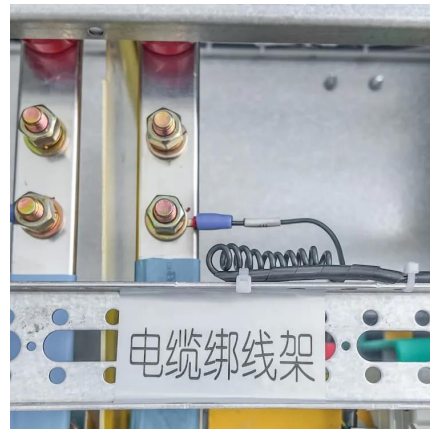


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