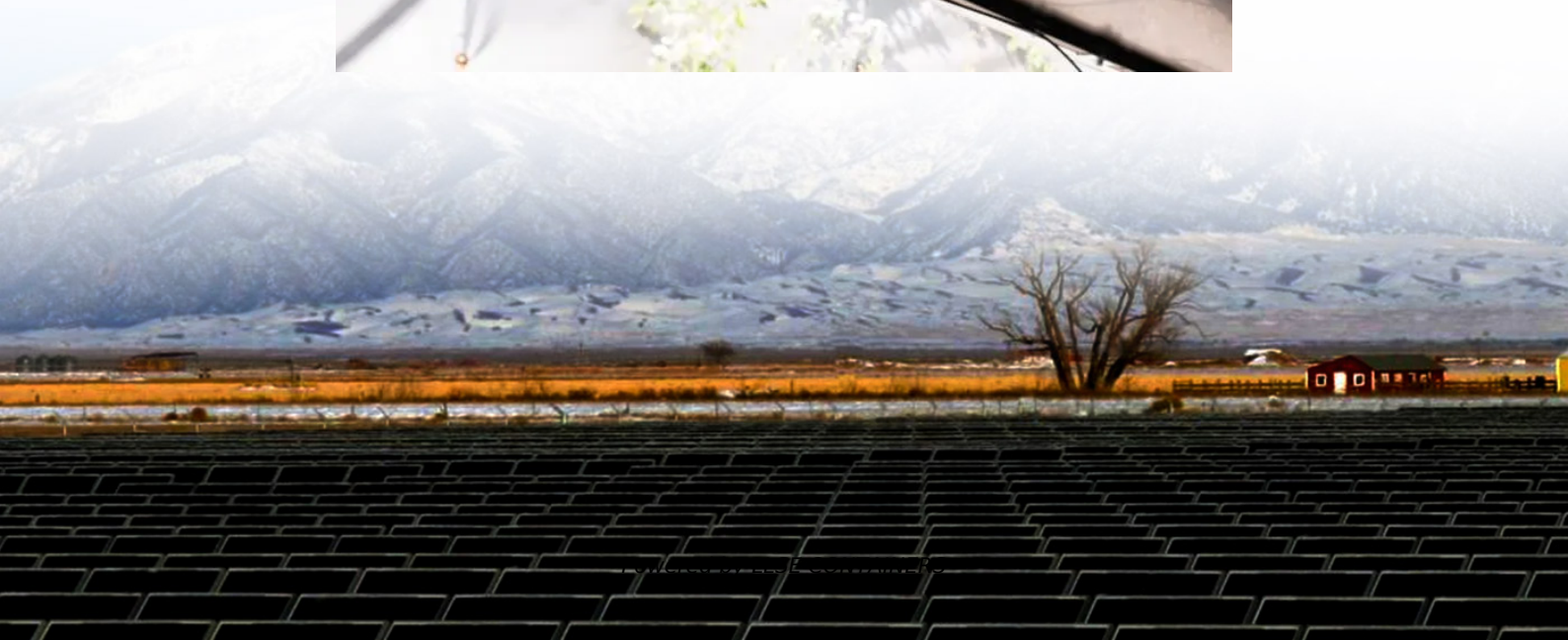**LLSE CONTAINERS**

Master and slave control of energy storage power station

Overview

Why should energy storage be a regulated power source?

Additionally, as a flexible regulated power source, energy storage's regulation capability and response speed in the frequency regulation (FM) auxiliary service market is significantly better than that of traditional thermal power plants. By providing services such as FM, SES can generate greater profits and enhance its capacity utilization rate.

How to optimize SES operation based on a master-slave game?

Then, an optimization model of SES operation considering the benefits of participation in FM is established based on the master-slave game. The upper layer optimizes the SES pricing, provision of FM, and power interaction strategies, while the lower layer optimizes the power consumption decision of each REC.

What are the constraints in the upper level shared energy storage price setting?

In the upper level shared energy storage price setting and operation optimization problem, the constraints to be satisfied are as follows: The conditions that need to be met for the charging and discharging composition of a shared energy storage plant at various moments.

Can a shared energy storage plant charge and discharge simultaneously?

The charging and discharging behaviors of the shared energy storage plant interacting with the grid, the renewable energy community power, and itself cannot occur simultaneously at any given moment.

Master and slave control of energy storage power station

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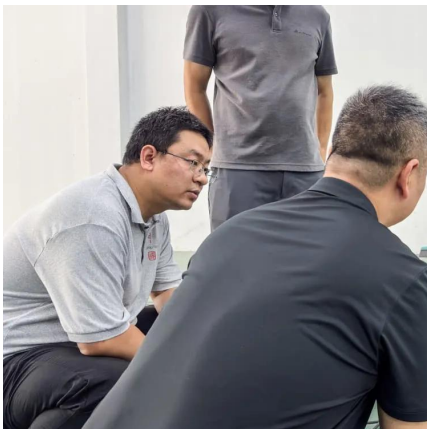
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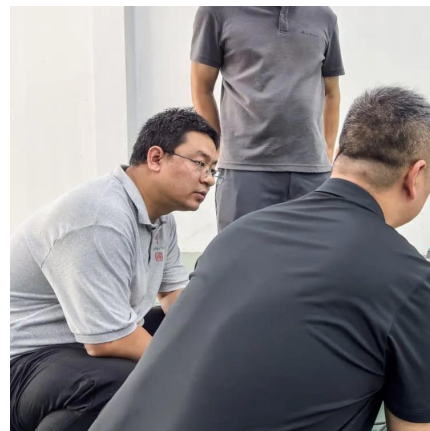
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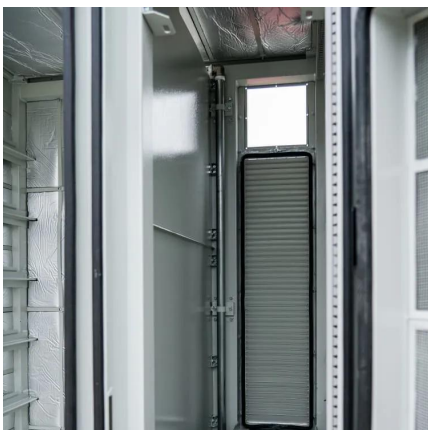
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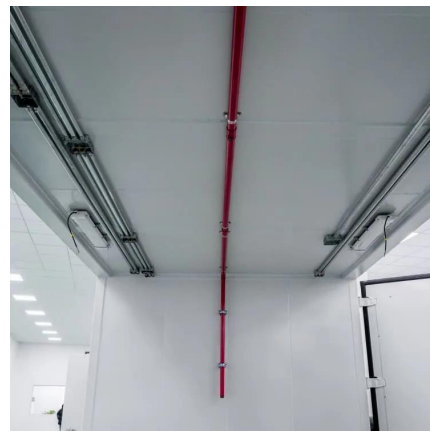
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