

China Power Secures a Stream of Successes in Wind, Solar and Thermal Power Projects

As the year of 2025 drew to a close, assets of China Power reported a series of successes, accelerating the pace of energy development.

New Pillar for Anhui Power: Successful Synchronization of a 1000 MW Unit

At 6:04 AM on December 30, 2025, Unit 7 of the Pingwei Power Plant Phase IV 2×1000 MW ultra-supercritical coal-fired power generation project achieved successful synchronization on the first attempt. With all system parameters stable and meeting standards, Unit 7 officially entered the load-testing phase, laying a solid foundation for commercial operation.

As a key supporting power project under Anhui Province's 14th Five-Year Plan, the Phase IV project involves a total investment of approximately RMB 8 billion, featuring two 1000 MW ultra-supercritical double-reheat coal-fired units. It integrates cutting-edge technologies such as the "BEST Double-Turbine Regenerative System", "Deep Boiler-Turbine Coupling Technology", and "Two-Units-One-Tower High-Level Water Collection Cooling Tower", achieving a net coal consumption rate as low as 258.5 g/kWh. Emission concentrations surpass national ultra-clean standards, with all technical indicators reaching industry-leading levels. Additionally, the unit possesses a 20% deep peak-shaving capacity, providing crucial support for the integration of wind and solar power and contributing to a new power system integrating generation, grid, load, and energy storage.

Once operational, the Phase IV project is expected to generate 10 TWh annually, enhancing regional grid reliability and emergency response capabilities during peak load periods in summer and winter, thereby strengthening Anhui Province's power supply foundation.

Pingwei Power Plant, a core asset under China Power's "coal-power integration" model, is known for its robust and stable profitability. Upon commissioning of Phase IV, Pingwei Power Plant's total installed capacity will reach 6,540 MW.

Green Power Breaks Through the Cold in the Tianshan Mountains

On December 28, 2025, Shenhua Mulei 800 MW Wind Power Project was successfully connected to the grid.

Jointly developed by China Power and Shenhua Group, the project aims to reduce 30% of the load of three 350 MW captive coal-fired units serving electrolytic aluminum production at Shenhua Xinjiang Coal Power Co., Ltd., and replace the reduced capacity with 800 MW of wind power.

Located in the Dashitou Wind Area of Mulei County, Xinjiang, at the foothills of the Tianshan Mountains, the project covers approximately 476 square kilometers, spanning 40 km east-west and 10 km north-south. The wind turbines are deployed along ridges and hilltops at altitudes

ranging from 1,550 to 2,350 meters, representing a typical complex mountainous wind farm. With a total installed capacity of 800 MW, the project comprises forty-two 8.34 MW wind turbines and forty-five 10 MW wind turbines. A new 220 kV collection station (Changji Huayu) has been constructed and connected to the Mulei South 750 kV Substation via a 54.8-km 220 kV transmission line of State Grid Xinjiang Electric Power Co., Ltd., enabling clean power transmission.

Upon operation, the project is expected to deliver approximately 2,400 GWh of clean electricity annually, saving about 710,000 tons of standard coal and reducing emissions by around 1.94 million tons of CO₂, 182 tons of SO₂, 295 tons of NO_x, and 32 tons of dust.

Blue Waters and "Light": Dual Benefits of Fishery and Solar Power

At 11:08 AM on December 28, 2025, the 100 MW Fishery-Solar Hybrid Centralized Solar Power Project of Zhongwudian Smart Energy Co., Ltd. achieved full-capacity grid connection.

Located in Wujian Town, Jiangdu District, Yangzhou City, the project employs a "fishery-solar hybrid" model for efficient land use. With a total installed capacity of 100 MW, the project includes a newly built 220 kV step-up substation and a 10 MW/20 MWh energy storage system. Once operational, it is expected to generate approximately 120 GWh of electricity annually, reducing CO₂ emissions by about 100,000 tons per year, delivering significant economic, environmental, and social benefits.