

The Research and Testing for Grid Connection of Photovoltaic Generation Station

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Due to the construction of China's largest development of photovoltaic generation, it was expected PV station capacity in China would be 20GW by 2020. The "Centralized", "Decentralized", "Large scale" develop mode and more and more PV station connected to the Grid challenges the grid operation. The "National Energy Solar Centre" (NESC) was set by SGCC. The Indoor test facility for high power PV inverters, Mobile test facility for PV stations, Simulation Platform and "Golden Sun Demonstration Projects" Data Centre is built by NESC. The Indoor test facility carried out testing for high power PV inverters connected to grid according to domestic and international standards. Mobile test facility conducted detecting for small and large PV station. PV station connected to the Dynamic Simulation Platform, the system load flow, short current and stability was simulated. The "Golden Sun Demonstration Projects" carried out monitoring and research online for domestic PV station.

Key words: PV station; Simulation Platform; "Golden Sun Demonstration Projects" Data; Mobile test platform