

China's Largest Offshore Wind Project Fully Connected

On October 26, 2024, the 450 MW U1 wind farm, the second phase of the Shandong Peninsula South Offshore Wind Power Base was successfully connected to the grid. This milestone marks the full capacity integration of China's largest single-unit parity offshore wind project. The wind power project boasts a total installed capacity of 1.5 GW, with 900 MW developed by SPIC Shandong Energy Development Co., Ltd. ("SPIC Shandong Energy") at the U1 wind farm and 600 MW by CHN Energy Investment Group Co., Ltd. at the U2 wind farm.

Located off the coast of Rushan, Shandong Province, the U1 wind farm spans 143 square kilometers and was constructed in two phases, featuring 106 turbines, each 8.5 MW, a 1 GW 220 kV offshore substation, an onshore control center, and an outgoing transmission line. The project incorporates a modular pre-assembled substation, cutting construction time by 60 days and reducing costs by 20%. It also implements a 66 kV collection system suitable for large-capacity offshore wind turbines, to save 190 hectares of sea space and reduce costs by 180 million RMB. The project also promotes the application of the company's self-developed products in terms of safety. The project will supply 2,550 GWh of clean electricity annually, saving 829,000 tons of coal and reducing CO₂ emissions by 2.299 million tons.

In the past four years, SPIC Shandong Energy has put four offshore wind power projects into operation in Shandong Province, further increasing the installed capacity, leading the industry and promoting the development of large-scale offshore wind power bases.