China's First Pile-Fixed Offshore PV Power Demonstration Project Announced Successful

On September 26, 2023, SPIC Shandong Energy Development Co., Ltd. ("Shandong Energy") announced the successful completion of the pile-fixed offshore PV power demonstration project in Shandong Province. As China's first pile-fixed offshore PV power demonstration project, it marks an important breakthrough in the construction of such projects from scratch.

The project includes the HG34 site in Haiyang and the HG32 site in Wendeng. The two PV power plants have experienced the rainy and typhoon seasons and have been successfully verified in off-grid operation. The PV modules demonstrated good performance in corrosion resistance, wind and wave resistance, and system stability. During the operation period, more than 10 indicators such as environmental protection, stress, vibration and tilt were recorded through in-service monitoring, and key data such as wind speed, irradiation, water level, structural stress and displacement were collected. All the information is of great significance in promoting the industry's technological progress, performance transformation and industrial development.

Shandong Energy actively bid for the 11.25 GW offshore PV power in Shandong Province in 2022, and as the consortium leader or member, won the HG34 project in Haiyang and the HG32 project in Wendeng with a total capacity of 4.7 GW. Based on the successful implementation of the demonstration project, Shandong Energy will continue to play a synergistic fusion of industrial chain and technology chain, accelerate the transformation of the achievements of the demonstration project, and help Shandong Province build a 10 GW-class offshore PV power base.

In addition, the *Technical Specifications for Evaluation of Performance of PV Modules for Offshore PV Power Stations*, jointly prepared by more than 30 experts from China Quality Certification Center (CQC), Shandong Energy, and the research team led by Prof. Hou Baorong from Institute of Oceanology, Chinese Academy of Sciences (IOCAS), has recently been released, filling the gap in standardization of offshore PV modules and providing a standard basis for the selection of offshore PV power equipment and quality control.