

Shandong Energy Built the Offshore Pile-Foundation Photovoltaic Demonstration Project in Haiyang

On April 27, the construction of key technology research and demonstration project for Haiyang HG34 Offshore Pile-Foundation Photovoltaic Project ("HG34 Offshore PV Project" for short) was officially completed by Shandong Energy, a subsidiary of CPID, and the off-grid power generation of the Project was successfully realized.

This demonstration project is the first offshore pile-foundation fixed PV project in China. Situated in Haiyang sea area of Yantai City, Shandong Province, it is 6.5 km offshore where the average water depth is 7 meters. Two demonstration schemes, one 308 kW large module and one 92.4 kW small module, have been built. They are intended to verify the technical route for the HG34 Offshore PV Project planned to be constructed in this sea area, and provide key data regarding the applicability of main equipment and the construction economy.

The planned installed capacity of HG34 Offshore PV Project is 2,700 MW, which is among the first batch of offshore pile-foundation fixed PV projects in China and is the largest in terms of installed capacity around the world. According to the known data, there is no pile-foundation fixed photovoltaic application case in open sea area with a water depth larger than 7 meters worldwide. In the absence of a proven technical scheme for reference, the demonstration test was conducted for HG34 Offshore PV Project to study the Project's capability of resistance to corrosion, tide, typhoon, ocean current and floating ice.

The successful off-grid power generation of the HG34 demonstration project will lay a solid foundation for the scale and commercialization of regional offshore PV projects, greatly contribute to the green and low-carbon transformation and high-quality development of local energy sector, and boost the construction of PV projects in deep blue sea.