



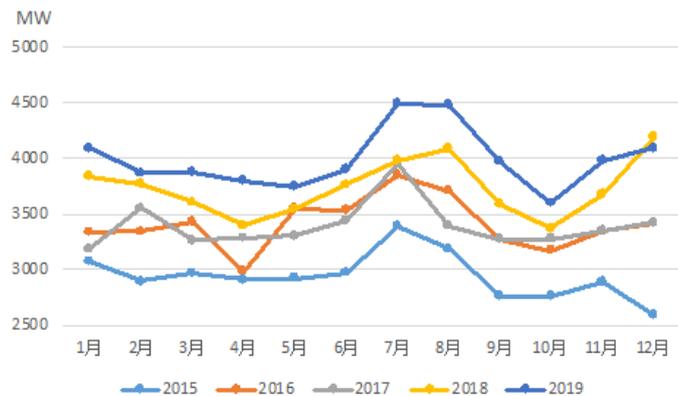
GREEN POWER FOR YELLOW RIVER

GoodWe inverters power 40 MW PV plant in Shandong

Background:

Dongying's location on the banks of the Yellow River Delta make it ideal for solar and wind energy deployment. For the last decade, electricity consumption has grown at an annual rate of 7.4% and it is expected to reach 43.7 billion kWh by 2025.

(Annual Load Curve of Dongying, 2015-2019)



Challenge:

In the last few years, the typical daily load of Dongying has continuously increased. Generally speaking, there are two load peaks in a typical summer day that occur at about 12 PM and 9 PM. Since 2015, the daily load difference between the peak and the valley point have fluctuated dramatically.

In order to meet peak demand in an economical and environmental way, Dongying government opted for solar to ease pressure on the existing energy infrastructure.

As the solar plant is built by the banks of the Yellow River, it is crucial that panels and inverters are capable of operating normally in a humid environment.

Solution

GoodWe's GW225K-HT High-power Smart Inverters with 1500V system design were selected for this project. 99% efficiency and high-power tracking density backed by 168 MPPTs drives power generation to a whole new level.

With advanced sensors integrated, HT Inverters can detect the machine's internal temperature and humidity. This function is designed to send alarms if the inverters' interior relative temperature and humidity exceeds safety limits. The C5 corrosion class protects the inverters from high humidity and adverse atmospheric conditions.

The 30A max current per MPPT makes the inverters highly compatible with high-power bifacial modules - both 182mm and 210mm large PV modules - which brings increased revenue.



Installation details

Location: Dongying, Shandong, China

System Owner: Dongying Finance Investment Group

System Capacity: 40 MW

Commissioning: 30 December 2020

Solar Panels: JA solar's JAM78D10/MB, 88900 units

Inverters: GoodWe's GW225K-HT High-power Smart Inverters

Economic benefit:

The land is now home to a 40 MW power plant that generates 57.4 million kWh per year, which represents a saving of USD 3.81 million. The development of the solar industry likewise generates additional growth for the local economy. The traditional farming and fishing communities in the Yellow River Delta region will benefit from access to cheaper and cleaner energy and the project will contribute to additional jobs for current and future generations.

Environmental benefit:

More than 50,000 tons of CO2 emissions are spared each year, which is equivalent to planting 2.76 million trees.

“ GoodWe engineers are very cooperative and the whole process was very smooth. With GoodWe's high power inverters, we are off to a good start on delivering the local energy transition and easing pressure from the demand side. ”

Dongying Finance Investment Group

Why GoodWe?

Long term safety and reliability bring customers a higher return on investment and GoodWe is a guarantee of maximum reliability. High-quality core components from premium brands are integrated in the inverter and an aluminium-magnesium alloy shell makes it lighter and more corrosion-resistant. The integrated die-casting technology protects the internal electronic components from corrosion of moisture and high salinity, which ensures the whole PV system can work steadily for the whole life cycle.

The GW225K-HT Smart Inverters are the latest state-of-the-art high-power, high-efficiency inverters that are behind GoodWe's increasingly prominent role in the global transition towards renewables. With each project we are one step closer to helping the world realize carbon emission reduction goals and contribute to a clean, low-carbon, safe and sustainable planet for mankind.