

Gas power station

In 2000, China's natural gas power generation capacity was just 960,000 kilowatts. In 2005, this rose to 10.5 million kilowatts, and, according to the latest data of the China Federation of Electric Power Enterprises, in 2010 China's natural gas power generation capacity reached 26.42 million kilowatts (over 6000 kilowatts), representing around 3% of installed capacity.

Trajectory 1

In this scenario, facing restrictions on the exploration and development of natural gas, natural gas resources are in relatively short supply, and prices are relatively high. Gas power is inferior to coal power and nuclear power, is not used for generating a base load, instead being predominantly used for peak load regulation. The capacity of gas power

generators remains at 50 million kilowatts.

Trajectory 2

In this scenario, environmental pollution, taking action on climate change and the unceasing increase in energy demand all increase demand for gas power. Natural gas power stations not only are used for peak load adjustment, but are also used for base load generation along with other electricity production methods, all supplementing each other. In 2020, natural gas power reaches 65 million kilowatts, in 2030 it reaches 100 million kilowatts and in 2050 it reaches 170 million kilowatts.

Trajectory 3

In this scenario, under constant pressure to protect the environment and reduce CO2 emissions, and with an effective guarantee on natural gas import contracts, China sees a rapid development in gas power. In 2020,

installed gas power capacity reaches 100 million kilowatts, in 2030 it is 190 million kilowatts and in 2050 it reaches 300 million kilowatts.

Trajectory 4

In this scenario, natural gas is in steady supply, and the price is very competitive in comparison with coal power. Gas power becomes the predominant method for China's electricity generation, used for a proportion of base load generation. In 2020, installed capacity is 120 million kilowatts, by 2030 this has risen to 250 million kilowatts and by 2050 this has reached 460 million kilowatts.

