

# ABB wins orders over \$300 million to strengthen China's power grid and lower environmental impact

Zurich, Switzerland, April 18, 2016 – Advanced transformer technology will enable UHVDC transmission links to transmit up to 10,000 megawatts (MW) of electricity, setting a new world record in terms of capacity at the 800 kilovolt (kV) voltage level

ABB has won orders worth more than \$300 million to supply advanced converter transformers for two long-distance ultra-high-voltage direct current (UHVDC) transmission links capable of transporting up to 10,000 MW of power at the 800 kV voltage level, setting a new world record in terms of capacity. The orders were booked in the first quarter of 2016.

The 1,609 kilometer (km) long Ximeng-Taizhou and 1,231 km long Shanghaimiao-Shandong 800 kV transmission links will deliver 25 percent more power compared with recent 800 kV UHVDC links, through the same narrow transmission corridor. Recent advances in key technologies like the 509 megavolt ampere (MVA) converter transformers make it possible to increase the power transmission capacity of UHVDC links to an unprecedented level.

The two links are part of a project to transmit power out of Inner Mongolia via long-distance transmission lines, rather than transporting millions of tons of coal to distant generating sites. Overall, the project aims to reduce carbon dioxide emissions by around a third of a billion metric tons, as well as reducing sulfur dioxide and mono-nitrogen oxide emissions, and preventing around 140,000 metric tons of smoke and dust from polluting the air.

“This latest breakthrough of transmitting 10 gigawatts (GW) of power over a single 800 kV UHVDC link underlines ABB's Next Level strategy of delivering innovative solutions for the integration of renewables and efficient bulk power transmission to urban centers,” said Claudio Facchin, President of ABB's Power Grids division. “Our ultra-high-voltage technologies are enabling countries like China to transmit ever increasing amounts of power over greater distances, with minimal losses and uncompromising reliability.”

China has major load centers in its eastern regions, while its energy resources are in the west and northwest. The expansive geography and increased demand over the last decade have prompted the country to increase its UHV transmission capacity, enabling delivery of power from newer, more-efficient thermal power generation plants near energy reserves while lowering pollution near cities.

Transmitting large amounts of power at higher voltages is significantly more efficient. UHVDC transmission is an advancement of HVDC, a technology pioneered by ABB over 60 years ago, and represents the biggest capacity and efficiency leap in over two decades.



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ABB ([www.abb.com](http://www.abb.com)) is a leading global technology company in power and automation that enables utility, industry, and transport & infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 135,000 people.

## More information

<http://new.abb.com/products/transformers/power/hvdc-converter>

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