ABB replaces HVDC link in the US

New link replaces Oklaunion high-voltage direct current (HVDC) line in Texas to enhance grid reliability and facilitate efficient power exchange

Zurich, Switzerland, July 28, 2014 – ABB, the leading power and automation technology group, has successfully commissioned an HVDC link for American Electric Power (AEP) which replaces the 30-year-old Oklaunion HVDC back-to-back converter station in Texas, USA. The converter station is an integral part of the Oklaunion HVDC transmission link - an asynchronous interconnection between the Texas (ERCOT) and Oklahoma (SPP) power grids.

The project scope included engineering, supply, installation and commissioning of an HVDC back-to-back transmission system capable of delivering 220 megawatts (MW) of power in either direction. The new system has black-start capability, which enables fast grid restoration in the event of a power outage, allowing power to be used from the other end of the link.

Other key components supplied as part of the turnkey solution included converter valves, converter transformers, and ABB’s MACH advanced control and protection system, to help meet stringent system performance requirements.

“In addition to enhancing grid reliability and power stability, our HVDC solution enables efficient transmission of electricity across this important interconnection,” said Hanspeter Faessler, head of ABB’s Grid Systems business, a part of the Power Systems division. “ABB’s domain expertise and global experience enabled us to deliver this link in 22 months, and to minimize outage time for users, the converter station that was replaced remained in operation during the new construction.”

ABB pioneered HVDC transmission technology 60 years ago and has been awarded around 90 HVDC projects representing a total installed capacity of more than 95,000 MW, which accounts for about half of the global installed base.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 150,000 people.

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