Power and productivity
for a better world™

Press Release

ABB energizes first phase of India's most advanced UHVDC power link

Bengaluru, Sept 28, 2015 – North East Agra power 'superhighway' is world's first multi-terminal UHVDC transmission system, capable of supplying clean power to 90 million people

ABB, the leading power and automation technology group, has energized the first pole of the North-East Agra 800 kilovolt (kV) Ultra-high voltage direct current (UHVDC) transmission link, which will supply clean hydropower from northeastern India to a nodal substation in Agra and from there, feed it across north India.

The project is being executed by ABB together with Bharat Heavy Electricals Limited (BHEL) on a turnkey basis, including design, system engineering, supply, installation and commissioning for Power Grid Corporation of India Ltd (POWERGRID), India's central transmission utility.

This completes phase one of the project, which enables transfer of up to 1,500 megawatts (MW) of electricity along this link, across a distance of 1,728 kilometers. When fully commissioned in 2016, the link will become the world's first multi-terminal UHVDC connection, capable of transmitting enough electricity to serve around 90 million people, based on average national consumption.

The North-East Agra link will help address the shortage of power in north India by transporting hydropower generated in the mountainous north east region. This region has abundant untapped renewable resources, but load centers are thousands of kilometers away and power must pass through a narrow, 22-kilometer land corridor bordered by Nepal and Bangladesh on either side.

"This is the world's first multi-terminal UHVDC transmission link, and it underlines India's commitment to sustainable infrastructure development and ABB's ability to deliver such future ready technologies," said Bazmi Husain, Managing Director, ABB India. "Bringing clean power to people is a focus of our Next Level strategy and we are pleased that we continue to be a reliable technology partner in India's efforts to bring power to all. "

The UHVDC link operating at 800 kilovolts (kV) will have a world record converter capacity of 6,000 megawatts (MW) with in-built capacity of 33 percent to cover contingent situations of single pole outage. The world's first multi-terminal UHVDC link will have three converter stations - two "sending" stations will convert power from alternating current (AC) to DC for transmission over a single power line that will pass through the narrow land corridor and deliver it to a "receiving" station in Agra where it will be converted back into AC for distribution to end users. The multi-terminal solution considerably reduces costs compared to the alternative of running separate power links from multiple hydropower plants to Agra. There is also is a provision of reversal of power flow from Agra to North-East.

ABB India Limited
(Formerly known as ABB Limited)
Registered Office and Corporate Office
21st Floor, World Trade Center
Brigade Gateway, No. 26/1
Dr. Rajkumar Road, Malleshwaram West
Bengaluru – 560 055

CIN: L32202KA1949PLC032923

Phone: +91 80 2294 9150 - 54
Fax : +91 80 2294 9148

www.abb.com/in

UHVDC transmission is a development of HVDC, a technology pioneered by ABB more than 60 years ago and now the preferred solution to transmit large amounts of power over long distances to high consumption centers with minimum losses. Since its inception, ABB has been awarded about 100 HVDC projects, which represent a total installed capacity of more than 120,000 MW and accounts for around half the global installed base. ABB also has an impressive track record in India, including Rihand-Delhi, the first HVDC project commissioned in 1990.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility, industry, and transport and infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 140,000 people.

For more information please contact:
Corporate Communications, ABB India Ltd.

Sohini Mookherjea
Tel: + 91 9632726608
email: sohini.mookherjea@in.abb.com

Peter Stierli
Tel: + 91 9901722298
email: peter.stierli@in.abb.com

ABB India Limited
(Formerly known as ABB Limited)
Registered Office and Corporate Office
21st Floor, World Trade Center
Brigade Gateway, No. 26/1
Dr. Rajkumar Road, Malleshwaram West
Bengaluru – 560 055

CIN: L32202KA1949PLC032923

Phone: +91 80 2294 9150 - 54
Fax : +91 80 2294 9148

www.abb.com/in