Press Release

ABB to develop 1,200 kilovolt ultra high-voltage circuit breaker

New breaker at world’s highest AC voltage level can reduce footprint up to 60 percent

Zurich, Switzerland, Apr. 13, 2012 – ABB, the leading power and automation technology group, will develop, design and manufacture a 1,200 kilovolt (kV) circuit breaker, the highest AC voltage level in the world.

The innovative circuit breaker will be deployed at a national test station being constructed by Power Grid Corporation of India (PGCIL), India’s central transmission utility, at Bina in the central Indian state of Madhya Pradesh. The innovative circuit breaker will being jointly developed by ABB engineers in Switzerland and India, with the support of PGCIL, and will be manufactured at ABB’s production facility in Vadodara, India.

ABB’s 1,200 kV circuit breaker is safely housed along with the disconnector in a tank filled with insulating gas. This unique design can result in a space saving of up to 60 percent compared with conventional designs. The configuration also protects critical components from environmental exposure and brings down the center-of-gravity, thereby increasing its ability to withstand seismic events. Other design features include modular ring type current transformers, partial discharge sensors and composite bushings.

“This 1,200 kV circuit breaker is another example of ABB’s commitment to remain at the forefront of technology and innovation,” said Giandomenico Rivetti, head of ABB’s High Voltage business, a part of the company’s Power Products division. “ABB has pioneered many power technologies in India, and we are proud to build on this heritage by supporting PGCIL for this benchmark project.”

India is adding significant power generation capacity to meet growing demand, which in turn requires an efficient and reliable transmission and distribution infrastructure to deliver the electricity to consumers. Transmitting at higher voltages enables more power to flow through lines with minimal space impact and significantly lower transmission line losses. These factors have prompted India to develop a 1,200 kV transmission system, which will be the highest AC voltage level in the world. The 1,200 kV Bina station will carry out field tests as part of this initiative.

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 135,000 people.

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