ABB Introduces New High Voltage Circuit Breaker

The 145PM63-B simplifies substation cost and design by eliminating shunt capacitance for short line fault interrupting

Mt. Pleasant, Pennsylvania, May 10, 2007 – ABB, the leader in power and automation technologies, announced today the release of a new 145kV high voltage circuit breaker.

The 145PM63-B high voltage circuit breaker utilizes a new high performance interrupter to serve 121-145 kV applications at 40-, 50-, and 63-kA ratings without need for shunt capacitors to meet ANSI standards for short line fault interrupting performance. The breaker footprint and overall dimensions are identical to earlier 145PM designs. The breaker retains the advantages of spring-hydraulic drive technology with the HMB-2 operating mechanism, a more powerful version of the well-proven type HMB-1 unit used by its predecessor. Key features of the new breaker include:

• Lower engineering, acquisition, installation, and maintenance costs by eliminating the need for shunt capacitors for applications where short line fault interrupting capability is required
• Simplified SF₆ gas system, eliminating potential leak points
• Elimination of breaker-mounted capacitors, lowering total weight and reducing foundation costs
• Easy replacement of current transformers in the field without removing the bushings, significantly reducing maintenance or modification expense
• Modularized high-performance interrupter platform, enabling the one-piece units to be easily removed and replaced in the field during maintenance. This cuts maintenance cycle time on an interrupter to approximately 1 day or less. A factory exchange program can further reduce replacement expenses through use of pre-tested units which require no field adjustments.
• Composite bushings with silicone rubber insulators that offer a pollution resistant, lighter-weight construction (porcelain bushings optionally available).

All of these features lower total cost of ownership and improve system reliability. The new
145PM63-B design provides opportunities for installation in applications previously not served by 145PM offerings.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 109,000 people.