

## Celebration on commissioning the superconducting fault current limiter at Vattenfall power plant

On January 28, 2010, the superconducting fault current limiter (FCL) was officially commissioned at the Boxberg brown coal power plant in Saxony. Dr. Thomas Krüger, Project Manager Vattenfall and Dr. Joachim Bock, Managing Director Nexans SuperConductors invited to this ceremony. Besides high-ranking Vattenfall representatives, Dr. Francis Krähenbühl, Managing Director from Nexans Deutschland was also present. Even representatives of the press and broadcast media were among the approximately 40 guests.



On site inspection



Dr. Joachim Bock presents the superconducting fault current limiter

Nexans SuperConductors' pilot system is the world's first resistive fault current limiter based on high-temperature superconductors in a power plant. It protects the power supply for coal mills and breakers against short-circuit currents. The power plant operator expects this innovative technology to yield significant benefits in personnel and plant safety. If the device proves successful in the field test, new plants could be built more cost-effectively thanks to the FCL because the size of the switch gear can be reduced due to the safety gain. This means a tremendous potential for savings in the event of short-circuit currents up to several tens of thousands of amperes. Superconducting fault current limiters are suitable not only for new power plants but also for extensions such as retrofitting CO<sub>2</sub> separators.

After the partners gave their presentations on the new technology and the project, the guests had the opportunity to view the fault current limiter on the premises. The power plant's management and Vattenfall's engineers were all enthusiastic about the new system. "Formerly the old reactances were situated in this position. They were air-cored chokes in the form of large copper coils", stated Wolfgang Beyer, the plant manager. Hubertus Altmann (head of power station management) emphasised the intention of intensive continuing work with Nexans on this matter with the objective of a possible series launch as various new projects are planned.



fault current limiter

