Medium Voltage Service Success Story

Life Extension and Upgrades
Kernkraftwerk Leibstadt (KKL), Switzerland

Main Facts
Customer: Kernkraftwerk Leibstadt (KKL)
Segment: utility
Commissioning: August 2009
ABB products: extension panels.

Customer Need
Extension of a 30 year old 7.2kV switchboard with three new panels. The old switchgear units of type UniArc-CR10 equipped with air-magnetic DIARC circuit breakers were both phased-out many years ago. About 150 DIARC circuit breakers are in service in the plant and therefore any acceptable proposal must allow fitting of these older units into the new cubicles.

ABB Response
ABB met KKL requirements by recovering the old switchgear drawings and providing the following:
- UniArc-CR10 panels identical to existing ones
- New HD4 retrofit circuit breakers
- Site work up to energization.

Customer Benefits
- Reliability in full adherence to project schedule.
- Incorporate latest technology products allowing easy upgrades of the existing switchgear in the future.

The Story
The nuclear power station is located in Leibstadt (Aargau) on the south bank of the river Rhine. The plant was commissioned in 1984 after a ten-year construction period and therefore it is the youngest nuclear plant in operation in Switzerland. Producing about 9’000 GWh a year, a 1’220 MW boiling water reactor serves 15% of the power demands of Switzerland. A significant part of the plant was designed, supplied and commissioned by ABB.

The new equipment was delivered to site in July, six months after the project kick-off meeting. ABB service engineers and KKL maintenance staff made an outstanding job during the shut-down period from Tuesday 11th up to the re-energising on Friday 14th August.

No better words than those of KKL Maintenance Manager René Jehle to the ABB team can give a truer picture of this project: “I would like to express my sincere gratitude to all who worked on the extension switchboard 10/20BA. From the beginning to the end there was an exceptional collaboration between all parties. For me, it was a great pleasure to work with you. The last days during the commissioning we felt a great support by your staff. In the meantime the switchboard is back to operation. We are looking forward to finish this project and starting then the next steps concerning upgrading switchboard 10/20AG and new circuit breakers.”