

Retrofit & Refurbishment Comisión Federal de Electricidad (CFE), Mexico



Main Facts

Customer: Comisión Federal de Electricidad (CFE)

Segment: utility

Commissioning: 2004-2009

ABB products: apparatus retrofit.

Customer Need

CFE is the country's state power company of Mexico and was looking for a cost-effective alternative solution to the switchgear replacement of its power plants for extending their life. The strong requirement for having a very short implementation time was also a key issue in order to limit the switchgear shut-down period. But how would have been possible to replace different legacy brand circuit breakers despite of these constraints?

ABB Response

ABB supported CFE with an extensive sites survey and was able to propose a full solution:

- Design and prototype two apparatus type, using VD4 for retrofitting VRB vacuum circuit breakers
- Propose already existing HD4 retrofit solutions for DIARC air-magnetic devices and HA3 gas circuit breakers
- Local ABB support for installation and commissioning.

Customer Benefits

- Maximize investment performance of asset
- Incorporate latest technology to increase safety, performance and functionality.

The Story

CFE is a government-owned company chartered with generating, transmitting, distributing and providing electrical service to end users throughout the country. It serves 21.6 million customers (nearly 120 million individuals). CFE has 5 generation regions, 13 distribution divisions, 40,000 Km transmission lines and 614,000 Km sub-transmission and distribution lines in Mexico. The estimation is that electricity consumption will grow by more than 50 percent over the next 10 years. The utility is investing heavily in infrastructure improvements to meet soaring demand for electricity. It is also improving the quality by upgrading older portions of its electricity grid with new technology. ABB, a long-time CFE supplier, is playing a key role in this respect, by supplying several retrofit circuit breakers.

ABB was awarded seven turn-key projects to upgrade the switchgear of five power stations. More than 200 circuit breakers have been delivered to C.T. Francisco Perez Rios (Tula), C.T. Plutarco Elías Calles (Petacalco), C.T. Gral. Manuel Alvarez Moreno (Manzanillo), S.E. Valle Oriente (Monterrey) and C.T. José Aceves Pozos (Mazatlan) sites over the last 6 years. A consistent and competent working team built around the factory in Italy and the service centre in Mexico has managed to effectively meet CFE needs from the project beginning up to the commissioning, providing fully interchangeable circuit breakers with existing ones and allowing very short switchgear shutdown. New retrofit circuit breakers will allow CFE to keep in operation installed switchgear for additional decades.

For more information please contact Service department at:

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