

## Underground Cable Link

### 220 kV Tiancun-Tianhe Double Loop Cable Line Project ("Pearl River")



#### Cable data

Voltage	245 kV AC
Power	480 MVA
Length	24 300 m
Conductor	1000 mm <sup>2</sup> Cu
Insulation	XLPE
Weight	31 kg/m
Customer	Guangdong Electrical Power Holding Company (GEPHC)
Year	2000

#### Project content

- XLPE cables
- Joints and terminations
- Cable system design
- Installation
- Testing

ABB signed a contract in March 2000 with Guangzhou Electrical Power Holding Company (GEPHC) regarding a complete supply of underground cables in concrete tunnels in the city of Guangzhou (Canton). Project specific tasks include design, manufacturing, shipment, erection and testing on site of a 220 kV solid dielectric polymeric cables system including joints and terminations.

The contract is ready for operation and ABB is expected to hand-over the project after commissioning during 2001.

The major rationale behind the order is the utility's pressing need for space and safety in one of the most densely populated areas in the world as well as a request for a mitigation of the negative visual environmental impacts caused by the overloaded networks in the city. Following vast public spending in the T&D sector, unveiled by the Chinese federal government, this is in line with the ongoing upgrade and redevelopment of the grid and power infrastructure in Guangdong province and China.

Being the first deal since 1995 this contract was a hallmark for ABB in China and the Asia Pacific region. It significantly boosted ABB's performance, also on a global scale, in advanced tunnel installations at extra high voltage transmissions as well as in the replacement of overhead lines with underground cables.



In a cablification project in the city of Guangzhou (Canton) ABB replaces the overhead lines with cables.

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