

Underground Cable

Totally important for the projects in Qatar



Cable data	Phase IV	Oil Cracker	Project content
Voltage	132 kV AC	132 kV AC	XLPE cable and accessories
Power	315, 210 MVA	115 MVA	Cable system design
Length	45 km	34 km	Project management
Conductor	2000 mm ² Cu	630 mm ² Cu	Installation
Insulation	XLPE	XLPE	
Weight	40 kg/m	20 kg/m	
Customer	Ministry of Electricity & Water	Qatar General Petroleum Company	
Year	1995-1998	2000	

ABB was well equipped for the challenge when we won our largest order in Qatar so far. Recent years' collaboration, which started in 1993 with the construction of the Ras Laffan power plant, means that the new negotiations could be carried out in a climate built on great trust.

In connection with a new shopping centre the need of power transmission was also created. The region is expansive due to good economic development and to ensure the energy supply to future housing and industries far-sighted planning was made. The principal wanted to create a solution with a long life span, that is to say, cover the need of the transmission output for the next 15 years.

Phase IV

The project comprised substations, cable systems and overhead lines - all with the purpose of improving the power network in the whole country. It was a question of two links as well as transformer cables. The cable was a segmented conductor in five segments in a total of 2000 mm² Cu and at this time it was the heaviest XLPE-cable manufactured at the factory.



Our undertaking concerned a complete system solution, which included excavation work, setting-out, assembly, testing, etc.

The outdoor conditions were tough with difficult ground conditions and intense heat. This resulted in special demands with regard to product design, materials and laying techniques, which ABB through its long presence in the region has good knowledge of. Several heavily trafficked roads needed to be passed during installation. To avoid disruption to the traffic large demands were placed in planning and project implementation, which was achieved

to the customer's full satisfaction and with little effect on the urban traffic.

Q-Chem

After this order the conditions were good to beat the competition when Qatar Generator Petroleum Company opened purchasing procedures for a large expansion to its refineries.

The customer saw this as an important part of the work to expand its processing industries and thereby increase the value of the petroleum resources. Especially important in this case was to be able to satisfy the stringent safety demands associated with activities at refineries. As ABB was already active in the region contact paths were quick and direct. A prerequisite in order to take on the expansion and supply of a complete system solution.

In both projects the customers have expressed satisfaction with the work in the entire chain, from planning, via design to the manufacture and installation. The recipe for success is: Right product at the right time at the right price and quality.

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