This project contributes significantly to the development of the agricultural region of the Mitidja within the overall plan by the National Office of Irrigation and Drainage (ONID), under the management of the Water Ministry.

The pumping station Harrach-Douéra, located in the Mitidja plains, Wilaya of Blida, about thirty kilometers south of Algiers, between the Water Derivation/Outlet Structure/ Oued Harrach and the Douéra Dam, has a total installed power of 11MW and is equipped with two pumping lines.

Group A ensures pumping of the high flows from Oued Harrach to the Douéra Dam via a 23km-pipeline with a total flow of 8m³/s using 3 pumps of 2.7MW each. They only operate during winter when the flow from the Oued Harrach is high.

Group B ensures pumping from Douéra Dam to the distribution network, with a total flow of 4m³/s using 5 pumps of 450kW each. This is the normal operating case during summer, but they can also pump the low flows to the dam during winter when the flow from Oued Harrach is low.

ABB AG was the subcontractor responsible for the design, supply, erection supervision and commissioning of the electrical, mechanical, control, instrumentation and communication equipment of the pumping station.

Enduser: National Service of Irrigation and of Draining (ONID)

The project was completed in November 2009.
Technical Specification / ABB Scope

Main Pumping Station Harrach-Douéra

- 3x 3MW 10kV motors (group A)
- 5x 0.5MW 10kV motors (group B)
- 3x 3MW variable frequency drives (group A)
- 5x 0.5MW soft starters (group B)
- 3x 4000kVA phase shift transformers (group A)
- 3x pump units, flow: 9700m³/h head: 87m (group A)
- 5x pump units, flow: 3600m³/h head: 38m (group B)
- 6x 30kV GIS switchgear cubicles
- 11x 10kV AIS switchgear cubicles
- 2x 8MVA power transformers
- 1x 160kVA distribution transformer
- Distribution boards
- Earthing system
- DC/UPS system
- Complete pumping station MV & LV cabling works

- Instrumentation
- Complete piping system DN600-1200
- All valves DN600-1200
- 1x overhead crane 15t
- 1x overhead crane 5t
- HVAC system
- DCS control system
- Erection supervision
- Complete commissioning of electrical and mechanical works

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