The population of Istanbul, Turkey's largest city, is expected to reach fifteen million by the year 2040. The Melen project is designed to secure the drinking water needs of the forecast number of inhabitants.

Water from the river Melen near the Black Sea is pumped 200km via a pipeline and two pumping stations at a rate of maximum 720000m³/day into the water treatment plant in the city of Cumhuriyet.

The treated water will then be transferred through an undersea tunnel below the Straits of Bosporus to Istanbul.

The construction of the pumping stations was carried out by a consortium. Within this consortium ABB was responsible for all electrical, control and instrumentation works.

Enduser: Directorate of State Hydraulic Works (DSI), Ankara, Turkey.

The project was completed in October 2008.
Technical Specification / ABB Scope

Melen Pumping Station
- 6x 4.5MW 11kV motors
- 6x liquid starters
- 9x 11kV 1600A switchgear cubicles
- 2x 630kVA distribution transformers
- 16x LV switchgear cubicles
- Control system
- Instrumentation
- DC/UPS system
- SCADA
- Power factor correction system
- Erection supervision and commissioning

Cumhuriyet Pumping Station
- 6x 2.2MW 11kV motors
- 6x liquid starters
- 9x 11kV 1600A switchgear cubicles
- 2x 630kVA distribution transformers
- 16x LV switchgear cubicles
- Control system
- Instrumentation
- DC/UPS system
- SCADA
- Power factor correction system
- Erection supervision and commissioning

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