Shoaiba II Combined Cycle Power Plant (CCPP) – Desalination Plant

Owner: Saudi Electricity Company (SEC)
Client: Daelim Industrial Co, Ltd.
Location: Saudi Arabia
Capacity: 2,400 m3/d
Start-up: 2015
Application: Power; SWRO; boiler feed
SWT was contracted to design, manufacture, and supply a seawater desalination plant consisting of dual media filters, double pass RO units, CIP and chemical dosing systems as well as all controls. We provided installation supervision, start-up, testing and commissioning services as well as operator training.

Operational Data:

- Feed water TDS: 42,640 mg/l
- Permeate TDS: 2.65 mg/l
- Permeate flow: 50 m3/hr
- RO Recovery: 40%
- Array: 15, 4:2 (Pass 1, pass 2: stage 2)