



## Demineralization Water Plant for Combined Cycle Power Plant



**THE SITUATION:** A Chinese construction and engineering company that designs, builds, operates, and owns power plants, required highly purified process water to wash their turbines for a combined cycle power plant located on an oil field in southern Iraq.

**LOCATION:** Iraq

**INDUSTRY:** Power Generation

**THE CHALLENGE:** The quality of the raw water and the required demineralized water were the most significant challenges considering the limited footprint provided for equipment at this plant.

**THE SOLUTION:** CECO Peerless provided a very compact demineralization water plant by selecting the most efficient, effective, and compact technologies to ensure meeting the performance criteria.

**The total package included:**

- Ultrafiltration
- Activated Carbon Filtration (For Potable water)
- Double Pass Reverse Osmosis Plant
- Demineralization using Electro-Deionization technology
- Oily Water Treatment Package using CPI technology



#### THE RESULTS:

- a. Ensured demineralization quality
- b. Compact packages to fit within the limited footprint available

#### ENVIRONMENTAL BENEFITS:

- a. CECO Peerless used Reverse Osmosis technology to meet this customer's goals because it is one of the greenest solutions to treat contaminated water.
- b. CECO Peerless used Electro-Deionization technology since it is the only Demineralization technology requiring no operational chemical.

"CECO Peerless is the leader in understanding our customers' needs, enabling us to identify the appropriate technologies and adapt designs to suit different projects. CECO is focused on providing optimized, efficient, and competitive solutions to meet our customers' needs."

