

CASE STUDY



OPG POWER GENERATION PRIVATE LIMITED



Difficulty:

Super Critical Boiler Requires Very Pure water more or less equal to Distilled water for Steam generation. Available Bore well water have more contamination viz., TDS, Hardness, Silica and other impurities which has to be treated in Water treatment plant to avoid Scale formation in Boiler tubes and to avoid Silica deposition in Turbine blades. This was a challenge to Client to treat their Raw water to meet Super critical Boiler feed water requirements.

Solutions:

Zion Enviro offered a solution to treat their raw water to their expectation level to fulfill Super critical Boiler water requirements.

Scheme:

Raw water Reservoir → MGF → ACF → SOFTENER → R.O. 1st Pass → R.O. 2nd Pass → DGT → M.B (1 W + 1 S) → DMST

Scope of work:

Design, Engineering, Procurement, Supply, Erection & Commissioning.

Quality of Treated Water: pH : 6.8 – 7.2, Cond. : < 0.1 us/cm, Silica : < 0.02 ppm

Advantage:

1. Treated water meets Super Critical Feed water norms.
2. No Silica deposition in Turbine blades and no scaling in Boiler tubes.
3. Operator friendly erection and very less maintenance.