CASE STUDY

A 660MW power station operating under flexible cyclic load operation in Central India

Problem

- High value of conductivity after cation exchange

- Stress corrosion cracking (SCC) of steam turbine blades

Objective

To ensure quick start up of steam turbines after plant shut down, eliminating threats from anions like chlorides and preventing air ingress to the condenser

Solution

Installation of Forbes Marshall's Relisafe™ CO2 system for measurement of degas conductivity after cation exchange (DCACE) enabling the operation and chemistry teams to take correct and timely decisions to start steam turbines quickly and safely

Benefits

- CO2 samples from steam and condensate taken before CACE measurement

- accurate measurement of
  - specific conductivity
  - conductivity after cation exchange (CACE)
  - degas conductivity after cation exchange (DCACE)
  - calculated pH
  - calculated CO2

- Start up time reduced by 3-4 hours

- Fuel saving during each cold startup of the plant

- No stress corrosion cracking (SCC) of steam turbine blades