

Gujarat Industries Power Co. Ltd

Heat Exchanger, Condenser & Cooling tower system - Performance & Maintenance strategy

Overview & Objective:

It is very evident that the power plant efficiency or station heat rate depends not only on its basic Rankine cycle but, on other system performance attached to the plant as well. Present era of merit order power dispatch demands a lot from power plant basic unit like boiler & steam turbine as well as other systems like; feed water heaters, Heat exchangers, condenser & cooling water system and cooling towers. Not only performance of each these system but current economic situation challenges and demands lot from power plant professionals also. It demands an innovative solution to each plant specific problems & strategy to deal with such problem to minimize the loss to the power plant. Workshop on BoP (Balance of Plant) would be ideal platform to discuss the different method of performance measurement & maintenance strategy to deal with by different power plant professionals.

So far OEM (original equipment manufacturer) were supplying all other required system for power plant. Due to heavy demand of their main plant equipments, integration of other system with main plant equipment were not done optimally. It has now become imperative to look into the each system critically as well as aligning its input & output to optimize the plant performance. For e.g. Condenser & Circulating water system – Condenser should demonstrate best heat exchange efficiency at most operating steam turbine load. Also, condenser design should be such that it has least pressure drop and has enough no. of pass to exchange heat. Power plant professionals have to devise a method to measure the performance of the system based on the resources available to them, generate data base, analyze the data and then design maintenance strategy to deal with them.

The program aim to deliver the basics and operational aspect of mainly cooling tower, condenser, heat exchanger etc., as well as water chemistry of circulating cooling water, performance of cooling tower and scope of energy conservation. The program also aims to dwell on maintenance strategy of systems/equipments other than main plant equipments.

Course Content:

- Importance and basics of Cooling tower
- Basics of CW system & Condenser
- Operational aspect of CW system & Cooling tower.
- Water Chemistry of CW system
- Performance of Cooling Tower
- Scope of Energy conservation
- Maintenance strategy of cooling tower

Training Methodology:

- Classroom training
- Interaction
- Case Studies
- Plant Visit

Recommended For: Jr. Level Engineers & Middle level engineers working

in power plant or process industry.

Duration of Course : 2 Day

Date : Refer Training Calendar posted on website

Type : Residential

Course Fees : Rs. 8000/- + applicable taxes

Venue : Gujarat Industries Power Company Limited

Surat Lignite Power Plant (SLPP),

P.O Nani-Naroli, Dist: Surat.

For Nominations:

Registration Form

<u>OR</u>

Contact:

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