

*Webinar on*

# POWER PLANT PERFORMANCE & HEAT RATE IMPROVEMENT OPPORTUNITIES

19-22 October, 2020

**Dr. DEBDAS BANERJEE**

*Former Addl. General Manager (CENPEEP), NTPC Ltd.*



**SHRI SANKAR BANDYOPADHYAY**

*Former Executive Director (CENPEEP), NTPC Ltd.*



**CENTRAL BOARD OF IRRIGATION  
& POWER**



## BACKGROUND

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Central Board of Irrigation & Power (CBIP) a premier Institution, setup by Government of India in 1927 is serving the nation in the disciplines of Water Resources, Power & Renewable Energy Sectors for more than 93 years.

It is an exchange and knowledge bank for dissemination of technical knowledge & professional experience to help Engineers/ Professionals to update their knowledge and gain practical know-how.

## CBIP'S MAIN OBJECTIVE IS

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- To disseminate technical knowledge through various modes, e.g., publication of technical documents, organizing conferences /workshops
- To provide specialized training to the professionals in the Water Resources, Power & Renewable Energy Sectors.

In this present COVID-19 situation, skill enhancement and training of professional has emerged as a very important aspect and a challenge. Online trainings/ workshops are our attempt to continue sharing latest experience with participants.

In view of current scenario and with the aim to help the professionals and engineers to understand the need to optimize the performance of thermal power plants, CBIP is organizing online training programs on **"POWER PLANT PERFORMANCE & HEAT RATE IMPROVEMENT OPPORTUNITIES"** from 19-22 October, 2020(1430-1630 hours).

The unique features of this training will be high safety of participants in COVID19 situation as no travel is involved in addition to huge financial saving to departments.

### Note:

- Audio/video recording is prohibited however the presentations will be shared with participants via e-mail.
- CBIP will not be responsible for any quality and interruption of audio/video due to poor internet connectivity at the customer end.
- Online training session link will be provided to the participants only. Forwarding the link to other person is strictly prohibited.
- The participants must adhere to the time schedule fixed for the training.
- The participants are requested to be in formal dress.

## ABOUT THE PROGRAM

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The program is divided into 2 tutorials:-

- **TUTORIAL 1:-** *Boiler & its Auxiliaries Performance & Plant Heat Rate Improvement Activities*
- **TUTORIAL 2:-** *Turbine & its Auxiliaries Performance and Plant Heat Rate and Aux Power Improvement Activities*

### TUTORIAL 1 (19<sup>th</sup> & 20<sup>th</sup> October 2020)

- Boiler Air Heater Performance Assessment
- Analysis & Identification of performance gap areas
- Performance & heat rate improvement
- Improvement Potential
- Mill Performance assessment and Combustion Optimization

### TUTORIAL 2 (21<sup>st</sup> – 22<sup>nd</sup> October 2020)

- Turbine cycle efficiency, Gross Turbine Cycle Heat Rate Analysis
- Condenser Performance Assessment
- Impact of turbine and condenser performance on heat rate and improvement opportunities
- Cooling tower Performance
- Auxiliary power and its improvement
- HP heater performance analysis

## UNIQUE FEATURES OF ONLINE PRACTICAL TRAININGS

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- Virtual Instructor led Training Program
- Training with high safety of participants w.r.t. COVID19
- No travel related costs
- Learning and working balance as our sessions are planned for half day
- Flexibility to join via android/iOS mobile phones
- Well proven online platform with high cyber security
- Live message chat, Live voice chat, polls and Quiz
- Real time engagement
- Experts Panel discussions with Case studies
- Working Group Discussion within participants
- Demonstration of practical aspects through videos
- E-Certificates

## WHO SHOULD ATTEND?

Executives working in Operation, Maintenance, Design, Erection and Efficiency divisions of Boiler & Turbine and Generator and Chemist / Chemical Engineers.

## REGISTRATION FEE

The participants can register for either Tutorial 1 or Tutorial 2 or both based on their interest. Registration fee for each Tutorial is as follows:-

No. of Participants	Fee in INR	
	Members	Others
1	2000	2200
5	9000	10000
10	16000	18000
20	28000	32000

GST@18% will be extra.  
(GST No. 07AAAJC0237F1ZU)

An additional 10% discount shall be awarded to organizations who shall participate in both the Tutorials.

The program is limited to 200 participants, which will be on First cum First serve basis.

### TO REGISTER:

The perspective participants, desirous of attending the workshop may register themselves by sending the following details to CBIP along with necessary payments:

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Organization:** \_\_\_\_\_

**Mailing address:** \_\_\_\_\_

**Mobile No.:** \_\_\_\_\_

Note: After registration, the participants will be provided the link 1 day prior to the session to participate.

Payments of registration fee should be made by cheque at par/Demand Draft drawn in favour of "Central Board of Irrigation and Power", payable at New Delhi or by transfer the amount to HDFC Bank,

**Address:** 209-214, Kailash Building, 26 Kasturba Gandhi Marg, New Delhi 110001,

**Saving Bank Acc. No:** 00031110004411;

**Swift Code:** HDFCINBBDEL;

**IFSC:** HDFC0000003;

**MICR Code:** 110240001

## KEY SPEAKERS

**Shri Sankar Bandyopadhyay**, Former ED (CENPEEP), NTPC is Mechanical Engineering Graduate from BE College, Howrah (now BESU), M Tech in Thermal Engineering from IIT Delhi and MBA in Finance from IGNOU, Chartered Engineer of Institution of Engineers (India), Qualified auditor for ISO-9001, Lead auditor ISO - 14001 & Auditor for OHSAS -18001, BEE certified Energy Auditor cum Energy Manager and also accredited Energy Auditor of BEE. He has experience of about 38 years in NTPC in major areas of O&M, such as Operation, Commissioning, PG test, Efficiency, Commercial, Maintenance Planning (MTP), Energy Conservation, R&M and O&M contracts. He is presently Advisor (O&M), NTPC Consultancy Division and also Advisor, HPGCL. He is also faculty for training programmes of Power Management Institute of NTPC and other generating plants of different owners.

**Dr. Debdas Banerjee**, Former Addl. General Manager, CENPEEP, NTPC Ltd. is Ph.D from IIT Bombay and has about 36 years of experience in various fields, out of which he has about 26 years of experience in R&D and CENPEEP, NTPC. He has mainly worked in Boiler Performance & gap analysis through off-line monitoring of process parameters, Performance assessment of Air Heater, Mill, ESP & their computations, Combustion optimization in power plant, optimization of Coal blending in Power Station, Assessment of combustion reactivity of Non-Coking coal. He is faculty for training programmes of Power Management Institute of NTPC and also guest faculty of IIT Dhanbad & NPTI and other generating plants of different owners.

## ADDRESS FOR CORRESPONDENCE

**Dr. G.P. Patel, Secretary, CBIP**  
**Shri A.K. Bhatnagar, Director, CBIP**

Nodal Officer: Shri Shashank Sharma,  
Assistant Manager

Mobile No.: 9650782428;

E-mail:- shashank@cbip.org,  
shashank271993@gmail.com;

**Central Board of Irrigation & Power**  
Malcha Marg, Chanakyapuri,  
New Delhi – 110021  
Phone: 011 26115984/26116567