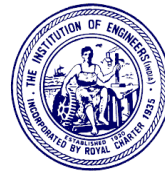




# Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)  
Old Bombay Road, Gachibowli, Hyderabad – 500 032, Telangana, India



## POWER & ENERGY DIVISION

### CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMME

## Environmental Issues, Challenges & Pollution Control Strategies in Thermal Power Plants

(On-line Course)

16 – 18 August, 2022

From 11:30 to 17:15 hrs (4 Hours 30 Minutes per day)

Online Interactive Sessions | Digital Learning | Experts Online Support



### Introduction:

Thermal power plants continue to contribute a great deal of about 60% to 65% of total electricity generation in India, which forms the backbone of economy and quality of life. There are number of environmental issues and challenges connected to thermal power plants viz., pollution of air, land & water, acid rain, green house effects. All associated together creates severe impact on environment resulting health hazards to mankind, flora and fauna. Thermal power plants also generate huge quantity of solid waste in the form of ash which, if not handled properly, constitutes a potential source of environmental pollution. Handling of ash by 100% utilization is one of the prime challenges to the generating stations.

As the air pollutants namely CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, SPM, Acid rain, Heavy metals etc. emitted by Thermal Power Plants have tremendous impact on the health of mankind, flora and fauna, it is essential that their concentrations in stack-outlets are to be controlled. The adverse impact of CO<sub>2</sub> emission is Green House Effect, which in turn has long term serious impact on environment. Govt. of India has stipulated stringent norms for controlling the emissions from thermal power plants. While the environmental pollution remains a bigger challenge concerning public health and long term green house effects, compliance of new norms of pollution from power plants remains as an equally bigger challenge for thermal power plants to reduce pollution.

There are proven methods of controlling such pollution through use of Supercritical & Ultra Supercritical Power Plants, Coal Washeries, Ultra Efficient ESPs, Fabric Filters, Flue Gas De-sulphurizers, CO<sub>2</sub> sequesters, etc. which can reduce emissions in Thermal Power Plants. However, although the new technology for controlling the emissions is available, very high cost of such equipments and space constraints to install them, in the existing power plants are posing major challenges to the management of existing Thermal Power Plants

### Objectives:

The objective of the program is to revisit and sensitize the top management personnel of Thermal Power Plants & Process Industries regarding the Environmental Issues, Challenges and Pollution Control Strategies.

### Course Coverage

- Present Power Generation Scenario In India
- Land, Water and Air Pollution Contribution by Thermal Power Plants and Process Industries.
- Impacts of various Pollutants from Power Plants
- Ash Handling and Utilization
- Supercritical and Ultra Supercritical Power Plants
- Environment Management System and Impact Assessment in Power Plants and Process Industries
- New Environmental Regulations and their Compliance
- Methods and Strategies of Pollution Control in Thermal Power Plants and Process Industries
- Case Studies

An ISO 9001:2015, ISO 14000:2015, ISO/TEC 17025:2017, ISO 45001:2018, ISO 50001:2018 Certified,  
AICTE & CEA Recognized Institution)

**Centre for Promotion of Professional Excellence**

## Methodology

Methodology of the programme includes Digital Learning through LMS Platform, Interactive sessions with audio visual aids, discussions, sharing of experiences etc. Online sessions will be conducted through Cisco WebexApp.

## Faculty

Apart from Core Internal Faculty, Consulting Firms, Government Organizations, Manufacturing, Academic and Research Institutions etc. will share the sessions.

## Target Participants

Middle to senior level executives/managers associated with Power Plants and Process Industry including Chemicals, Fertilizers, Petrochemical industry, Heavy Water Production with Captive power generation etc

## Benefits to the participants

- Capacity building with Knowledge sharing from well experienced domain specialist.
- Reading material will be emailed to all participants who have registered.
- A Certificate of participation will be awarded to each participant on conclusion of the programme

## Programme Dates & Timings

**Dates: 16 – 18 August, 2023 (4 Hours 30 Minutes per day)**

**Online Session timings** will be from 1130 to 1715hrs with breaks in between for tea and lunch.

### Programme Advisor

**Er. A Chadra Mohana Rao, FIE**  
(Former Scientist 'G', DAE, AGM, Tata Power)  
Advisor (Mob: 9866185035)

### Programme Director

**Dr. V. Vidyasagar**  
Sr. Faculty - Power & Energy Division, ESCI  
(Mob: 9421801203)

## Course Fee

**₹ 9,000/- Plus 18% GST= Rs.10, 620/-per participant**

**Group Discount :**10% discount for three (3) or more participants if sponsored by the same organization.

**(All discounts are applicable only if fee is received at ESCI a week before the commencement of the programme)**

ESCI's :**GST No:** 36AAATT3439Q1ZV. **PAN No:** AAATT3439Q

The payment may be made by Electronic Fund Transfer (EFT) to ESCI – SB A/c No. 33705165550 with The SBI, Manikonda Branch, GachiBowli, Hyderabad – 500 032 by NEFT / RTGS / IFSC Code No: SBIN0011076 – MICR No: 500002107. **While using EFT method of payment, please ensure to communicate us your company name and programme title.**

## Registration

**Online registration** shall be available on ESCI web portal :[www.escihyd.org](http://www.escihyd.org)

**To register manually** please send your nominations giving details of name, designation, contact address, email address, mobile no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to: [pe.esci@gmail.com](mailto:pe.esci@gmail.com)/ [pe@escihyd.org](mailto:pe@escihyd.org)

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