Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TS, India

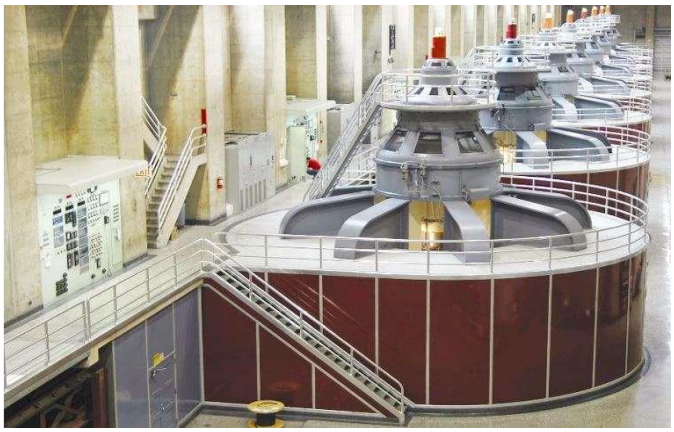
POWER & ENERGY DIVISION

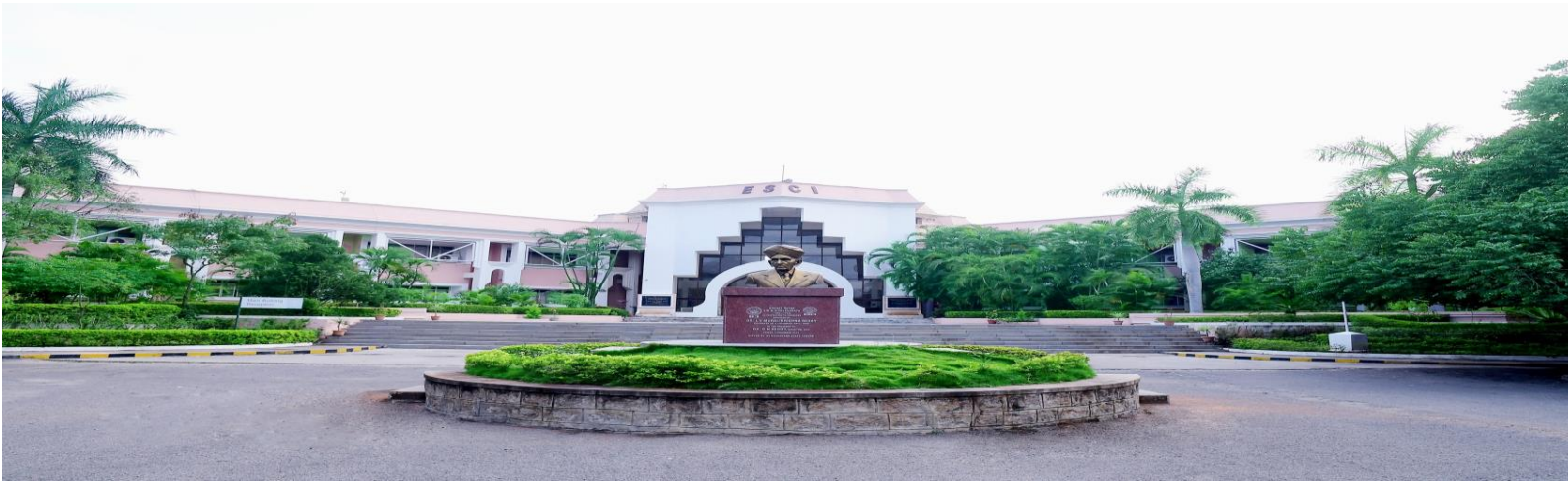
Classroom Continuing Professional Development Programme on

Flexibilization of Thermal Power Plants

18 – 20 August, 2026

at ESCI, Hyderabad





(An IMS Certified (ISO 9001:2015 QMS, ISO 14000:2015 Envtl. Mgmt., ISO 45001:2018 (OH&SM), ISO 50001:2018 EnM), AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

Energy security forms the backbone of country's all-round development, and presently fossil fuels are contributing about 56.8% of total power generation in India while renewable energy sources like hydro, solar and wind together contribute about 41.4%. Environmental pollution is one of the most serious issues the world is facing today, and power generation through fossil fuels contributes its gigantic share to the pollution. In order to save the planet-Earth from the galloping pollution effects, it's a well-established conclusion that power generation through fossil fuels is to be reduced, while renewable power should be mandatorily increased and encouraged. In this context, Govt. of India has set an ambitious target of 500 GW Renewable generation by 2029-30.

One of the most important features of power generation is that since there are no big storage facilities for storing electric energy at present, the electric power generated should be continuously balanced with power consumption at any instant to ensure supply of good quality power. In a given power demand scenario, as the eco-friendly renewable power generation increases, the polluting thermal power from fossil fuels should reduce its share. Unfortunately, the renewable energy sources viz. solar, hydro and wind are seasonal and not continuously available, the role of thermal power stations becomes much more critical in maintaining continuous power supply.

The thermal power stations are required to run more flexibly to ramp up and ramp down the power generation in tandem with renewable generation and also consumption demand. This puts a lot of burden on thermal power stations to flexibilize the O&M activities which are to be re-established to meet the varying power ramping requirements. This program takes the participants through flexibilization of thermal power plants in terms of various aspects of power ramping requirements, challenges in achieving them, and their effects on thermal power station performance their residual life and case studies etc.

OBJECTIVE

To sensitize the participants about the flexibilization of Thermal Power Plants in the light of Govt.of India's initiative for mandating renewable energy resources, challenges of power ramping requirements, and their effects on thermal power plants performance.

COURSE COVERAGE

- Current Power and Energy scenario in India
- Need for Flexibilization of TPPs
- Barriers of Flexibilization
- Manifestation & Issues expected in Flexibilization- Low/ Minimum load Operation, Ramping, 2- Shift Operation, Reserve shut down
- Impact of Flexibilization on Plant life
- Some useful tips based on experiments & experience
- Preparedness for flexibilization
- Options for Flexibilization
- Cost of Flexibilization
- Lessons learnt form low load operations
- Case Studies

METHODOLOGY

The programme will be conducted in an interactive environment providing greater scope for discussions. Emphasis will be on a highly participative style of learning. The classrooms are equipped with latest audio-visual aids for better learning process.

FACULTY

Apart from core internal faculty, experts from industry, consulting firms, government organizations, academic and research institutions etc. will share the sessions.

TARGET PARTICIPANTS

Power Engineers and Managers from Power Utilities, CPPs, Generating Companies, Independent Power Projects associated with Planning, Design, Construction, Operation & Maintenance, System Operation, Manufacturing Industry, Academic and Consultancy Firms etc.

PROGRAMME VENUE, DATES & TIMINGS

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad - 500032, Telangana, India.

DATES

18 - 20 August, 2026

TIMINGS

On the first day registration will commence at 0900 Hrs. On all other days the programme timings will be from 0945 to 1715 hrs with breaks in between for tea and lunch.

ACCOMMODATION

Participants will be accommodated in our Executive Hostel located within ESCI Campus. The accommodation will be on twin sharing basis.

COURSE DIRECTOR

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

COURSE FEE

Residential Fee is Rs.18,000/- per participant. Residential fee includes Course Material, Course Kit, and Twin-sharing / Single AC accommodation as per availability, Breakfast, Lunch, Dinner, Tea / Coffee and Snacks.

DISCOUNTS

Non-Residential Fee: 10% discount on course fee is allowed for non-residential participants.

Group Discount: 10% discount for three 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)

GST @18% (as applicable) is to be paid extra over and above the training fee. ESCI's **Provisional ID No. 36AAATT3439Q1ZV, PAN Card No. AAATT3439Q**.

The course fee is to be paid in favour of **"IE (I) – ENGINEERING STAFF COLLEGE OF INDIA"** in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT) to ESCI – Current A/c No. 33705165550** with The SBI, Manikonda Branch, Gachi Bowli, 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, ESCI invoice reference and programme title.

Online registration is available on ESCI website. To register, manually please send your nominations (**10 days** prior to date of commencement of the programme) giving details of name, designation, contact address, email address, mobile number, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to:

Power & Energy Division
Engineering Staff College of India
Gachi Bowli, Hyderabad – 500 032
Phone: 9885372277 / 7287860384
Email:pe.esci@gmail.com / pe@escihyd.org; Website: www.escihyd.org

CERTIFICATE: A certificate of participation will be awarded to each participant on conclusion of the programme.

GENERAL INSTRUCTIONS

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of the outstation, participants ESCI will facilitate pickup and drop from Airport / Railway Station / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number or email. The charges shall be paid by the participants directly to the cab driver.
- ESCI provides complimentary accommodation to participants a day prior to the commencement and after the conclusion of the programme. (Check in at 12:00 hrs a day prior to the commencement & check out at 12:00 hrs a day after completion of the programme)
- Overstay charges of @ Rs.1120/- per day / per head, (Food will be charged extra).
- Well developed Information Centre and Internet facilities are available to the participants free of cost.