



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

Continuing Professional Development Programme on

PAT Mechanism for Power Plants and DISCOMs

12 – 15 November 2019



(An ISO 9001:2008 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

World over, there is an increased awareness on the need to curb consumption and adopt a climate friendly and cleaner path while on the road to economic development. As a step towards this goal, Government of India promulgated the Energy Conservation Act in the year 2001 which was followed by a release of National Action Plan on Climate Change (NAPCC) in the year 2008. PAT Scheme was introduced in the year 2012.

Perform, Achieve and Trade (PAT) mechanism, implemented by the Bureau of Energy Efficiency (BEE), is one of the flagship programme of Government of India for initiating energy efficiency measures for the Indian Industries. PAT scheme is a regulatory instrument to reduce specific energy consumption in energy intensive industries, with an associated market based mechanism to enhance the cost effectiveness through certification of excess energy saving which can be traded.

In the first PAT cycle, this scheme covered the Designated Consumers i.e .Iron and Steel, Thermal Power Plants, Cement, Aluminium, Pulp and Paper, Textiles, Chlor-Alkali, Fertilisers, Refineries, DISCOMS, Railways. Penalties were applicable for the designated consumers who did not achieve the targets given by BEE. The first PAT cycle (2012-13 to 2014-15) realised a savings of 8.67 Million Tonnes of Oil Equivalent (MTOE). This translates into avoiding about 31 million tonnes of Co₂ emission. The second PAT cycle (2016-17 to 2018-19) is expected to achieve energy consumption reduction of 8.86 MTOE.

PAT Circle-III (2017-18 to 2019-20) is proposed on rolling basis effective from 1st April 2017.

There are lot of mandates and documentation required, which are statutory as part of the scheme. There is a need to train the various Stakeholders to meet the mandatory requirements. This programme therefore aims to train the participants of the above target industries, academic institutes and consultants on the requirements under the PAT Mechanism.

OBJECTIVES

This training program endeavours to familiarise the participants about

- 1) The PAT Scheme and the need to reduce specific energy consumption.
- 2) Barriers to Energy Efficiency.
- 3) The need to accelerate the shift to Energy Efficient Equipment in Power Plants of GENCOs..
- 4) The need to reduce losses in transmission lines of DISCOMS
- 5) The target set for mandatory savings in Energy consumption and the steps required to meet the targets.
- 6) Need for fiscal instruments for financing energy efficiency programs at reasonable rates.
- 7) The commitment required from Top Management.

COURSE COVERAGE

- Basics of Energy Conservation Act
- PAT Basics
- Energy Audit as per PAT Requirements (GENCOs & DISCOMS)
- Energy Management and Audit of power plants.
- Loss reduction strategies for DISCOMS
- Measurement and Verification Audit
- Data Normalisation
- PAT forms and documents and action required from utilities

- Energy Saving Certification, Registration Procedure and trading mechanism
- Green Productivity and PAT
- Measurement and Verification
- Learning from PAT 1& 2
- Sector wise targets and actions required
- Economics of achieving PAT Targets and Strategic Planning.
- Way Forward

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 provided with latest audio – visual teaching aids. The ambience in the campus and classrooms facilitate an effective learning by participants.

FACULTY

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

TARGET PARTICIPANTS

Nuclear / Electrical / Instrumentation Engineers from Nuclear, Power & Allied Installations, Manufacturing and Power Generating Plants, Engineers in captive Power Plants of Process Plants especially from Iron & Steel, Aluminum, Cement, Refineries and petrochemicals, Executives in Energy Efficiency departments etc

PROGRAMME VENUE, DATES & TIMINGS

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

DATES

12 – 15 November 2019

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

A Chandra Mohana Rao

Head, Power & Energy Division, ESCI
Certified Energy Auditor

COURSE FEE

Residential Fee is Rs.20,000/- (Residential) per participant. 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) – ENGINEERINGSTAFFCOLLEGE OF INDIA”** in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT) to ESCI – SB 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:

Head, Power & Energy Division

Engineering Staff College of India

Gachi Bowli, Hyderabad – 500 032

Phone 040–6630 4170 to 4177; 040-6630 4171 / 4174, Fax: 040 – 23000336, 66304103

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 provide guidance to 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 by fax 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.990/- per day / per head including hospitality (Bed Tea / Coffee to Dinner) will be charged.
- Well developed Information Centre and Internet facilities are available to the participants free of cost.