

# **Engineering Staff College of India**

Autonomous Organ of The Institution of Engineers (India)



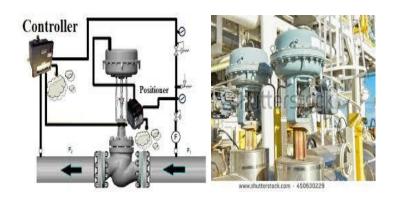
Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TS, India

# **POWER & ENERGY DIVISION**

Classroom Continuing Professional Development Programme on

# Best Practices in O&M of Industrial Valves & Actuators for Heavy Industries & Power Plants 17 - 19 July, 2024

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

All mechanical Valves constitute a very important class of hardware in industry, which are used for different purposes like controlling fluid-flow through control valves, isolating the flow through isolation valves, process-safety through safety relief valves etc. In power plants, the most essential requirement is to ensure uninterrupted operation of plant and also to match simultaneously the power generation with the consumption demand at any given instant. Control valves and actuators together, play vital role in ensuring accurate control of fluid flow and thereby controlling the generation of power as per demand. In process industry, accurate flow control is very critical for ensuring product quality while safety relief valves contribute a great deal to ensure plant safety and thereby to increase productivity. Different types of valves like control valves, isolation valves, check valves and pressure relief valves etc are available for different purposes of use in industry under different process conditions of temperature, pressure and dusty environments. Many such valves are Being operated automatically and remotely by using valve-actuators which are pneumatically/electrically driven, and mounted on the valves. Selection of proper valves and their actuators, and ensuring precision in their functional capabilities are of paramount importance. This program takes the participants through different types of valves and actuators, their construction details, operation features, repair and maintenance aspects etc. in power and process industry with respective case studies.

# **OBJECTIVE**

The objective of the programme is to familiarize the participants with best practices in operation and maintenance of different Valves & Actuators Power Plant and process industry to maintain optimum output with the highest degree of reliability.

# **COURSE COVERAGE**

- Mechanical Valve types and classification, relative merits and applications
- Basic elements of valves & their materials
- Construction details of different type of valves & lines connections
- Steam Traps and energy saving opportunities
- Different types of Actuators & Classification
- Trouble shooting of Valves & Actuators
- Storing and Installation of Valves
- Maintenance, Inspection, Repair of valves & actuators including Testing
- Gland packings gaskets including online sealings, live loading of valves, Best Practices including Operation Guidance
- Condition Monitoring of Valves
- Best Practices in O&M aspects of Valves

#### **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 in effective learning by participants.

# **FACULTY**

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

# **TARGET PARTICIPANTS**

O&M Engineers and Managers from Power Utilities, Captive Power Plants, Independent Power Producers, Chemical, Steel, Cement and all Process Industries. Also Executives from Purchase, Facility Planning, Stores and Spare parts management will find this course useful.

# PROGRAMME VENUE, DATES & TIMINGS

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

#### **DATES**

17 -19 July, 2024

# **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.16,500/- 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. GST 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:

# **Head, Power & Energy Division**

Engineering Staff College of India Gachi Bowli, Hyderabad – 500 032

Phone: 040-6630 4170 to 4176; 040-6630 4173 / 4176, 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 INFORMATION**

- 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 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 following day 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 Food (Bed Tea / Coffee to Dinner) will be charged extra as per actuals.
- Well developed Information Centre and Internet facilities are available to the participants at no cost.