

National Tutorial on
Electric Safety and Accident Prevention
- Practice and Standards

Date: 15th - 16th February 2023

Venue: Conference Hall, CBIP, New Delhi



Organised by

In Association With



New Delhi
ISO 9001:2015
Central Board of Irrigation and Power



Society of Power Engineers

ANNOUNCEMENT

The Central Board of Irrigation and Power is organizing a National Tutorial on “**Electric Safety and Accident Prevention - Practice and Standards**” on 15th - 16th February 2023 at Conference Hall, CBIP, Malcha Marg, Chanakyapuri, New Delhi – 110021.

TOPICS TO BE COVERED

The eminent faculty on the subject is Shri N. Murugesan, Former Director General, CPRI – Bangalore. The topics to be covered in the Tutorial are as follows:

- Why is Electricity safety is so important & Hazards and risks from Electricity
- Statistics for electrical accidents, types of accidents and injuries, common causes of accidents and injuries, employer duties
- Fundamentals of Electrical safety
- Introduction of Earth and Grounding system
- Effect of current passing through the human body and safety requirements
- Fundamentals of Ground Grid Design
- Ground Grid Design Procedures
- Example Design from IEEE Standard 80
- Safety Aspects of Ground Grid Operation and Maintenance
- Effects of High Fault Currents, Damage or Failure of Grounding Equipment, recommendations
- Grounding of Distribution Systems
- Grounding and Over voltages in Distribution Systems
- High-Resistance Grounding of Distribution Systems
- Electrical accidents and dangerous occurrences
- Basic safety precautions & Safety procedures and methods
- Earth electrode, protective conductors, grounding and bonding of electrical systems and equipment
- Electrical maintenance and relationship to safety, Testing Electrical safety
- Accident prevention, accident investigation, rescue and first aid
- Human factors in electric safety, Safety management and organizational structure, Safety training methods systems.
- High voltage safety, Arc Flash Analysis, Hazardous Area Classification
- Statutory Legislative frame work- Electricity Act 1910, Electricity Rules 1956,
- Environment Protection Act 1985, Electricity Act 2003, Energy Conservation Act 2001, Applicable part of National Building Code, 2016
- Electrical safety codes and standards – National Electrical Code 2011, IEC 60364
- CEA Regulations for measures relating to safety and electric supply -2010 and amendments
- Designating persons to operate & carry out the work on Electrical apparatus, Inspection & Safety measures.
- General Safety requirements, General Conditions relating to supply and use Electricity.
- Safety Provisions for Electrical installations & Apparatus of voltage not exceeding 650 volts and Safety Provisions for Electrical installations & Apparatus of voltage exceeding 650 volts.
- Safety Requirements for overhead lines, underground cables & Generating stations.
- Miscellaneous – Training requirements, syllabus & Evaluation procedures
- Measurement & Monitoring
 - Thermography
 - Periodic testing & maintenance
 - Electrical Safety Self-Assessment (audit)
- National Electrical Code- 2011
 - Part 1 General and common aspects
 - Part 2 Electrical installations in stand-by generating stations and captive substations
 - Part 3 Electrical installations in non-industrial buildings
 - Part 4 Electrical installations in industrial buildings
 - Part 5 Outdoor installations
 - Part 6 Electrical installations in agricultural premises
 - Part 7 Electrical installations in hazardous areas
 - Part 8 Solar photovoltaic (pv) power supply systems

WHO SHOULD ATTEND

The tutorial is open to various utilities and industry organizations/ individuals in the field of Power Systems.

DATE AND VENUE

The tutorial will be held on 15th - 16th February 2023 at Conference Hall, CBIP, Malcha Marg, Chanakyapuri, New Delhi – 110021. The tutorial timings will be 10.00 AM to 5.30 PM for both days. The registration will start at 9.00 AM on 15th February 2023.

REGISTRATION FEE

All those who wish to participate in the tutorial are expected to register in advance by sending the details through email to the organizers along with payment of registration fee as indicated under:

1. Non – Member fee is Rs. 12,000/- per participant
2. Discounted fee for members of CBIP is Rs. 10,000/- per participant
3. Special Discounted fee for students is Rs. 3,000/- per student

GST @ 18% shall be charged extra GST No. 07AAAJC0237F1ZU

The Registration fee covers the registration kit, tea/coffee/lunch during the tutorial. The tutorial is non-residential. Participants will have to make their own arrangements for travel, boarding and lodging etc.

All payments be made through cheque at par in favour of 'Central Board of Irrigation & Power', payable at Delhi or amount deposited/ transferred to HDFC Bank, CBIP A/c no. 00031110004411, MICR No. 110240001, Swift Code : HDFCINBBDEL, IFSC: HDFC 0000003, Address: 209-214, Kailash Building, 26 Kasturba Gandhi Marg, New Delhi – 110001

After making of the payment online in respect of the event, the details like UTR/Organization name to be furnished immediately.

ABOUT FACULTY



N. Murugesan, Former Director General, CPRI, Bangalore

Sri N. Murugesan holds M.Sc (Engineering) and brings nearly 43 years of experience in the areas of Power Systems, Transmission & Distribution System, Electric Grounding mat design for EHV Sub-Stations, measurements including HVDC Station Electrode and Electrical Safety, Standardization of Electrical Equipment (both National - Bureau of Indian Standards (BIS) and International - STL- Short Circuit Testing Liaison - IEC, IEEE Standards), Switch-gear Testing & Certification (Low & High voltage equipment) for confirmation as per National (BIS) & International Standards (IEC/ IEEE), Communication Protocol for Power system Automation, Sub-station Automation,

Distribution Automation, SCADA, Smart Grid, Advanced Metering Infrastructures (AMI), Smart Meters, Electric Vehicle Charging Infrastructure, Electrical Storage (BESS). Expanded Research and Testing facilities to an International level meeting all IEC, IEEE and BIS requirements across India in its 7 laboratories (1200 kV AC and 800 kV DC Systems). At present Sri Murugesan is working as Consultant/ Advisor advising Electric Distribution Utilities in introducing new Technology/ Process/ Schemes , revising the specification of equipment for tendering, producing Market Research Reports on various technologies including evaluating Utility Companies, Safety etc. and offering Training.

For further details, please contact the Event Secretariat.

EVENT SECRETARIAT

Shri A.K. Dinkar, Secretary, CBIP

Shri Sanjeev Singh, Director (Energy), CBIP

Central Board of Irrigation and Power, Malcha Marg, Chanakyapuri, New Delhi - 110021

Phone : 011-26115984/2687 6229/2688 0557 Fax: :011-2611 6347

Contact Person

Shri Vishan Dutt, Chief Manager, CBIP – M : 9811431554, E-mail : vishandutt@cbip.org Website : www.cbip.org

Shri S.K. Batra, Consultant, CBIP – M : 9811943812, E-mail : batra@cbip.org

National Tutorial on
**Electric Safety and Accident Prevention
- Practice and Standards**

15th - 16th February 2023

CBIP Conference Hall, New Delhi

REGISTRATION FORM

(To be filled in block letters preferably)

1. Name : _____
2. Position : _____
3. Organization : _____
4. Address : _____
5. Phone : _____ Fax No. _____
6. Email : _____

Dated _____

Signature _____

Details/ Amount of Registration fee Paid:

All payments 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 Account No. : 00031110004411; Swift Code: HDFCINBBDEL; IFSC: HDFC 0000003; MICR Code: 110240001. (GST No. 07AAAJC0237F1ZU).

After making the payment online in respect of the event, the details like UTR/Organization name to be furnished immediately.

Registration Form, duly filled in, is to be mailed to the following address:

Secretary

Central Board of Irrigation and Power, Malcha Marg, Chanakyapuri, New Delhi 110 021, India
Tel: 91-11-26115984/26116567 Fax: 91-11-26116347
E-mail: vishandutt@cbip.org; batra@cbip.org Web-site: <http://www.cbip.org>

Note:

- Photocopies of the registration form can be used for additional requirements, if any.
- Spot registration facilities will also be available, provided the prior information is received.