

National Conference on

Innovative Substation concepts, Designs and Operation

Under the aegis of CIGRE NSC B3 on Substations and Electrical Installations

Date: 27th – 28th November 2025

Venue: CBIP Conference Hall, New Delhi



Organized by



In association with



Supported by



BACKGROUND

Substations are a vital part of the electrical grid. They act as the connection points between power generation plants, transmission lines, and the distribution network that provides electricity to homes and industries. As the energy sector evolves, with more renewable energy sources like solar and wind being added, substations need to be more reliable, efficient, and smarter than ever before.

Along with rising electricity demand, advancements in digital technology and automation are transforming substation design and operation. Modern substations use digital equipment and intelligent control systems that improve safety, reduce maintenance, and allow faster fault detection and response. Technologies like Geographic Information Systems (GIS), communication protocols such as IEC 61850, and compact, modular designs make substations more flexible and easier to manage.

Effective asset management tools help utilities monitor the health and performance of substation equipment, which helps in preventing failures and extending equipment life. These innovations also contribute to creating a more resilient and adaptable power grid capable of handling the challenges of a modern energy landscape.

Recognizing these changes, the Central Board of Irrigation and Power (CBIP), in association with CIGRE India, is organizing a National Conference on Innovative Substation Concepts, Designs and Operation on 27–28 November 2025. This Conference is supported by Central Electricity Authority. This conference is being organised under the aegis of CIGRE National Study Committee B3 on Substations and Electrical Installations.

This conference will provide a valuable platform for utilities, engineers, technology providers, policymakers, and researchers to come together. They will share the latest advancements, discuss practical challenges, and explore new solutions for building future-ready substations that support India's growing power needs.

Through this event, participants will gain knowledge on the latest innovations, best practices and strategies for efficient substation management, helping to ensure a reliable, efficient, and sustainable power supply for the nation.

AIM AND OBJECTIVES

The conference aims to:

- Showcase innovations in substation design, construction, and automation.
- Promote the adoption of digital substations and IEC 61850-based communication standards.
- Address O&M challenges, safety, and reliability issues in substation operation.
- Facilitate knowledge exchange on modernization and upgradation of existing substation infrastructure.
- Encourage collaboration among utilities, OEMs, consultants, and academia for the development of future-ready substations.

CALL FOR PAPERS / PRESENTATIONS

1. Innovative Concepts in Substation Design and Layout including Compact and Modular Substation Designs for Urban and Remote Areas
2. Digital Substations: Architecture, Benefits, and Case Studies
3. IEC 61850-Based Automation and Communication Protocols
4. Use of Drones, Robotics, and AI in Substation Inspection and Monitoring
5. Advanced Protection and Control Systems
6. Substation Cybersecurity: Threats and Solutions
7. Integration of Renewable Energy into Substation Infrastructure
8. Health Assessment and Condition Monitoring of Substation Assets
9. Substation SCADA, Analytics, and Remote Operation
10. Retrofitting and Modernization of Existing Substations
11. Environmental and Safety Considerations in Substation Design
12. Role of IoT, Edge Computing, and Cloud Platforms in Substation Management
13. Case Studies: Utility Experiences, Lessons Learned, and Best Practices

REGISTRATION FEE

All those who wish to participate in the conference 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/CIGRE-India is Rs. 10,000/- per participant
3. Special Discounted fee for Students is Rs. 2,500/- per student

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

The Registration fee covers the registration kit, tea/coffee/lunch during the conference. The conference 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.

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

DATE AND VENUE

The conference will be held on 27–28 November, 2025 (Thursday and Friday) at Conference Hall, CBIP, New Delhi.

The conference timings will be 10.00 AM to 5.30 PM on both the days. The registration will start at 9.00 AM on 27th November 2025.

SPONSORSHIP OPPORTUNITIES

The conference provides an effective opportunity for sponsoring companies to promote their products/services to a focused audience, besides networking with engineers of utility, manufacturers and academic institutions during tea/coffee and lunch intervals. Main banner and other publicity material related to conference and will have the privilege of distribution of their product's pamphlets/catalogues during the event. Sponsors will also have the privilege of sending delegates exempted from payment of registration fee as indicated hereunder :

Platinum Sponsor : Rs. 3,50,000/-	Gold Sponsor : Rs. 2,50,000/-	Silver sponsor : Rs. 1,50,000/-
<ul style="list-style-type: none">• 10 delegate passes for participation in the Conference• Speaking Opportunity• Invitation to the key person of the organization as special invitee during Inaugural session• Circulation of Company Literature during the event• Company logo on main backdrop and other banners• Complimentary Advertisement in the Key Journal Published immediately after the event covering report of the event.• Announcement -Thanking sponsor	<ul style="list-style-type: none">• 05 delegate passes for participation in the Conference• Company logo on main backdrop and other banners• Circulation of Company Literature during the event• Announcement - Thanking sponsor• Complimentary Advertisement in the Key Journal Published immediately after the event covering report of the event.	<ul style="list-style-type: none">• 03 delegate passes for participation in the Conference• Company logo on main Backdrop• Announcement – Thanking sponsor

CONFERENCE SECRETARIAT

Shri A.K. Dinkar, Secretary, CBIP

Shri Sanjeev Singh, Director (Energy), CBIP

Contact Person : Shri A.K. Srivastava, Advisor, CBIP M : 9650998042 Email : arvind@cbip.org;

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

Central Board of Irrigation & Power (CBIP), Malcha Marg, Chanakyapuri, New Delhi -110 021

Phone: 011-26115984/ 26116567 E-mail: cbip@cbip.org

Note: • Spot registration facilities will also be available, provided the prior information is received.

National Conference on **Innovative Substation Concepts, Designs and Operation**

27–28 November, 2025
CBIP Conference Hall, Malcha Marg, Chanakyapuri
New Delhi

REGISTRATION FORM

(To be filled in block letters preferably)

Delegate _____
(Surname) (First Name)

Designation _____

Name of Organisation _____

Organisation GST No. _____

Mailing Address _____

City _____

State _____ PIN _____

Phone _____ Fax _____

Email _____

Dated _____ Signature _____

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

Shri A.K Dinkar, Secretary, CBIP

Shri Sanjeev Singh, Director (Energy), CBIP

Contact Person : Shri A.K. Srivastava, Advisor, CBIP M : 9650998042 Email : arvind@cbip.org;

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

Central Board of Irrigation & Power (CBIP), Malcha Marg, Chanakyapuri, New Delhi -110 021

Phone: 011-26115984/ 26116567; E-mail: cbip@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.