Topics to be Covered

- Historical Evolution of Substation Automation Systems (SASs)
- Emerging Communication Technologies and Communication Standards
- IEC Standard 61850 (Communication Networks and Systems for Power Utility Automation), IEEE Standard 802.3 (Ethernet)
- Main Functions of Substation Automation Systems and Impact of the IEC 61850 Standard on SAS Projects
- Switchyard Level, Equipment and Interfaces
- Bay Level: Components and Incident Factors, Station Level: Facilities and Functions
- System Functionalities, System Inputs and Outputs. System Engineering, Overall System Engineering
- Communication with the Remote Control Center. Communication Pathway, Brief on Digital Communication
- Factory Acceptance Tests, Test Arrangement, System Simulator, Hardware Description, Software Identification, Checking System Features
- System Behaviour in an Avalanche Condition. Tests on the Communication Link for Technical Service
- Non-structured FATs, After FATs. Commissioning Process, Hardware Description, Software Identification
- Training Strategies for Power Utilities. Project-Related Training, Station Level Module, Bay Level Module, Process Level Module
- SAS Engineering Process According to Standard IEC 61850. Future Technological Trends, Toward the Full Digital Substation

Keynote Speakers

- **Rajil Srivastava**
  Former Chairman CIGRE NSC B3 & Chief General Manager
  POWERGRID

- **Nihar Raj**
  Chairman CIGRE NSC B3 & Vice President (O&M)
  Adani Transmission

- **N. Murugesan**
  Former Director General
  Central Power Research Institute
  Bangalore, India
Background
Central Board of Irrigation & Power (CBIP) a premier Institution, setup by GOI in 1927 is serving the nation in the disciplines of Power, Renewable Energy and Water Resources Sectors for more than 94 years.

It is an exchange and knowledge bank for dissemination of technical knowledge & professional experience to help Engineers/ Professionals to update their knowledge and gain practical know-how.

Facilitation Charges
The duration of the online training will be of 2 days (2 hrs. on each day) out of which 1hr 30 minutes will be for technical session followed by 30 minutes for question/answer session.

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<th>Login fee for the participants is as follows:</th>
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<td>Members*</td>
<td>Rs. 3,000/- per participant</td>
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<td>(CBIP, CIGRE &amp; AARO)</td>
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<td>Non Members</td>
<td>Rs. 3,600/- per participant</td>
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<td>Students</td>
<td>Rs. 750/- per student</td>
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Note: 18% GST extra

The program is limited to 200 participants, which will be on First cum First serve basis.

*CPSUs, PSUs, Centre & State Utilities, Regulatory Commission, Research Institution and Key Pvt. Sector organization are member of CBIP.

Unique Features of Online Trainings
- Training with high safety of participant's as no travel & travel related cost is involved.
- Expert’s Panel discussions within participants.
- Learning and working balance as our sessions are planned for 2 hours per day.
- Well proven online platform with high cyber security.
- Live message chat, live voice chat, polls and quiz.
- Real time engagement.
- E-Certificates to the participants.

Objective
- To disseminate technical knowledge through various modes, e.g., publication of technical documents, organizing conferences /workshops.
- To provide specialized training to the professionals in the Power, Renewable Energy and Water Resources Sectors.

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Central Board of Irrigation & Power
Malcha Marg, Chanakyapuri, New Delhi - 110021
Phone: 011 26115984/26116567, Fax: 011 2611 6347;
E-mail: cbip@cbip.org

To Register
The perspective participants, desirous of attending the above event may register themselves by sending the following details to CBIP along with necessary payments:
Title of event, Name, Designation, Organization, Mailing address and Phone / Fax/E-mail

Payments of facilitation charges should be made by bank transfer and cheque at par/Demand Draft drawn in favour of “Central Board of Irrigation and Power”, payable at New Delhi.

Sponsorship Opportunity

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<th>Platinum Sponsor: Rs. 50,000/-</th>
<th>Gold Sponsor: Rs. 30,000/-</th>
<th>Silver sponsor – Rs. 20,000/-</th>
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<td>Platinum Sponsor - up to 10 nos.</td>
<td>Gold Sponsor - up to 5 nos.</td>
<td>Silver Sponsor - up to 3 nos.</td>
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<td>Full visibility &amp; wider publicity: through display of logo on the Brochure for email marketing for the virtual event, on the banner for display during the event, on the websites of CBIP/CIGRE-India.</td>
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<td>Sharing of data of participants: to have a chance to connect with new customers for business exposure.</td>
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<td>Coverage/ Publicity in Key Journal: i.e. Water &amp; Energy Intl. Journal, which has a circulation of 10,000 to focused professionals &amp; stakeholders.</td>
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Note: Registered participants will get link 1 day prior to the event.