

5th Conference on **ADVANCES & INNOVATIONS IN SUBSTATIONS**

(Under the aegis of CIGRE NSC - B3 on Substations & A3 on HV Equipments)

30 Nov. - 1 Dec. 2017, New Delhi



TOPICS

- Modern Trends in Substation Technology
- Handling of High Short Circuit Levels : Options & Challenges
- Development of Un-manned Substations
- Advancement of use of SF₆ CTs and CVTs in substations
- Hybrid based solution for Renovation & Modernization of substations
- Development of Digital Substations
- Forced outages due to failure of substation equipment – corrective actions
- Modern condition monitoring techniques used in Substations
- Use of Sensors for Maintenance of Sub-station Equipment
- Others Case studies on the subject.

KEY SPEAKERS



Rajil Srivastava
*Chairman CIGRE NSC B3,
AGM, POWERGRID*



R.K. Tyagi
*Chairman CIGRE NSC A3,
GM, POWERGRID*



S.K.R. Mohapatra
Chief Engineer, CEA



Chaklader Gautam
GM, BHEL



Nihar Raj
AVP, ABB



K. Rajaram
Head, L&T



Vikram Gandotra
Siemens Ltd.



Sukhbir Kapoor
DGM, Alstom T&D India Ltd.

Organised by



Central Board of Irrigation & Power



CIGRE-India

INTRODUCTION & ANNOUNCEMENT

To minimize the sub-station equipment failure, it has become a pressing necessity for practicing engineers today to keep abreast with the best practices of maintenance of sub-station equipment. Due to this, maintenance practices of sub-station equipment have been undergoing refinements in techniques and scope, consistent with rapidly changing requirements and compulsions.

Modern condition monitoring techniques and procedures already in use worldwide should, therefore, be adopted based on techno-economic considerations and importance/criticality of the link in the system. Residual life assessment of the equipment also needs to be carried out to extend useful life beyond designed life in a cost effective manner. Causes of failure of equipment require thorough investigations to avoid recurrence which will further improve availability, reliability, efficiency and safety of the equipment.

In view of the recent advancement & innovations taking place at a fast pace, it is extremely necessary for the professionals to update their knowledge. By participating in this conference one will have the opportunity to meet the eminent experts on the subject, in order to build up a state-of-the-art view on the new requirements; solutions proposed and expected improvements for the betterment of the substation.

The aim of the conference is to provide a forum for open discussions and exchange of information on the latest state-of-the-art technology to come out with positive/concrete recommendations on the subject. It will be appreciated that it is very necessary for the professionals to capture the latest knowledge and innovations so as to keep the pace with the advancement taking place in this sector. The accentuation of the knowledge of the professionals in this region is going to ensure better performance of Power System.

Keeping in view the importance of the subject and to disseminate the development is being taken in the recent past by the various organization on the substation technology the Central Board of Irrigation & Power and CIGRE India are jointly organizing this Conference on **ADVANCES & INNOVATIONS IN SUBSTATIONS** on **30 Nov. – 1st Dec. 2017** at CBIP Conference Hall, New Delhi.

TOPICS

The following themes have been identified for discussions during the conference:

- Modern Trends in Substation Technology
- Handling of High Short Circuit Levels : Options & Challenges
- Development of Un-manned Substations
- Advancement of use of SF6 CTs and CVTs in substations
- Hybrid based solution for Renovation & Modernization of substations
- Development of Digital Substations
- Forced outages due to failure of substation equipment – corrective actions
- Modern condition monitoring techniques used in Substations
- Use of Sensors for Maintenance of Sub-station Equipment
- Others Case studies on the subject.

DATE AND VENUE

The Conference will be held on 30 November - 1 December 2017 (Thursday & Friday) in the Conference Hall, CBIP Building, Malcha Marg, Chanakyapuri, New Delhi-110021

CALL FOR CASE STUDIES

Experts who desire to participate for making presentations/case studies on the above subject are requested to furnish the write-ups to reach CBIP office latest by 20th November 2017.

PARTICIPANTS PROFILE

Executive from Power Utilities, Corporations, State Govts. / SEBs/ Researchers/ Academics, Manufacturers, Planners, Operators, Consultants, Electrical Contractors etc.

REGISTRATION FEE

The perspective participants, desirous of attending the Conference may register themselves by sending the following details to CBIP along with necessary payments:

Delegate Name : _____ Designation : _____
Organisation : _____
Mailing address : _____
Phone/Fax/E-mail : _____

The registration fee for attending the Conference is given below:

- (i) Rs. 12,000/- per participant. **(18% GST Extra) GST No. 07AAAJC0237F1ZU**
(ii) Rs. 10,000/- per participant for members of CBIP and CIGRE. **(18% GST Extra)**

The conference is non-residential. The conference timing will be 10.00 AM to 5.00 PM on both the days. The registration will start at 9.00 AM on day one of the conference.

Registration fee shall cover the registration kit, and Tea/ coffee / lunch during the Conference. Participants will have to make their own arrangement for travel, boarding and lodging, etc.

SPONSORSHIP OPPORTUNITIES

Scope exists for organizations to be the sponsor, gain publicity through networking with the industry's leading Government Officials, Sr. level delegates and experts besides following privileges:

Platinum Sponsorship INR 3,00,000	Gold Sponsorship INR 2,00,000	Silver Sponsorship INR 1,00,000
<ul style="list-style-type: none">• 5 delegate passes• Company logo on Backdrop• Company logo on Cover page of Proceedings Volume• Advertisement (Special Position) in the Proceedings Volume• Circulation of Company Literature• Exhibit Space• Announcement – Thanking sponsor• Advertisement in the Key Journal Published covering report of the event• Speaking Opportunity	<ul style="list-style-type: none">• 3 delegate passes• Company logo on Backdrop• Company logo on Cover page of Proceedings Volume• Advertisement (Special Position) in the Proceedings Volume• Circulation of Company Literature• Exhibit Space• Announcement – Thanking sponsor	<ul style="list-style-type: none">• 1 delegate passes• Company logo on Backdrop• Company logo on Cover page of Proceedings Volume• Circulation of Company Literature

ADVERTISEMENT IN PROCEEDINGS VOLUME

A limited space will be made available on first come first served basis, for advertisement to the organizations, involved in the concerned field, in the proceedings of the Conference. The interested organizations are required to send the advertisement material, i.e., soft copy of advertisement in PDF or Coreldraw format along with payments as detailed below:

- (i) Inner Pages Rs. 25,000/- (ii) Second or Third Cover Rs. 30,000/- (iii) Back Cover Rs. 35,000/-
GST (as applicable)

PAYMENTS

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

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Contact Person : Shri Vishan Dutt, Chief Manager - Tech., M: 9811431554 E-mail: vishandutt@cbip.org

KEY SPEAKERS

Eminent speakers will address the Conference with their immense technical knowledge and also present practical case studies. The following renowned experts in field have confirmed to deliver the lecture during the Conference:

Shri Rajil Srivastava, Chairman CIGRE National Study Committee on B3 on Substations & AGM, Power Grid Corporation of India Ltd. He is having more than 25 years experience in substation engineering. He is presently Study Committee member in CIGRE India B3. A Seasoned sub-station design engineer mainly dealing with transmission line, power transformer and shunt reactor protection, sub-station automation and design and protections of Fixed Series Compensation. Expert in Detailed Engineering 765 kV Class Sub-stations both Air Insulated and Gas Insulated and finalizing the relay setting of very complex network which include series capacitor, very complex transmission network etc.

Shri R.K. Tyagi, Chairman CIGRE National Study Committee on A3 on High Voltage Equipments is presently General Manager, POWERGRID. He has passed B.E. (Electrical) from PEC, Chandigarh in 1987 and did M.Tech. from IIT Delhi in 1995. He is a Fulbright Scholar from Carnegie Mellon University, USA. Shri Tyagi started his carrier from NTPC as Engineer Trainee. He joined POWERGRID during 1991 and has been associated with Operation Services, Engineering and Technology Development Departments since last 22 years. He has wide exposure on Switchgears, Instrument Transformers and Surge Arresters. He is representing India in MT-36 on Circuit Breakers. He was involved in development of 1200 kV AC Technology in India. He has travelled all over the world and has presented about 27 Technical papers in various National/ International forums/ Conferences.

Shri Sushant Kumar Ray Mohapatra is the Chief Engineer, CEA. He graduated in Electrical Engineering from Sambalpur University, Orissa in 1982 and had his Master's Degrees and MBA from IIT, Kharagpur and Faculty of Management Studies, University of Delhi in 1984 and 2003 respectively. His professional experience of more than 20 years includes Project appraisal, tendering & procurement, design and engineering of EHV substations with the CEA, identification and investigation work for harnessing hydro power potential (micro / mini / small hydroelectric power projects) and assessment of wind power potential with Govt. of Orissa (India) and testing & quality control of PVC & XLPE cables of 11 kV and 33 kV grade with M/s NICCO Orissa Ltd., India.

Shri Chaklader Gautam is General Manager (Construction, Engineering & Quality), Bharat Heavy Electricals Limited. He has done B.Tech in Electrical Engineering from Indian Institute of Technology (Banaras Hindu University), Varanasi and also completed M.Tech in Power Systems in 1983. He has a wide experience of more than 32 years in his credit in various capacities. His area of expertise also includes testing and commissioning.

Shri Vikram Gandotra works at Siemens Ltd, Gurgaon where he heads the Marketing & Strategy group for Digital Grid Business Unit. He is recognized in the Power T&D industry for his work with power utilities in bringing about significant improvements in their operations through introduction of newer technologies. He has degrees in Electrical Engineering and Business Administration and has a rich experience covering all areas in the Power Transmission & Distribution domains. He has worked on several projects for improvement of the Distribution networks of Power Distribution Utilities in India and abroad.

He dreams to see the Indian industry play a leading role in the global Smart Grid community and is the Chairperson of the Smart Grid Division of IEEMA. He is also the Secretary of WG 5 - DMS of the 'Power System Control and Associated Communications Sectional Committee, LITD 10 of "Bureau of Indian Standards", Member of CIGRE India D2 Committee and also represents India in the IEC PC-118 committee for Smart Grid User Interface.

Shri Nihar Raj is the Assistant Vice President - Technical, ABB Ltd. Presently he heads the Power System Consulting Business & HVDC Engineering division at INABB. He received his engineering degree from M.S. University, Vadodara. Since then he has been working with ABB India Ltd. He has designed several air insulated substations from 11 kV to 765 kV and gas insulated substations ranging from 36 kV to 400 kV. He is also involved in the design of 800 kV Mixed Technology Switchgear and GIS solutions. Shri Nihar is a life member & Advisory committee member of Society of Power Engineers (Vadodara Chapter), CIGRE B3 committee member, Senior faculty member at ABB University, Vadodara and has presented several technical papers at various national & international level conferences.

Shri K. Rajaram is presently Vice President and Head – EHV Substations and Power Distribution Business Unit under Power Transmission & Distribution - L&T Construction. He graduated from Delhi College of Engineering, Delhi University, in the year 1982 and since then with L&T. He has over three decades of varied experience in the field of PT&D covering various industries and segments. He has worked in India and abroad in various capacities viz. Testing & Commissioning expert, Project Head, Head of Engineering, Design & Research (Electrical), Zonal Project Head; Head of Business Development and Contracts (Electrical) etc.

He played key role in taking his Business Unit from Construction to Engineering & Turnkey Construction, from 220 kV to 765 kV level, from AIS substation business to GIS substation.

Shri Sukhbir Kapoor is Deputy General Manager– Engineering & Expert; Alstom T&D India Ltd. (GE Group Company).He has graduated in 1992 with specialization in Electrical Engineering from Bangalore University & MBA from Manipal University in 2004. He is having more than 24 years' experience in Electrical industries including 800 kV EHV substation design, back to back HVDC & FACTS solutions. He has contributed many technical papers in National / International Conferences on EHV system.