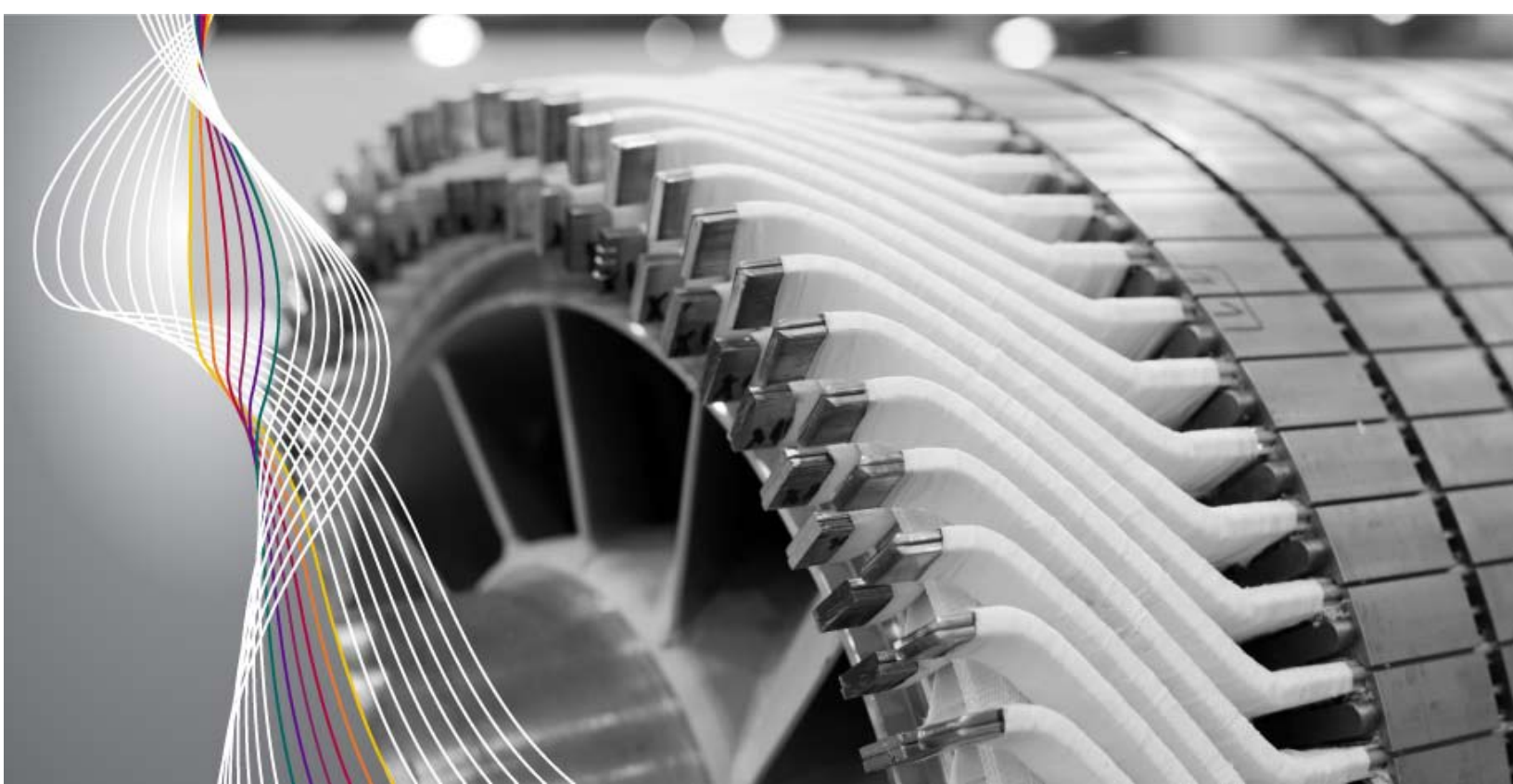


**3<sup>rd</sup> Interactive Workshop on  
Rotating Electrical Machines  
– Emerging Technologies**

(under the aegis of CIGRE National Study Committee on Rotating Electrical Machines)

**22 – 23 March 2018**

**Venue : Conference Hall, Central Board of Irrigation & Power  
Malcha Marg, Chanakyapuri, New Delhi**



*Organised by*



**Central Board of  
Irrigation & Power**



**CIGRE India**

## ANNOUNCEMENT

Electrical Rotating Machines consume more than 70% of the energy used across Industries. The major growth drivers for the electrical motors and drives market include the advancement and rapid growth in automation, adoption of energy-efficient international standards, ease of use, integration of motion control components in motors and drives, and regulations on energy efficiency.

The Committee for CIGRE-India in its capacity as National Committee for CIGRE and Central Board of Irrigation and Power are organizing an Interactive Workshop on Rotating Electrical Machines – Emerging Technologies on 22 – 23 March 2018, in the Conference Hall, Central Board of Irrigation & Power, Malcha Marg, Chanakyapuri, New Delhi.

The broad objectives of the workshop is to provide a technology sharing forum for open discussions and exchange of information on the latest state-of-the-art technology between manufacturers, users, academia, regulators and consultants. It will also provide an interdisciplinary platform to present and discuss the most recent innovations, trends and concerns as well as practical challenges encountered and solutions adopted in the fields Rotating Machines and Drives. The workshop will focus on the latest trends and technological advancements that impacts motor and drive systems.

## TOPICS

Papers are invited on any topic pertaining to the aim and scope of the workshop that includes, but not limited to, the following:

### **Generation mix of the future**

- Design improvements and technological developments required for machines to withstand cycled operation due to fluctuating feed-in of renewable energy and variable load demand.
- Impact and effect of increasing renewable power mix on existing legacy generators, generator auxiliaries and motors.
- Evolution and trends in designs of machines for renewable generation.

### **Asset management of electrical machines**

- Experience with refurbishment, replacement, power up-rating and efficiency improvement of aged generators.
- Novel techniques to overcome known operational and design problems.
- Optimized condition monitoring, diagnosis, prognosis and maintenance practices to improve reliability and extend operational life at conventional plant and in new volatile grid conditions.

### **Developments of rotating electrical machines and operational experience**

- Latest design, specification, materials, manufacture, maintenance and performance and efficiency Improvements in generators and motors.
- Operational experience: failures, root cause analysis, recovery options, cost and time reduction initiatives.

## SPEAKERS

The experts from organizations like NTPC; BHEL; ABB; GE ALSTOM; Kirloskar, Siemens; Crompton Greaves; Toshiba; Doosan; L&T; International Copper Association; Jumont Electric India Pvt. Ltd. and EESL are expected to make presentations during the workshop

## CALL FOR CASE STUDIES

Experts who desire to participate for making presentations/case studies on the above subjects are requested to furnish the write-ups to reach CBIP office latest by 10 March 2018.

## WHO SHOULD ATTEND

- Central / State / Private / IPP Utilities / EPC / Contractors who are responsible for the operation and maintenance of machines and involved in maintaining & life-cycle management of rotating electrical machines and drives
- Rotating machines and drives manufacturers system houses and after service providers.
- Manufacturers of conducting, magnetic, insulating materials and accessories used in electrical rotating machines

- Energy Planners, consultants and organizations involved in development of electrical rotating
- Companies involved in developing applications in electronics drives and control panels.
- Research organizations, laboratories, standardization bodies and academic institutes.

### REGISTRATION FEE

The perspective participants, desirous of attending the workshop 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 workshop is given below:

1. Rs. 12,000/- per participant
2. Discounted fee for members of CBIP & CIGRE is Rs.10,000/- per participant

**GST 18% shall be charged extra. (GST No. 07AAAJC0237F1ZU)**

The workshop is non-residential and the 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 at the venue of the workshop.

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

### SPONSORSHIP OPPORTUNITY

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

## KEY SPEAKERS



**Mr. Anand Kumar Gupta**, Vice President, CIGRE India and Convener for CIGRE Working Group on Rotating Machines & Director, NTPC, is Bachelor of Engineering (Electrical) in the year 1980 from National Institute of Technology Allahabad. As head of Electrical department of largest power utility of India, having 30,000 MW plus generation capacity, he had been fully involved in all developments & standardization work in the country with respect to Rotating Machines. He had also been responsible for Technology selection, Finalizing technical specification, Design review & testing of all turbine generators & other rotating machines for Thermal, Hydro & Gas based power projects of NTPC, besides other responsibilities. He had also been involved in many failure analysis & rectification measures adopted for various generators in NTPC. He also has experience of Operation & Maintenance of Large turbo generators during his tenure as head of Operation & Maintenance at Feroz Gandhi Unchahar Thermal Project of NTPC. At present he is Director (Commercial), NTPC.



**Mr. D.K. Chaturvedi**, National Representative in CIGRE Study Committee on Rotating Machines and Addl. General Manager, NTPC, is 1981 batch graduate in Electrical Engineering from, the IIT Roorkee. He has done Master of Engineering in Electrical Engineering from IIT Roorkee in 1985. He is presently in NTPC Ltd. responsible for Main Plant Electrical System. His area of specialization is Rotating Electrical Machines, Excitation System, Variable frequency Drives and High Current Bus-bar Systems. He is member of CIGRE working committee on Machine Diagnostics and IEC working committee on Rotating Electrical Machines. He is member of BIS committee ET-15 on 'Rotating Electrical Machines' and ET-02 Electrical Insulation System. He has played vital role in finalization of Standard on Energy Efficient Motors IS 12615 and harmonizing of Indian standards of ET-15 with IEC standards. He has been actively contributing new ideas to CIGRE and emphasizing for implementation of proven practices and concepts into our system.

**Note : Besides above, the eminent experts from the organizations like BHEL; ABB; GE ALSTOM; Kirloskar, Siemens; Crompton Greaves; Toshiba; Doosan; L&T; International Copper Association; Jumont Electric India Pvt. Ltd. and EESL are expected to make presentations during the workshop.**

## 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.

## ADDRESS FOR CORRESPONDENCE

**V.K. Kanjlia**

*Secretary*

Central Board of Irrigation & Power

Malcha Marg, Chanakyapuri, New Delhi - 110021

Phone: 011 26115984/1294/26116567; Fax: 011 2611 6347

E-mail: vishandutt@cbip.org; cbip@cbip.org;

**Contact Person at CBIP** : Vishan Dutt, Chief Manager -Tech., M: 9811431554