

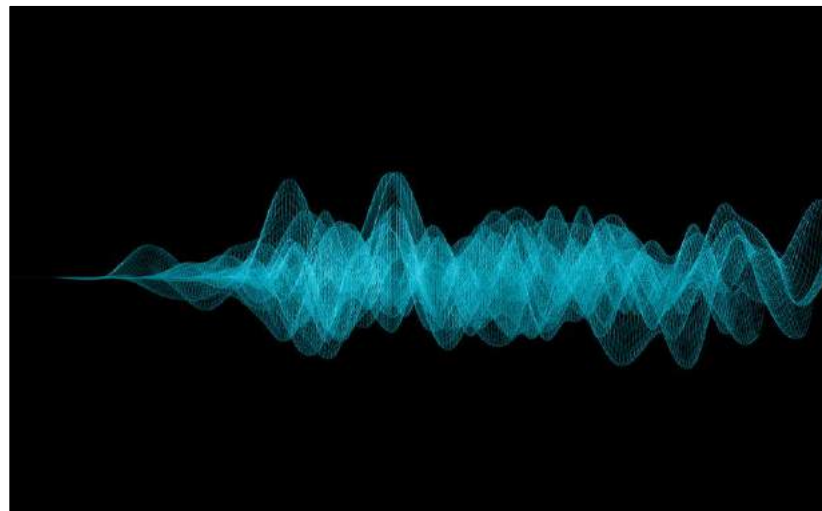
*Online Training Program on*

# REACTIVE POWER MANAGEMENT & ADVANCE HARMONIC MITIGATION TECH. IN LV SYSTEMS

**29-30 JUNE, 2021**  
**1500-1630 hours**

## KEY TAKEAWAYS

- ✚ Methods & Modes of reactive power management.
- ✚ Dynamic compensation of reactive power.
- ✚ Challenges in PF improvement in presence of Harmonics
- ✚ Passive Harmonic Filters: 7% & 14% detuned filters
- ✚ Compliance to “IEEE-519-2014” – Active & Hybrid Harmonic Filters



## ORGANIZERS



IN ASSOCIATION WITH



## ABOUT ORGANISERS

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**Central Board of Irrigation & Power (CBIP)** a premier Institution, setup by Government of India in 1927 has been serving the nation in the disciplines of Water Resources, Power & Renewable Energy Sectors for more than 93 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.

CBIP's main objective is to disseminate technical knowledge through various modes, e.g., publication of technical documents, organizing conferences /workshops and to provide specialized training to the professionals in the Water Resources, Power & Renewable Energy Sectors.

**L&T Electrical & Automation (E&A)** is a market leader for electrical distribution, monitoring and control solutions in the low voltage category. E&A offers a wide range of its brand L&T Switchgear comprising low and medium voltage components, electrical systems, industrial automation, building electrical solutions, energy management solutions, solar energy solutions, electrical modernization solutions and metering solutions.

L&T Switchgear Training Centre (STC) was set up with the objective of enhancing knowledge and necessary skill sets of personnel for proper maintenance and efficient working of electrical equipment and systems for industry wide improvements in productivity and higher profitability. STCs promote good electrical engineering practices and provide an excellent platform for discussions and learning on technical issues.

**International Conference on Electricity Distribution (CIRED)** is an international association set up in Belgium. CIRED works for the purpose of increasing the business relevant competencies and skills and knowledge of professionals of countries participating in CIRED's activities.

CIRED is active in the technical field of Electricity Distribution Systems, including dispersed and embedded generation issues.

## OBJECTIVE

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In view of the current scenario and with the aim to discuss and give a better understanding to the professionals and engineers about Reactive Power Management, **CBIP** jointly with **L&T Electrical & Automation** is organizing online training program on "**REACTIVE POWER MANAGEMENT & ADVANCE HARMONIC MITIGATION TECHNIQUES IN LV SYSTEMS**" on 29<sup>th</sup>-30<sup>th</sup> June, 2021 (1500-1630hrs).

## UNIQUE FEATURES OF ONLINE PRACTICAL TRAININGS

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- Virtual Instructor led Training Program
- Training with high safety of participants w.r.t. COVID19
- No travel related costs
- Learning and working balance as our sessions are planned for half day
- Flexibility to join via android/iOS mobile phones
- Well proven online platform with high cyber security
- Live message chat, Live voice chat, polls and Quiz
- Real time engagement
- Experts Panel discussions with Case studies
- Working Group Discussion within participants
- Demonstration of practical aspects through videos
- E-Certificates

## WHO SHOULD ATTEND?

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The training program is open to the Utility Engineers of various organizations and other individuals such as Panel Builders, OEMs, End users: Projects, O&M team, consultants and other experts in the field of power system.

## Note:

- **Audio/video recording is prohibited; however the presentations will be shared with participants via e-mail.**
- **Organizers will not be responsible for any quality and interruption of audio/video due to poor internet connectivity at the customer end.**
- **Online training session link will be provided to the participants only. Forwarding the link to other person is strictly prohibited.**
- **The participants must adhere to the time schedule fixed for the training.**

## REGISTRATION FEE

The duration for the training program will be of 90 minutes each day (1500-1630 hours) which will be followed by Q&A session.

The participation fee for full 2 days shall be:-

Number of Participants	*Member Fee per nomination	*Non-member Fee per nomination
1 or more	Rs.3,000	Rs.3,600
5 or more	Rs.2,800	Rs.3,200
10 or more	Rs.2,400	Rs.2,800
15 or more	Rs.2,000	Rs.2,400
Ph.D Scholars or M.Tech Students(max age=35 years)		Rs.1,000

**\*18% GST will be charged extra.**

**(GST No. 07AAAJC0237F1ZU)**

### TO REGISTER:

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

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

**Organization & GST Number** \_\_\_\_\_

**Mailing address:** \_\_\_\_\_

**Mobile No.:** \_\_\_\_\_

Payments of registration fee 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 Acc. No:** 00031110004411;

**Swift Code:** HDFCINBBDEL;

**IFSC:**HDFC0000003; **MICR Code:**110240001

## HOW TO JOIN

**The program is limited to 200 participants** & it shall be conducted in **Microsoft Teams**.

After registration, the participants will be provided the link 1 day prior to the session to participate on their registered e-mail ids. The link shall be open for joining on 1430 hours on 29<sup>th</sup> June, 2021.

### For joining through laptop:-

**Step-1:-** Click on the link provided.  
(Your internet browser will open along with 3 options)

**Step-2:-** Click on the option “**Continue on this browser**”  
(The Microsoft Teams window will open on the browser with a field to write the name)

**Step-3:-** Enter the name of organization and yourself and click on “**Join Now**”  
(example: CBIP-Shashank)

### For joining through mobile/smartphone:-

**Step-1:-** First Download the MicroSoft Teams App from play store/ app store on your phone

**Step-2:-** Click on the link provided.  
(Microsoft Teams app will open along with 2 options)

**Step-3:-** Click on the option “**Join meeting**”  
(A window to enter the name will open on the browser)

**Step-4:-** Enter the name of organization and yourself and click on “**Join meeting**”  
(example: CBIP-Shashank)

**\*\*Only the registered participants shall be allowed to attend the program\*\***

## ADDRESS FOR CORRESPONDENCE

**Shri A.K. Dinkar, Secretary, CBIP**  
**Shri A.K. Bhatnagar, Director, CBIP**  
Nodal Officer: Shri Shashank Sharma,  
Assistant Manager,  
9650782428

E-mail:- [shashank@cbip.org](mailto:shashank@cbip.org), [cbip@cbip.org](mailto:cbip@cbip.org);  
[shashank271993@gmail.com](mailto:shashank271993@gmail.com);

**Central Board of Irrigation & Power**  
Malcha Marg, Chanakyapuri,  
New Delhi – 110021, Phone: 011 26115984



## FACULTY PROFILE

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**SHRI SANJAY KALE** is currently heading L&T Switchgear Training Centre, Pune and has a formal degree in Electronics. He has 34 years of extensive industrial experience including last several years in the field of training.

His area of expertise ranges from Selection of Low Voltage Switchgear to Power Quality Solutions, Reactive Power Management etc. In his long association with the Switchgear Training Centre, he has been regularly conducting sessions for various prestigious organisations like ONGC, NTPC, IOCL, ISRO, BHEL etc.



**SHRI VIVEK RATNAM** is currently heading L&T Switchgear Training Centre, Kolkata and is designated as Deputy General Manager, Training at L&T Electrical & Automation.

### Educational Qualification:

- ✚ B.E Electricals & Electronics 2008 from BITS, Bhopal
- ✚ MBA in Marketing 2017 from Sikkim Manipal University, Manipal.

He holds enriching 12+ years of experience in the field of LV Switchgear. He has collective experience in Technical Training/ Marketing/ Product Life Cycle Management / Design & Development /Value Engineering. For the initial six years he has worked in R&D of LV Switchgear involved in development of Control gear & Power gear products like Contactors, Relay, Starters, MCB, RCBO, MCCB etc. Innovation by way of having filed 3 patents in the area of electrical engineering and various design registrations.

He possesses extensive knowledge of Product Life Cycle Management, DOE, DFMEA, 3D Modelling in Pro-E with detailed drawings, Prototype Development, Testing as per IEC & IS and Field Complaint Analysis.