

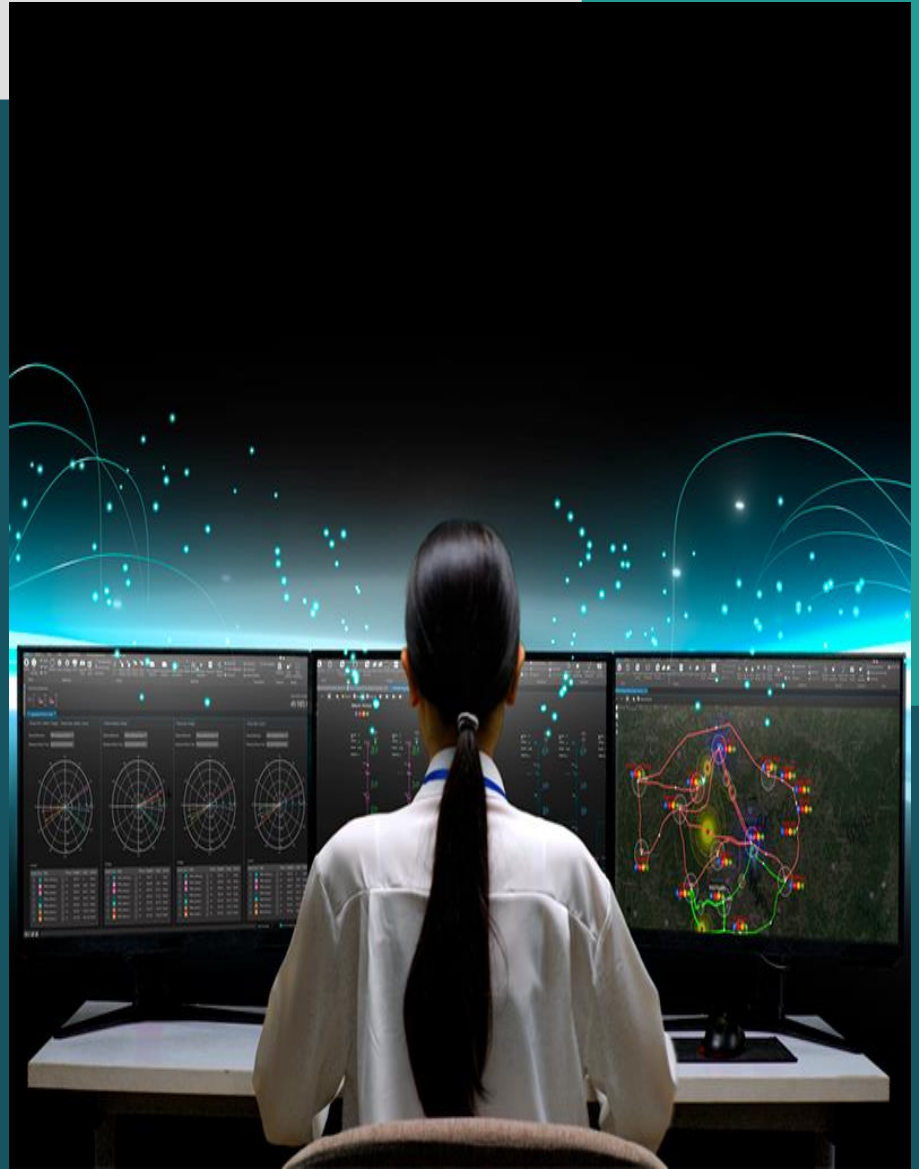
Hands-on Training

Information Bulletin

WAMS & Synchro phasor Technology and India Grid code requirements

Date: 20th – 22nd January 2025

Venue: Hitachi EnergyTEC, Hitachi Energy India, Vadodara



Organized by



New Delhi
ISO 9001:2015

CENTRAL BOARD OF IRRIGATION & POWER

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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 98 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.
- To provide specialized training to the professionals in the Power, RE and Water Resources Sectors.

CBIP realizing the importance of competency development and with the aim to create large reservoir of highly qualified manpower in all fields related to engineering, technology & technology management has recently signed a MoU with Hitachi Energy India Limited for jointly providing hands-on training to the professionals for skill development.

As the hands-on training help to understand the concepts, it is important to blend the practical demonstrations with theory for engineers to put the knowledge into practice. This is challenging as the equipment installed at working substations are not available for experimentation and exploring the same to test different concepts and theories learnt.

The unique feature of the training is:

- a) Factory visits to understand manufacturing and testing processes.
- b) Experiments related to training giving real time experiences through demonstration.
- c) State of art experience center product displays with cut sections giving insight into product design and construction.

It is with above aim the CBIP is organizing a Hands-on Training on "WAMS & Synchro phasor Technology and India Grid code requirements" from 20-22 January 2025. The eminent faculties from Hitachi Energy India Limited and other invited experts on the subject will deliver the presentations covering following topics:

India Grid Code Requirements

1. Indian Grid Code, CEA Compliance Requirements, References & Standards, Typical Grid Integration Studies
2. Important Input Data for Network Modelling, Detailed model development, Various Simulation Software
3. Steady State Analysis, Power Quality Analysis; Dynamic Analysis (PSSE)

WAMS and Synchro phasor technology

4. Conventional SCADA and State Estimation; Phasor Measurement Unit, IEEE C37.118-1
5. Phasor Data Concentrator PDC, IEEE C23.247; Time synchronization and communication, IEEE C37.118-2
6. PMU Placement and connections to instrument transformers, IEEE C37.242, Communication bandwidth estimation
7. Applications of WAMS, Oscillation Mode Identification; Linear State Estimation
8. Advanced Applications; PMU in distribution system, D-PMU; Point on Wave PMU, PoW-PM

Venue for the Course: Hitachi EnergyTEC, Hitachi Energy India Limited, Maneja, Vadodara

WHO SHOULD ATTEND

The training program is open to various utilities and industry organizations/ individuals in the field of power system.

COURSE FEE

The duration for the training will be for 3 days. The event is non-residential. Participants will have to make their own arrangements for travel, boarding and lodging etc. The registration fee will be Rs 30,000/- per participant + 18% GST shall be charged extra. The fee will cover the professional fees; site visit including Hands on/Demo in the Lab; working lunch; Tea/coffee/snacks during the course.

TO REGISTER

The participants, desirous of attending the above training may register themselves by sending the Registration Form to CBIP along with necessary payments. Participants are advised to bring GST No, of their organization along with name of office to whom the invoice is to be sent.

PAYMENT

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 – 110001 (CBIP GST No. 07AAAJC0237F1ZU)

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

ADDRESS FOR CORRESPONDENCE

Shri A.K. Dinkar, Secretary, CBIP, **Shri Sanjeev Singh**, Director, CBIP

Central Board of Irrigation and Power, Malcha Marg, Chanakyapuri, New Delhi - 110021

Phone: 011-26115984/2687 6229/2688 0557 Fax: 011-2611 6347, E-mail: cbip@cbip.org

Nodal Officer: Shri S.K. Batra, Consultant, CBIP – M: 9811943812, E-mail: batra@cbip.org; Website: www.cbip.org

Coordinator at Vadodara: Shri Prabhakar Tripathy , Phone: +91 265 6725107; Mobile: +919724334054

E-mail: prabhakar.tripathy@hitachienergy.com



Hitachi EnergyTEC is India's leading technology and knowledge institute with state of art facility for practical training and learning in futuristic and current power engineering, power automation and digital technologies.

Designed to be India's leading technology and knowledge institute, Hitachi EnergyTEC imparts training and learning in futuristic and current power engineering, power automation and digital technologies. Thus enabling a stronger, smarter and greener grid, industrial installations and urban transportation.

With decades of unparalleled domain knowledge and experience, Hitachi Energy's expert team of trainers offer hands-on training across the value chain of generation, transmission, distribution, transportation, services and safety, under a single roof. This future-proof facility integrates best-in-class demonstrations and in-depth technical proficiency to up skill up engineers to make in India and neighboring countries, all while optimizing your operations.

Training programmes conducted so far:

- 70000+ man days of training power system professionals completed so far.
- Courses covering entire value chain with Expertise across generation, transmission, distribution and transportation.
- Courses in the area of:
 - Electrical Safety
 - High Voltage Switchgear (up to 1,200 kV), Transformers
 - Medium Voltage Switchgear and Protection
 - Power System Studies, Power System Earthing
 - Condition Monitoring of Switchyard & Asset performance Management
 - Digitalization of POWERGRIDS, MICROGRIDS & BESS
 - HVDC & FACTS

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20th – 22nd January 2025

Hitachi EnergyTEC, Hitachi Energy India Limited, Maneja, Vadodara

REGISTRATION FORM

(To be filled in block letters preferably)

1. Name : _____
2. Position : _____
3. Organization : _____
4. Address : _____
5. Phone : _____ Fax No. _____
6. Email : _____

Dated _____

Signature _____

For the purpose of giving this real time experience to our participants, please ensure all who are nominated for training MUST wear safety shoes during the factory visit sessions.

Details/ Amount of Registration fee Paid:

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. (GST No. 07AAAJC0237F1ZU).

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

The Secretary

Central Board of Irrigation and Power, Malcha Marg, Chanakyapuri, New Delhi 110 021, India
Tel: 91-11-26115984/26116567 Fax: 91-11-26116347
E-mail: batra@cbip.org Web-site: <http://www.cbip.org>

Coordinator at Vadodara: Shri Prabhakar Tripathy, Phone: +91 265 6725107; Mobile: +919724334054
E-mail: prabhakar.tripathy@hitachienergy.com

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.