

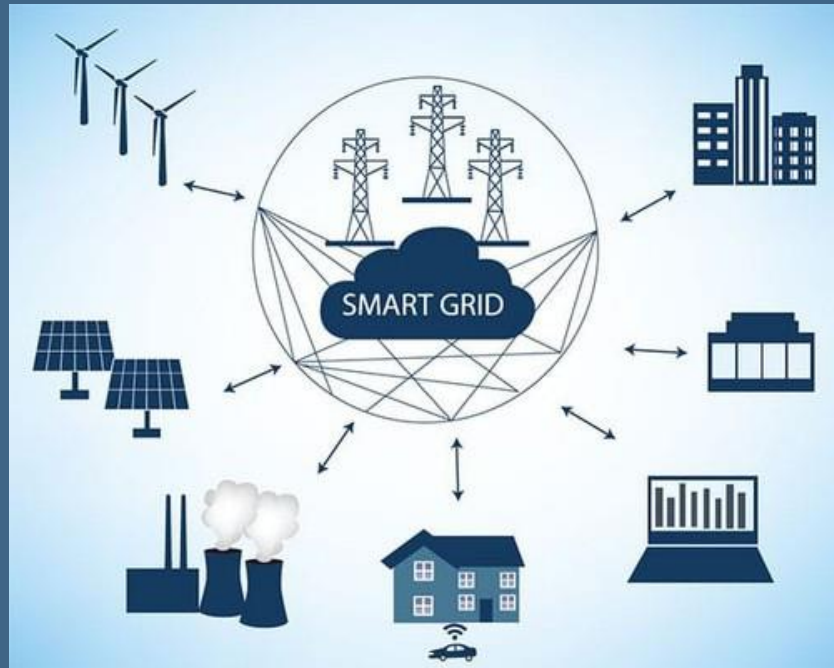


GOVERNMENT OF INDIA
MINISTRY OF POWER



Training Program on Smart Transmission and Distribution System with Storage

21st - 25th August 2023, IIT Kanpur



Organized by
National Power Training Institute, Faridabad
&
**Department of Electrical Engineering,
Indian Institute of Technology, Kanpur**

ABOUT NPTI

National Power Training Institute (NPTI), an ISO 9001 & ISO 14001 organization under the Ministry of Power, Government of India is a National Apex body for Training and Human Resources Development in Power Sector with its Corporate Office at Faridabad. NPTI had been providing its dedicated service for more than five decades. NPTI's committed faculties are providing excellent training in the Power Sector, which is the most important sector among various infrastructure sectors. Training provided by NPTI on Simulators has improved Plant Load Factor of Generating Units, has increased the availability of Transmission & Distribution Systems and has decreased Aggregate Technical & Commercial Losses. Thus the training being provided by NPTI is having a cascading effect in the growth of GDP and economy of the country.

ABOUT IIT KANPUR

IIT Kanpur is a premier government-funded institution for higher technical education in India. Consistently ranked amongst the top 5 engineering institutes in India over past several decades. IIT Kanpur offers courses in sciences, engineering, humanities and management. At IIT Kanpur, there is a strong emphasis on research in all their academic programs and they also have several specialized centers for research into various focus areas. Many of their alumni are leaders in academia and industry around the globe. The sprawling IIT Kanpur campus is located in the industrial city of Kanpur, only a few hours away from New Delhi, the Capital of India.

OVERVIEW OF THE PROGRAM

The present-day distribution system is undergoing a major transformation through adopting smart grid concepts and distributed microgrid implementations at different levels till consumer end. The operation, control, and protection philosophy of the emerging smart grid will pose several R&D and operational challenges related to cyber security, protection, storage integration etc. This training will include talks by leading experts from industries and academics on some of the key smart distribution grid technologies and the associated challenges. The smart city prototype in IIT Kanpur, one of the fourteen pilot projects sanctioned by the Ministry of Power (MOP) in 2014, is an important milestone in the smart distribution system journey of India. The main objective of the project was to develop and implement key solutions and identify the associated challenges in implementing smart distribution system technology in Indian cities. Key components of the IIT Kanpur pilot include supervisory control and data acquisition system (SCADA), advanced metering infrastructure (AMI), and rooftop solar PV integration. Additionally, the US India collaborative for Smart Distribution System with Storage (UI-ASSIST) project, jointly funded by IUSSTF/DST and the U.S. Department of Energy is implemented to showcase Smart Distribution System & microgrids with Storage.

OBJECTIVE

The main objective of this training is to familiarize the participants from utilities, industries, and R&D organizations with different concepts and developments in Smart Grid Technology. Experience gained through some of the pilot projects will also be shared.

SESSIONS/TOPICS COVERED

The tentative topics to be covered in the training include the following:

1. Introduction to Smart Grid Technology
2. Intelligent Distribution system framework

3. Framework for the resilient power distribution network
4. Renewable Integration and Interfacing Converters
5. Microgrid Protection & Active Distribution System
6. Cyber Security in Intelligent Distribution Systems
7. EV and Storage Integration
8. Intelligent Distribution Systems Communication Systems and AMI
9. Consumer Indexing and Engagement
10. IT Enablers for Intelligent Transmission & Distribution Systems
11. SCADA Distribution and its components
12. Facilities Management System in Distribution System
13. Resource Adequacy
14. Challenges in Renewable Energy Implementations
15. Lab Visits
16. Field visits

TRAINING FEE DETAILS

Trainees from the other categories - INR 29,500 + GST (including accommodation)

COORDINATORS

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CHIEF PATRON

Prof. Abhay Karandikar, Director, IIT Kanpur

Dr. Tripta Thakur, Director General, National Power Training Institute

SCHEDULE AND VENUE

The training will be held from 21st to 25th August, 2023 at visitor Hostel, IIT Kanpur - 208016, Uttarpradesh



NOMINATION FORM

Name: _____

Designation: _____

Organization: _____

Gender (for accommodation): M F

Accommodation required: Yes No

Correspondence Address: _____ PIN: _____

Phone: _____ Fax: _____ E-mail: _____

Qualification: _____

Category

Utility

Industry

R&D organization

Academics

I will submit the final vaccination (all doses) certificate on my arrival at IIT Kanpur, failing which my candidature for the training will stand cancelled

I will be willing to attend the training under paid category

(Signature of Participant)

Forwarded

(Head of the Organization/Unit)

Signature with seal

FEES PAYMENT THROUGH SBI COLLECT

Course Code	IITK/CCE/23-24/033
Course Title	Training Program on “Smart Distribution System and Storage”.
Course Duration	21.08.2023 – 25.08.2023
Participants Fees 29,500/- + 18% GST(5310/-) = Rs 34810/-	Per Participant
Name of Participants	
Name of Institute/Organization	
Course Fee	
Online Payment Link	https://www.onlinesbi.sbi/sbicollect/icollecthome.htm
Remarks	

Note: Duly filled registration form along with fees receipt should be E-Mailed to program coordinator.

- Following are the steps for fees payment

How to Pay the FEES using SBI Collect

Step 1: Click on “Educational Institutions”



Step 2: Select "Indian Institute of Technology Kanpur" in Educational Institution

The screenshot shows the SBI Collect website interface. At the top, there is a navigation bar with the SBI logo and links for HOME, TRANSACTION HISTORY, FAQs, and CUSTOMER SUPPORT. Below this is a 'Payment Progress' section with a progress indicator showing three steps: 'Select Payee', 'Enter Payment Details', and 'Verify Payment Details'. The 'Select Payee' step is currently active. The main content area is titled 'Select Payee' and shows a search for 'Indian Institute of Technology Kanpur'. A dropdown menu is open, displaying 'INDIAN INSTITUTE OF TECHNOLOGY, KANPUR' as the selected option. At the bottom, there is a pagination indicator showing 'Showing 100 1 of 1 entries (Sorted from 1071004 entries)' and a refresh icon.

Step 3: Select "CDTE WORKSHOPS" in Payment Category

The screenshot shows the SBI Collect website interface. At the top, there is a navigation bar with the SBI logo and links for HOME, TRANSACTION HISTORY, FAQs, and CUSTOMER SUPPORT. Below this is a 'Payment Progress' section with a progress indicator showing three steps: 'Select Payee', 'Enter Payment Details', and 'Verify Payment Details'. The 'Enter Payment Details' step is currently active. The main content area is titled 'Enter Payment Details' and shows a search for 'INDIAN INSTITUTE OF TECHNOLOGY, KANPUR'. Below this, there is a 'Payment Category' dropdown menu with 'CDTE WORKSHOPS' selected. A 'Back' button is visible at the bottom right.

Step 4: Complete the form

The screenshot shows the SBI Collect website interface. At the top, there is a navigation bar with the SBI logo and links for HOME, TRANSACTION HISTORY, FAQs, and CUSTOMER SUPPORT. Below this is a 'Payment Progress' section with a progress indicator showing five steps: 'Select Payee', 'Enter Payment Details', 'Verify Payment Details', 'Enter Payment', and 'Make Payment'. The 'Enter Payment Details' step is currently active. The main content area is titled 'Enter Payment Details' and shows a search for 'INDIAN INSTITUTE OF TECHNOLOGY, KANPUR'. Below this, there is a 'Payment Category' dropdown menu with 'CDTE WORKSHOPS' selected. The form contains various fields for entering payment details, including 'Payment Category', 'Amount', 'Payment Mode', 'Payment Reference', 'Payment Date', 'Payment Frequency', 'Payment Cycle', 'Payment Term', 'Payment Start Date', 'Payment End Date', 'Payment Interval', 'Payment Day', 'Payment Month', 'Payment Year', 'Payment Period', 'Payment Duration', 'Payment Frequency', 'Payment Cycle', 'Payment Term', 'Payment Start Date', 'Payment End Date', 'Payment Interval', 'Payment Day', 'Payment Month', 'Payment Year', 'Payment Period', 'Payment Duration'. At the bottom, there is a 'Make Payment' button and a 'Back' button.