

**Engineering Staff College of India** 

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TG, India



INFORMATION TECHNOLOGY DIVISION

PFC Sponsored - Capacity Building Training Program On "Cyber Security in Power Sector" for Middle Management Engineers of DISCOMs under RDSS of MoP, Gol

03 – 05 June 2025 (Batch 1) | 16 – 18 June 2025 (Batch 2) at ESCI, Hyderabad





(An IMS Certified (ISO 9001:2015 QMS, ISO 14000:2015 Envtl. Mgmt., ISO 45001:2018 (OH&SM), ISO 50001:2018 EnM), AICTE & CEA Recognized Institution)

**Centre for Promotion of Professional Excellence** 

# **BRIEF ABOUT PFC & RDSS**

The Central Government has approved a Revamped Distribution Sector Scheme- a Reforms-based and Results-linked Scheme with an outlay of Rs.3,03,758 crore over a period of five years from FY 2021-22 to FY 2025-26 with the objective to improve the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient distribution sector. The Scheme aims to reduce the AT& C losses to pan-India levels of 12-15% and ACS-ARR gap to zero by 2024-25 by improving the operational efficiencies and financial sustainability of all DISCOMs/ Power Departments excluding Private Sector DISCOMs.

The Power Finance Corporation (PFC) is a financial institution under the Ministry of Power, Government of India, that provides financial services to the power sector. Under the Revamped Distribution Sector Scheme (RDSS), PFC plays a crucial role in enhancing and strengthening the financial stability and operational efficiency of the electricity distribution sector in India.

## Key Aspects of the Revamped Distribution Sector Scheme (RDSS):

- Objective: The RDSS aims to improve the operational efficiency of power distribution companies (DISCOMs) through a variety of reforms and investments, ultimately leading to reduced losses and improved financial viability.
- Financial Assistance: PFC provides funding support to DISCOMs for implementing projects that modernize operations, reduce Aggregate Technical and Commercial (AT&C) losses, and improve consumer services.
- Reforms and Incentives: The scheme encourages states to undertake reforms by offering financial incentives for achieving specific operational and financial benchmarks.
- Technological Upgradation: The RDSS focuses on digitalization, smart metering, and advanced grid technologies to enhance efficiency and transparency in operations.
- Capacity Building: PFC supports training and capacity-building initiatives for employees of DISCOMs to improve service delivery and operational management.
- Consumer Services: Enhancements in consumer services are prioritized, promoting better grievance redressal and customer engagement strategies.

# **PROGRAM INTRODUCTION:**

Cybersecurity in power systems is crucial for ensuring the reliable and continuous delivery of electricity by protecting against malicious cyberattacks that could disrupt operations, damage critical infrastructure, or cause widespread blackouts.

# **OBJECTIVE OF THE PROGRAM**

The objective of the training program is

- The instructor-led course will provide knowledge and skills to protect your IT /OT critical infrastructure for Cyber Attacks
- To Learn Cyber Security Challenges in IT/OT Systems in Power Sector

## **COURSE COVERAGE**

- Introduction to Cyber Security for Power Systems
- Types of Attacks Security Threats and Vulnerabilities
- Introduction to IT & OT Systems of Power Sector
- Security Perspectives in the Power Sector
- Cyber Security for Critical Infrastructure & Role of NCIIPC
- Cyber Security for IT Systems In Power Sector
- Attacks on Smart Grids Case Studies
- Cyber Security Challenges in OT Systems in Power Sector
- Introduction to Smart Grid
- Smart Grid Communication Systems
- Industrial Control Systems (ICS) & SCADA Security
- Introduction to Cloud Computing
- Security of Cloud infrastructure
- Smart Metering Infrastructure
- Head End Systems (HES) and Meter Data Management (MDM)
- Cybersecurity Capability Maturity Model (C2M2)
- Corporate Security Culture
- Cyber Security Standards
- Case Studies

#### **METHODOLOGY**

The programme will be conducted in an interactive environment providing greater scope for discussions. Emphasis will be on a highly participative style of learning with Hands-on Practical. The classrooms are provided with latest audio – visual teaching aids. The ambience in the campus and classrooms facilitate in effective learning by participants.

### FACULTY

Apart from Core Internal Faculty, Cyber Security Experts from Industry and various Power Utilities. shall share their experience, besides, eminent engineers and specialists from IT industry, R&D institutes, Consulting Firms and Academia.

### TARGET PARTICIPANTS

Middle Management Engineers (Junior Engineer to Superintending Engineer) of Power Distribution Companies across pan India.

#### **PROGRAMME VENUE, DATES & TIMINGS**

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, GachiBowli, Hyderabad - 500032, Telangana, India. DATES

03 – 05 June 2025 (**Batch 1**) | 16 – 18 June 2025 (**Batch 2**)

#### TIMINGS

On the first day registration will commence at 0900 Hrs. On all other days the programme timings will be from 0945 to 1715 hrs with breaks in between for tea and lunch.

#### ACCOMMODATION

Participants will be accommodated in our Executive Hostel located within ESCI Campus. The accommodation will be on twin sharing basis.

#### COURSE DIRECTOR Mr Syed Azgar

Head & Sr. Faculty IT Division, ESCI (Mob: 8886661060)

### **COURSE COORDINATOR**

**Ms Joythi** Jr. Faculty IT Division, ESCI (040 66304123 / Mob: 9885372277)

#### **COURSE FEE**

The Training program is sponsored by the Power Finance Corporation (PFC) under RDSS of Ministry of Power and Government of India.

Online registration is available on ESCI website. To register, manually please send your nominations (**10 days** prior to date of commencement of the programme) giving details of name, designation, email address and mobile number of the participant addressed to:

#### Head, Information Technology Division

Engineering Staff College of India Gachi Bowli, Hyderabad – 500 032 (TG) Mobile No's: 8886661060 / 9177461391 Email:it@escihyd.org / Website: www.escihyd.org

**CERTIFICATE**: A certificate of participation will be awarded to each participant on conclusion of the programme.

#### **GENERAL INSTRUCTIONS**

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of the outstation, participants ESCI will facilitate pickup and drop from Airport / Railway Station / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by email. The charges shall be paid by the participants directly to the cab driver.
- ESCI provides complimentary Single / Double Sharing AC accommodation as per availability to participants a day prior to the commencement and after the conclusion of the programme. (Check in at 12:00 hrs a day prior to the commencement & check out at 12:00 hrs a day after completion of the programme)
- Overstay charges of @ Rs.1120/- per day / per head, (Food will be charged extra).
- Well-developed Information Centre and Internet facilities are available to the participants free of cost.

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