

CALENDAR OF TRAINING PROGRAMS - 2023-2024

1. NATIONAL TRAINING PROGRAMMES FOR POWER EXECUTIVES

National Regular Training Programmes are organized by RECIPMT for executives working in national power sector utilities on state of art topics and also on the areas relevant to present scenario. These Training programmes are organized on both technical and non-technical topics covering, Power Generation, Transmission, Distribution, Renewable Energy, Finance, Management, HR and other important topics related to power sector. The National Regular Programmes proposed through Classroom mode for the year 2023-24 are as under:

S. No.	Name of the Programme	Dates/ No. of Days	Coordinator S/Shri
1	DISTRIBUTION TRANSFORMERS - OPERATION & MAINTENANCE PRACTICES AND FAILURE MINIMIZATION	25-28 Jul 2023/ 4 days	Dr. RM Nafi
Recent Developments in Materials and manufacturing of electrical equipment, Design and Manufacturing of Distribution Transformers, Erection, Testing and Commissioning of Distribution Transformers, Transformer Oil Characteristics, Filtration and Reclamation Techniques, Maintenance of Distribution Transformers, Protection and Failure Analysis of Distribution Transformers.			
2	O & M OF EHV SUB-STATION, LINES AND QUALITY ASSURANCE	8-11 Aug 2023/ 4 days	Sudhir Chopade
EHV Equipment Selection and Sizing, EHV Equipment Erection, Operation and Maintenance, Condition Monitoring of EHV equipment, Protection of Transformers and lines, Erection, Commissioning, Operation and Maintenance of Transmission Lines, Emergency Restoration System; Hot Line Maintenance and Safety Aspects			
3	POWER TRANSFORMER – TESTING, COMMISSIONING, PROTECTION & MAINTENANCE	22-25 Aug 2023/ 4 days	Dr. RM Nafi
Power transformer - principles of operation, parallel operation, OLTC and best practices in Erection, Testing & Commissioning, Transformer oil – Standards -Testing and oil filtration of power transformer – Periodical, Preventive and Break down Maintenance and Power transformer failure analysis, Condition monitoring of Power transformer – DGA, Furan and RLA, Protection systems– digital & numerical, Earthing of earth resistance ,Factory testing & Procedure with connection diagrams			
4	SMART METERING TECHNOLOGIES FOR DISTRIBUTION SECTOR	12-15 Sep 2023/ 4 days	Himabindu
Metering need, conventional vs advance metering, requirements, Smart Meters, Components, Smart Meter (HES, MDM), important features, Digitization of grid, Need for Infrastructure upgrade of Sub- transmission and distribution networks, Advance Metering Infrastructure (AMI)– Technologies available in market, finalisation of specifications, Standard Bidding Documents, procurement methodologies,(TOTEX,CAPEX,OPEX) Addressing Issues related to Bidding and Procurement.			
5	GENERAL NETWORK ACCESS (OPEN ACCES), POWER TRADING & EXCHANGES	12-15 Sep 2023/ 4 days	Ramesh Betha
General network access, Open Access - Electricity Act, New amendments, Power Trading in multi-buyer and multi-seller environment; Availability based tariff – concept and importance, Balancing and settlement mechanism; Power trading rules in changed scenario; Role of Regulatory Commissions - Open Access challenges for Power Market			
6	BEST PRACTICE IN HR MANAGEMENT FOR POWER UTILITIES	10-13 Oct 2023/ 4 days	Sudhir Chopade
Power sector scenario, issues and challenges, Dynamics in Power sector, expectations of stake holders and mitigating them by adoption of innovative HR practices, developing learning atmosphere, role of Training and Development, Values and Ethics, Behavioural aspects, Motivation, work life balance and creating an organisation a best place to work a win-win scenario.			

7	DESIGN, CONSTRUCTION & TESTING OF DISTRIBUTION SUB-STATION AND LINES	10-13 Oct 2023/ 4 days	Ramesh Betha
Design, Construction, Testing & Commissioning of Sub-station (Indoor & Out door) – Bus-Bar Arrangements - Reactive Power compensation – Earthing Practices in a Substation - Power Transformer - Operating Principle, Erection and Testing & Commissioning - Testing & Commissioning of Instrument Transformers and Breakers - Protection in a Sub-station – Battery and Battery Chargers			
8	DISTRIBUTION LOSS REDUCTION , THEFT OF ENERGY, ISSUES,CHALLENGES AND REMEDIAL MESURES	17-20 Oct 2023/ 4 days	Dr RM Nafi
Technical Losses in Distribution Business, Commercial Losses, Energy Accounting and Audit - Distribution Losses - Analysis of Aggregate Technical and Commercial (ATC) losses - Pilferage of Electricity and malpractices, Remedial measures, Administrative, legal and technical measures for minimization of theft of electricity and distribution losses - Assessment and Penal Provisions - Electricity Act Provisions, Vigilance Operations – issues and challenges, best practices in improving metering, Billing & Collection of electricity for sustainable operation of DISCOMS.			
9	PROTECTION SYSTEM IN EHV SUB-STATIONS & LINES	17-20 Oct 2023/ 4 days	Sudhir Chopade
Type of faults, Need of Protection systems, understanding power system operation under different conditions, such as overload and fault, relay technologies, fault identification, restricting fault, Conditions leading to faults, protective relays, Fault current calculations, Fundamentals and philosophy of Protection. Protection Schemes for important equipment's and lines, Special protection Schemes and improving reliability, security and stability of grid.			
10	CONCEPT TO COMMISSIONING OF SOLAR POWER PLANTS – ON GRID AND OFF GRID	21-24 Nov 2023/ 4 days	Ramesh Betha
Overview of solar PV Systems - issues and challenges; Design Concepts of solar PV systems, Best practices of Erection, Testing, Commissioning, O&M of solar power plants, Methods of tracking, Design with software (PV SYST), Selection of modules, inverters and structures & detailed Bill of Material, Performance measurement, Reliability Testing, Qualification tests, IEC Standards 61215 & 61646; Typical faults and diagnosis, Safety considerations and lightning protection			
11	TARIFF POLICY AND SUBMISSION OF ARRs – REGULATORY COMPLIANCE	21-24 Nov 2023/ 4 days	Himabindu
Provisions on Tariff in EA 2003, Draft EA amendment of 2018, proposed amendment in 2021-22 and Tariff policy; Different Regulations and Guidelines on tariff design; Submission of ARR by Power Companies; Tariff proposals in PPAs – fixation of tariff for Generation, Transmission and Distribution (retail tariff); Multi-year tariff concept; Competitive bidding – Tariff for multi licensees and emergency purchases & Role of Regulators			
12	OPERATION, MAINTENANCE & PROTECTION OF DISTRIBUTION SUB-STATIONS AND LINES	05-08 Dec 2023/ 4 days	Dr. RM Nafi
O & M of Switching equipment, Protection equipment, Control equipment and transformers in power distribution system - O&M of Distribution substation and lines, Code of practice in Sub Station and lines Operations, Work permits, line clear procedure, Maintenance of log books, Records, etc., Distribution Automation & SCADA, Geographical Information System, Concept of Intelligent Substations			
13	RDS SCHEME AND SMART METERING TECHNOLOGIES - EFFECTIVE IMPLEMENTATION FOR SUSTAINABLE DISCOM OPEARTION	05-08 Dec 2023/ 4 days	Himabindu
Need for effective implementation of Smart Metering and AMI Infrastructure, cost benefit analysis of smart metering technologies. Revamped Distribution Scheme, Analysis of Bidding Documents and Deployment of Resources, Handling, Implementation, Coordination with Different stake holders, reporting and resolving technical issues, handing over as per bidding documents, putting the systems to use. Benefit analysis and Standardisation with reference to the desired outcome of Bid. Post Implementation best practices, such as, effective outage management, revenue management and improved operational parameters. A way towards Smart grid, Demand response modelling, Promoting Renewables for sustainable operation.			

14	POWER PURCHASE AGREEMENTS AND INTRECASIES IN POWER MANAGEMENT	12-15 Dec 2023/ 4 days	Ramesh Betha
Draft EA amendment of 2018, proposed amendment in 2021-22, Provisions for Electricity purchase, Undertaking and obligations of the developer and Power Utility; Acceptance test procedure; Sale and purchase of energy; Tariffs, Force majeure, Buy-out clause, Dispute Settlement Mechanism, Arbitration & Reconciliation; Role of Regulatory Commissions; PPA for Renewable, Power Market, Negotiating PPAs-Front Loading & Project Based Security, Role of forecasting and optimising power purchase cost. Dealing with Legalities and Intricacies in Power Purchase.			
15	ENERGY TRANSITION, PROMOTION OF GREEN ENERGY AND BEST PRACTICES	12-15 Dec 2023/ 4 days	Sudhir Chopade
Growing Energy need, Economic issues, Climate change, government initiatives, sustainable renewable technologies, dropping cost and improving reliabilities, historic investments in renewable, net zero emission targets, nationally determined contributions (NDCs), carbon neutral strategies and implementation in power sector, Best cases discussion and way ahead.			
16	TECHNO COMMERCIAL IMPROVEMENTS OF DISCOMS – ISSUES & CHALLENGES	19-22 Dec 2023/ 4 days	Himabindu
Understanding Balance sheet of DISCOMS, Important Techno Commercial Parameters for DISCOMS, Understanding of Income and Expenditure components, Controllable technical and commercial measures, CAPEX and OPEX requirements, Best Practices for improving baselines for DISCOMS, Average Cost of Supply (ACS) vs Average Revenue Realization (ARR), Analysis of Financial Statement for ARR filing, Commercial issues and regulatory practices to improve operational efficiency of DISCOMS			
17	RECENT REGULATIONS IN GRID MANAGEMENT AND SECURITY ISSUES	19-22 Dec 2023/ 4 days	Sudhir Chopade
Grid Operation, Regulations and guidelines role of SLDCs in stable operational, Optimal load forecasting & scheduling, RPC's, OCC and PCSC role s and responsibilities, Technical aspects in Transmission Congestion Management-TTC/ATC, Grid connectivity procedure LTOA, MTOA&STOA, GNA &TGNA regulations, ABT, DSM regulations 2022/23 & Case studies, POC, Grid security measures Islanding Cross border regulations, REMC Challenges in Grid balancing and operation, Grid Failures-Case studies - Role of Voltage stability-Reactive Power Management, Grid Ancillary services & Cyber security in SLDC			
18	LABOUR LAWS - PROCEDURES IN DEALING WITH COURT CASES	02-05 Jan 2024/ 4 days	Dr. RM Nafi
Basic Concepts Indian scenario, Importance of Law - Procedural practices; Jurisdiction of Courts; Hierarchy of Courts; Legal Terminology, etc. - Alternate Dispute Mechanism - Lok Adalats - Types of Writs - Labour Laws - ESI, EPF and Contract Labour Act, Employees' Compensation Act – RTI Act - Procedure in dealing the Court Cases & Pursuance Required, compliances, Forms and formats, dealing with special cases and Discussions			
19	DESIGN, CONSTRUCTION & QUALITY CONTROL OF EHV SUBSTATIONS & LINES	29 Jan – 1 Feb 2024/ 4 days	Ramesh Betha
Transmission Planning – Design of EHV Sub-station - Bus-Bar Arrangement - Foundation Laying & Erection of Sub-Station Structures - Salient Features & Erection of Power Transformer and Switchgears including Testing & Commissioning – Earthing of EHV Sub-Station – Protection Systems – Sub-Station Automation			
20	UNDERGROUND CABLES –SELECTION, SIZING, LAYING, MONITORING & FAULT DETECTION	6-9 Feb 2024/ 4 days	Himabindu
Modern trends in Underground Cabling – Basic Concepts, Selection, Types and Design of Underground including Standards of Cables - Primary & Detailed Survey, Laying of Cable, Jointing, Testing and Commissioning - Fault Location of Cables - Maintenance & Trouble Shooting & Earthing of Underground Cables - Problems encountered during conversion of overhead lines to underground cables.			

HOW TO REGISTER

1. The course fee for National Regular programme on **residential basis is Rs. 6500/day/ participant + 18% GST**. The course fee for **Non-Residential participant is Rs. 5500/day/ participant + 18% GST**.
2. Programmes are mainly residential and conducted at RECIPMT Campus, Shivarampally, Hyderabad.
3. A discount of 10% on above course fees is offered for participation up to 3 nominations per programme and a discount of 20 % offered for participation 4 and above nominations per programme. However, the discount will be offered on participation basis.
4. Residential course Fees includes **boarding and lodging at RECIPMT Hostel in addition to tuition fees, courseware & other facilities, field visit, etc.** whereas Non-Residential fee **excludes** Boarding and Lodging of the participants.
5. The participants have to make their own transport arrangements to reach RECIPMT Campus.
6. The Course fee may be paid in advance by banker's cheque or demand draft drawn in favour of "**REC Institute of Power Management and Training**" payable at Hyderabad. The course fees can also be paid by NEFT/RTGS. The Bank Details of RECIPMT are as follows:

Name of the Bank	HDFC Bank Ltd.
Account No.	00210350000930
IFS Code	HDFC 0000021
MICR No.	500240002
Branch & Address	Lakdikapul Branch, Hyderabad
PAN	AAACR4512R
GSTIN	36AAACR4512R3Z0

7. Names of the nominating officers may be sent to the **Director, REC Institute of Power Management & Training (RECIPMT)**, Shivarampally, Aramghar X Roads, NPA Post, Hyderabad – 500052 along with the course fee. The nominations may also be sent by E-mail: recipmt@gmail.com/ recipmt@recl.in.
8. **Bulk orders and customized requirements from utilities are welcome in advance. We will be happy to discuss requirements and offer special discounts for such requirements on annual basis to utilities through A MOU mechanism on receiving request from utilities. The details of Customized programs are given at Page – 10.**