



# **ASIA INSTITUTE OF POWER MANAGEMENT**

# AIPM



2A, Lord Sinha Road, Ground Floor, Kolkata - 700 071 Tel.: +91 33 2301 4003 / www.aipm-india.com

CESC Limited, the flagship company of RP-Sanjiv Goenka Group, is the century old private sector power utility, supply electricity to 3.2 million consumers in the twin city of Kolkata and Howrah. The company holds excellent performance records in entire value chain of power business starting from Generation, Transmission and Distribution of Electricity. Following enactment of Electricity Act 2003, the power sector in India has undergone a sea change in technology and processes for enhancement in efficiency and service reliability. The monolithic power sector started unbundling of Generation, Transmission and Distribution as individual profit centres and to cope up with the challenges a vast pool of competent personnel was a dire necessity. In the above backdrop, CESC setup Asia Institute of Power Management as the training provider with Singapore Power for training of power sector employees in India and neighbouring countries to propagate updated knowledge, modern best practices and Smart Grid technology for faster development.

Asia Institute of Power Management (AIPM), offers value added trainings and consultancy services for the development of power sector.

AIPM training modules are developed by domain experts, having rich experience in different facets of power business. Every module is a perfect blend of theory and practical exposure of best practices and technology.

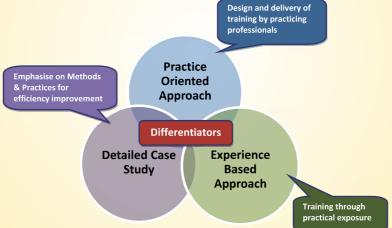
CESC Limited, being a century old power utility, witnessed thorough transformation in technology and work processes in Power Sector, CESC experienced migration from manual operation to IoT applications in Smart Grid regime. Quest for innovation is the basic constituent in the genetic code of CESC which leads to continuous development with high performance. The expertise of CESC has enriched AIPM in training and consultancy domain.

## The institute offers training and consultancy services to:

- Capacity building of engineers and executives of Indian Power Sector
- Smart Grid Initiatives and associated technologies with IT/OT applications
- Business Process Re-Engineering, Solar Power and Renewable Integration
- Energy Management, Efficiency improvement for Core Sector Industries

#### Flow chart of Training Methodology

· Training requirement based on organisational goal Need Analysis · Assessment of skill gap in organisational platform · Base level data collection & Training Need Identification Identify training areas to meet the skill/competence gap · Match training objective in reference to TNI · Design & Development of training modules Design & · Module finalisation with final approval of client Delivery · Training execution with classroom and practical orientation · Participant & Management feedback are throughly analysed to assess the improvement at the bottom line Feedback · Feedbacks are used for qualitative improvement of content and execution modality for best utilisation of training platform Design and delivery of



#### Accreditations and Collaborations:

- Recognition from Ministry of Power (CEA)
- Partner training Institute of Power Finance Corporation (PFC)
- Partner of National Smart Grid Mission (NSGM)
- Training partner of Singapore Power Global Solutions
- Training partner of Eastern Regional Power Committee (ERPC)
- Member of Central Board of Irrigation and Power (CBIP)

#### Value added services of AIPM

- Training Need Identification, course design & content development for various cross section of participants
- Execution of tailor made training programmes for PowerUtilities



- "Train the Trainer" programme for Power Sector employees on Generation and Distribution
- Leadership Development Programme for Senior Executives
- Improvement of operational performance in Thermal Power Plants
- Implementation of Change Management Process in Power Companies
- IT Applications in Power Business

## Training highlights of AIPM

#### National Training Programmes:

- Training on Smart Grid and Business Process Re-Engineering in Singapore and Kolkata under DRUM (Distribution Reform Upgrades and Management) project, funded by the USAID under the Ministry of Power. Participated by the senior executives and policy makers from state DISCOMs, CEA, REC, PFC, MoP
- Smart Grid Training under the aegis of The World Bank for Indian DISCOMS
- Smart Grid Applications in Distribution business for the executives of Power Grid Corporation of India Limited
- Training on Underground Cable Management for the senior executives of Andhra Pradesh for Smart City project
- Training of all employees of Bangalore Electricity Supply Company Limited for 2 years on capacity building on modern technology, processes, smart grid initiatives, IT applications for performance improvement
- Training services to Punjab State Power Corporation Limited for technology/process upgradation for more than 600 engineers on Smart Metering, Advance Protection and Distribution Practices
- Trained more than 800 engineers and executives of West Bengal State Electricity Distribution Company Limited (WBSEDCL) on advance Distribution practices with Smart Grid Application for improvement of network reliability in Kolkata and Singapore

- Technical training services rendered to West Bengal Power Development Corporation Limited (WBPDCL). Trained more than 600 engineers for efficiency improvement with advance practices on thermal generation
- Trained about 350 engineers to Assam Power Distribution Company Limited on modern technical & commercial processes with smart metering in Distribution System
- Offered training to Sikkim Engineers for loss reduction, metering and IT applications
- Conducted training in Eastern and North Eastern States under R-APDRP schemes
- Gujarat Energy Training and Research Institute (GETRI), have a formal collaboration with AIPM for faculty and expert support in their training programme. Rendered training to more than 700 engineers

#### Consultancy services of AIPM:

- Condition Monitoring of Distribution plants to West Bengal DISCOM with Singapore Power
- Operation & Maintenance and Technical Loss Assessment of Northern DISCOM of Odisha
- Network Planning around Guwahati City of Assam under the ADB project
- Feasibility Study and network planning for Tripura State Electricity Corporation
- Safety Audit of power distribution network of Maharashtra DISCOM
- Developing Web Based training module on safety for Maharashtra DISCOM
- IT implementation for revenue management to Government of Nagaland
- Network reorganisation Bengal Ambuja and WBSETCL
- The World Bank project on SCADA & DMS application in Andhra Pradesh

#### <u>International Training Services:</u>

- Training to Afghanistan on advance Distribution processes
- Training to Philippines on cable technology, jointing and protection
- Training services to Bhutan Power practices
- Corporation to upgrade technical



Conducted several training in Singapore with WBSEDCL, BESCOM etc.

# Training programmes offered by AIPM

#### Smart Grid: From Concept to Reality

The programme apprise power utility professionals regarding philosophy, features and benefits of Smart Grids. The course covers the change over process during migration from Conventional Grid to Smart Grid. Relevant topics like Distribution Automation, Advanced Metering Infrastructure, Renewable Energy integration, Communication & IT Infrastructure and enablers for Smart Grid Infrastructure are thoroughly covered in the course.

#### Power System Protection

The programme provides an insight to Protection philosophy of Protective Gears and relevant coordination technique. Case studies with findings are discussed during the course and is extremely useful for the engineer working in Transmission and Distribution Sector of electricity.

#### AT & C Loss Management and Advance Metering Practices in Power Distribution

The programme will help in developing a detailed understanding of Modern Metering Practices for better Revenue Protection, Loss Management and Network Up-gradation to reduce Technical & Commercial Components of System Loss. Topics like, implementation of IT Enabled Tools, Smart Metering & Statistical Metering for Audit purpose are included in the programme in order to create a pool of professionals intended for running the Distribution Business with better performance.

#### Arresting failure of Distribution Transformer

The course addresses remedial action by Root Cause Analysis of DT failure and its prevention measures to arrest the foremost pain area of Distribution System. The modern, efficient & cost-effective methodology related to Selection, Installation & Maintenance of Distribution Transformer are covered, the training gives a comprehensive knowledge about Distribution Transformer Management System for enhancing System Reliability and Efficiency.

#### Application of IT in Power Business

The programme is designed to inculcate a comprehensive idea on various IT Tools used to enhance operational efficiency. Relevant focussed areas like Data analysis, Asset Management; CRM Services are covered in the course content to enlighten the participants about the ever growing IT Intervention in Utility Business.

#### Asset Management in Power Sector

This programme is focussed to inculcate concept & implementation procedures

of Asset Management of Plants and Equipment used in Power Transmission & Distribution Sector. The course deals with life cycle management of electrical assets of Power System from procurement, installation, use till disposal. The course will help participants to formulate measures for building & running T&D Network with enhanced reliability & efficiency supported with modern O&M practices.

#### Electrical Safety in Transmission and Distribution Sector

Safety to Human Life, Plant & Equipment is a major issue in today's Distribution business. Apart from loss of human life, unsafe operation also leads to power interruption resulting in loss of revenue. The training aware the participants about critical safety measures to be implemented in Power Companies to reduce number of accidents. The programme will also cover Safety Audit, framing Safety Policy & inculcating Safety Culture in the organisation.

#### Performance Optimization in Thermal Power Plant

The programme will focus on Standard Operating Procedures to optimize performance of power plant. This will enable participants to learn processes related to effective utilization of available resources of plant for performance improvement with environment management.

#### Simulator Training of Thermal Power Plant

The main objective of the programme is to provide comprehensive training in a virtual platform of 250 MW Simulator on all the aspects of Thermal Power Plant on normal & critical conditions. Systematic Operation with relevant sequence of all the Equipment & Systems, Cold & Hot Start-ups, Shutdown Procedure, mill change over along with critical systems will be practiced in the Simulator.

#### <u>Leadership Programme in Power Business</u>

This programme is designed to enhance business vision, professionalism, industry understanding and effectiveness of Managers working in Power Sectors. Our goal is to provide a highly interactive and integrated professional development programme for the senior/middle level power executives with requisite knowledge management and global best practices. The training will surely develop confidence to the executives in decision making and hone management skills for better understanding of the business, managerial responsibilities to meet the business goal.

#### Solar Power Project Installation and Maintenance

This training programme is for Power Utilities/ Companies planning to harness renewable energy and those who are already in the process of installing solar generation plants.



