Training Manual

2019-2020

Electricity Generation Company of Bangladesh Limited

PREFACE

Training is one of the main components of human resource development, it is the integral part and continuous process of professional development. There is no alternative to training for achieving professional excellence.

Under the Power Sector Reforms Policy of the Government, separate entities have been formed with a view to creating professional and service oriented work-culture. To ensure this, formulation of proper & need-based training programme is necessary. EGCB Ltd. has formulated profession-oriented training programme. We believe this training programme would contribute remarkably in capacity building and performance improvement of the employees of this company.

Keeping abreast with the view of effective training, Power Division, Ministry of Power, Energy & Mineral Resources is also conducting training courses for officers and staffs of Power Sector under different projects. Thanks & gratitude to Power Division for conducting such effective and necessary training courses.

Thanks to the respected Chairman of EGCB Ltd. for his continuous guidance and advice. Thanks also to the Board of Directors of EGCB Ltd. for their all-out support and directions.

(Engr. Arun Kumar Saha)
Managing Director
EGCB Ltd., Dhaka.

PRELUDE

EGCB Ltd. has formulated training programme for the fiscal year 2018-2019 considering the need of the employees. Training courses have been planned to be conducted both at the Corporate Office and the Power Stations of the Company.

For conducting these training courses, arrangements have been taken to constitute panels of trainers/resource persons. Moreover, expert from outside will be invited as trainer for imparting effective training. We expect that this training programme would be able to enhance the quality of the employees of EGCB Ltd.

(Md. Abu Hena Faizul Haque)
General Manager-HR (Addl.charge)
Corporate Office
EGCB Ltd., Dhaka.

Vision and Mission of EGCB Ltd.

Vision:
Generation of Quality Electricity for the betterment of the Nation.

Mission:
To excel in electricity business by generating efficient, reliable and cost effective electricity in an environmentally responsible manner to satisfy our customers.

Objectives of the Training:

- To develop capacity and skill of employees with a view to enabling them to implement wide range of technical & non-technical work.
- To disseminate knowledge of the latest know-how relating power generation.
- To import knowledge to the trainees regarding Modern Management & Administration, Accounts & Financial Management and Audit Procedure and settlement.
- To give knowledge about EGCB Service Rules, Accounts Management, Verification & Financial Rules.
- To ensure 70 man-hour training to the employees per year.
- To give Knowledge about procurement & store management.

Types of Training:

- Training on Power Generation related Machineries, equipment & accessories.
- Training on Good Governance, Total Quality Management (TQM).
- Training on Accounts, Tariff, Audit and Corporate Finance.
- Training on Health, Safety, Fire Fighting & Environment.
- Training on HRM, Statutory Acts/Rules, Behavioural development and other Management issues.

Training Method:

- Discussion and lecture.
- Practical Demonstration.
- Multimedia Presentation.
- On the Job Training.

Facility of Training:

- Multimedia Projector
- Course Materials

Trainers:
Apart from experienced and skilled Engineers, Management officers from EGCB, Experienced & highly qualified trainers from outsider are invited for conducting training.

Trainees:

- General Manager
- Superintending Engineer
- Deputy General Manager
- Executive Engineer

- Manager
- Sub-Divisional Engineer
- Deputy Manager
- Assistant Engineer
- Assistant Manager
- Sub-Assistant Engineer
- Junior Assistant Manager
- Staffs (Technical & Non-Technical)

Training Progress:
Since functioning of EGCB in 2006, EGCB arranges various training programs for the employees. Employees of EGCB are also sent for training in other institution, organization & abroad.

Training & Development:
EGCB Ltd has formulated need based and profession-oriented Training Manual containing 60 training courses (both technical & non-technical). This training program was contributing effectively in capacity building and performance improvement of the employees of this Company. 70 hours training for every employee is the target for the fiscal year 2018-19. The training history of the last 7 years are given below:

Year	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Foreign training (Number of employees)	11	23	45	18	30	5	44	76	90
Foreign training (Man hour)	102	1869	7420	2336	15296	1040	2568	4872	6708
Local training (Number of employees)	76	83	197	223	267	261	357	368	366
Local training (Man hour)	2485	3261	5567.8	9550	10744	27509.5	25901	26287	24259

CONTENTS

Training Course Schedule

Course Title:
Course Code:
No. of Participants:
Duration of the Course:
Course Co-Coordinator:
Asstt. Course Co-Coordinator:

Date & Time	9:30—11:00 a.m.		11:15—1:00 p.m.		2:00 – 3:30 p.m.		3:45 – 5:00 p.m.
	Session 1		Session 2		Session 3		Session 4
		Tea Break: 15 Minutes		Prayer & Lunch Break : 1 hour		Tea Break: 15 Minutes	
Holiday							

N.B. .....

Name of the course	:	Accounts and Financial Management
Course Code	:	O-1
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	14 (fourteen) days
Objective	:	To familiarize with, study and impart knowledge about Accounts and Financial Management.

Course contents	
Module	
1.	To know about the important aspects of Accounts. Finance & Audit Management.
	Accounting Information System of EGCB.
	Computerized Accounting System.
	Important schedule & Approval Procedure as per DoFP.
2.	Analysis of financial statements & its implication.
	Settlement of Audit Objection.
	Inventory Planning & Control including Store Accounting
3.	Preparation of Budget & Budgetary Control; Bank and Fund Management.
	Correspondence with Govt. Offices/bank/contractor/ other party, relating to loan/release & disbursement of money /bank account/LC & other financial formalities
4.	Accounts and audit procedure and DoFP.
	Discussion on application of Financial Power in the light of PPR-2008.
	Project Financial Management.
5.	Billing System and Invoice Preparation.
	Discussion on CPF & Gratuity.
	Accounting Standards & Financial Reporting Standards, Briefing on Annual Report overview.
6.	Corporate Finance & Financial analysis on Investment.
7.	VAT & Taxation etc.
	L/C opening, retirement and other related commercial matters.
	Handling and preservation of Accounts/Financial/Audit related documents.
8.	Customs documentation, clearance, payment documents and CD Vat assessment.
9.	L/C opening, documentation, customs duty and customs clearance.
10.	Fixed Assets Management
11.	PPA
12.	Fixation of Tariff
13.	Overview on KPI target (Accounts, Finance, Audit, HR related)

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Basic idea of Power Plants
Course Code	:	O-2
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Power Plant, store management and solar energy.

Course contents	
Module	
1.	To discuss about different Power Stations.
	To develop conception on proper Operation and Maintenance of different types of Power Stations including preventive maintenance.
	Basic idea about Steam Turbine, Gas Turbine, Boiler, different types of Pumps & Bearings used in Steam Power Plant.
2.	Basic idea about different types of Electricity Generation, AC Wave & Harmonics.
	Detail Discussion about different types of auxiliaries used in thermal and Gas Turbine Plant.
	Detail Discussion of starting & shutdown process, Cooling of turbines etc.
3.	Lubrication and sealing system, thermal insulation, air heating condensation of steam etc.
	Electrical protection of Generator, auxiliary supply and Motor protection system
	Safety of operation and Maintenance procedure during planned and forced condition. Shutdown process of Plant at Normal & Emergency Condition.
4.	Operation and maintenance procedure of electrical equipments such as Generator, Exciter, Thyristor, AVR, Transformer, CT, PT, HT/LT Motors, Breakers, Bus-bar, Isolator, Battery & Battery Charger etc.
	Basic idea about industrial water treatment and importance of water purification for industrial used in power Generation and properties of demy & Clarified water.
	Discussion about Data Acquisition, Control System, Measuring System, various. Protection & Interlocking system of Boiler and Turbine.
5.	Start Up process of Plant at Hot and Cold condition.
	Basic idea on store Management & Inventory system.
	Solar energy-its technic and application
6.	Implementation of Clean Development Mechanism (CDM) in power plant.
7.	Energy auditing and energy efficiency improvement in power plant.
8.	Overview on KPI target (Technical)

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Special Course
Course Code	:	O-3
Participants	:	Officers/Staff
No. of Participants	:	20 (twenty) persons for each Course
Duration of the course	:	22 (twenty two) days
Objective	:	To familiarize with, study and impart knowledge about Management and Technical aspect.

Courses	
Sl. No.	
1.	Introduction to Companies Act 1994
2.	Corporate Culture
3.	Total Quality Management
4.	Corporate/Good Governance and Motivation Team Building
5.	Enterprise Resource Planning (ERP)
6.	Gender issues, women's right & empowerment
7.	Performance Management
8.	Competency framework and self-analysis
9.	Managing changes in Public Sector
10.	Self-development and Career Development
11.	Concept of Development, Sustainable Development and Recent Development Trend in Bangladesh
12.	MDGs, SDGs, PRS and PPP (Public Private Partnership)
13.	Land Management
14.	Disaster Management
15.	Art of Public Speaking
16.	Office Inspection, Inspection of Development Project
17.	Conflict Management
18.	Discussion on Labour Act/Labour laws
19.	Key Point Installation (KPI) and its security
20.	Employee Conduct & discipline Rules
21.	Etiquette, manner & attitude and organizational behavior
22.	Office Management
23.	Concept and development of Leadership
24.	Introduction to Power Generation
25.	Innovation
26.	E-Filing

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Occupational Health, Safety and Environment
Course Code	:	O-4
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (three) days
Objective	:	To familiarize with, study and impart knowledge about Occupational Health, Safety Environment & First Aid

Course contents	
Module	
1.	To give the general idea of occupational health hazards and First Aid.
	To prevent health hazards & accidents and arrange appropriate measures against accidents.
	Applying first aid to the victims & applying it to the victims of electric shock and burns. Classification of burning, Artificial respiration of resuscitation. How to handle the burnt patients.
	Train up persons to work in a safe atmosphere
	Discussion on vulnerable & confined area and safety requirements to work in such a place.
2.	Radiation, Sound and other hazards of power plants.
	Discussion on Health hazards attributed to profession and prevention of such hazards.
	Discussion about Disaster management & activities of duty personnel, sending message to the authority.
	Classification of Hazards & hazardous elements in working & storage area.
3.	Discussion of protection from coal ash in coal based Power Station.
	Environmental issues for setting-up power plant.
	Maintaining environment friendly power plant.
	International/National Code, guidelines of environment & their compliance for power plant Operation & Maintenance.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Selection of procurement method and tender document preparation.
Course Code	:	O-5
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Procurement, Equipment specification, Tender document Preparation.

Course contents	
Module	
1.	Understanding of EGCB Procurement Policy, 2015, different procurement method, selection of different procurement method, preparation of APP, approval procedure etc.
	Understanding e-GP its practice and procedure in details.
2.	Information & Data required for the project planning.
	To give them the technical competence to furnish such data where required.
	To explain terms & concepts used in the Tender Document
3.	To Explain the meanings of various Technical and Financial Clauses of Tender Document
	To explain in detail about tender document
4.	Understanding the Tender evaluation technique
	Price, cost & estimating of the project.
	Equipment specification technique.
5.	Procedure to include and exclude the required terms and clauses. Items to be discussed in the Pre-Bid meeting.
	Detailing of technical activities and write up. Detailing of evaluation as per Technical norms and GoB's financial rule, bid security etc.
6.	Criteria to identify the Responsive and Non responsive bidders. Detailing of Tender document based on activities and material requirement.
	Discussion on adjustments prior to the financial bids. Procedure for the amendment of the Tender and supplementary document.
7.	Detailing and putting obligation of supply and work as per International standards.
	Preparation of comparative statement and overall study of tender procedure.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Familiarization with Gas Turbine/Steam Turbine Power Plant.
Course Code	:	O-6
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Maintenance of Power Plant

Course contents	
Module	
1.	To familiarize with the Power Generation.
	To familiarize with Gas Turbine plant.
2.	To familiarize with Steam plant.
	To familiarize with component of the power plant
3.	To familiarize with Operational behavior of power plant
	To familiarize with auxiliary plant and equipment of the power plant
4.	Maintenance procedure of GT
	Maintenance procedure of X-former
5.	Maintenance procedure of GBC
	Maintenance procedure of Generator
6.	Study and physical visit of the thermal / GT Power Plant. Discussion on CW pump, FD, ID, and regenerative air heater its function & operational sequences, steam, gas, oil and their sealing system, turning, gear, bearings of turbine and generator system.
7.	Discussion on Electrical operation system, auxiliary (6.6 and 0.4KV) and necessary protection, Turbine, Generator and unit transformer protection system.
8.	Preventive maintenance.
9.	Working Principle & detail description of Brayton Cycle.
10.	Functional Description of different parts

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Start up procedure of GT
Course Code	:	O-6(M1)
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	05 (five) days
Objective	:	To familiarize with, study and impart knowledge about Gas Turbine.

Course contents	
Module	
1.	Starting sequence of GT
2.	Description on P&I Diagram
	Construction Features
3.	Discussion on DLN method and DLN control procedure.
4.	Study and physical visit of the GT.
5.	Monitoring Parameters
	Heat balance of GT
6.	Discussion on safety practice and preventive maintenance.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Start up procedure of GBC
Course Code	:	O-6(M2)
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Gas Booster

Course contents	
Module	
1.	To familiarize with Gas Booster Compressor
2.	Basic working principle of GBC
3.	Construction features
4.	Starting procedure
5.	Discussion on Transfer Gear
6.	Discussion on GBC Auxiliaries
7.	Trip logic and Interlocks
	Construction features
8.	Preventive maintenance

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Gas Turbine Overview
Course Code	:	O-6(M3)
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Gas Turbine.

Course contents	
Module	
1.	To familiarize with Gas Turbine Plant.
	Working Principle & detail description of brayton Cycle.
2.	Functional Description Of different parts
	Description on P&I Diagram
3.	Construction Features
	Discussion on DLN method and DLN control procedure.
4.	Study and physical visit of the GT.
5.	Monitoring Parameters
	Heat balance of GT
	Discussion on safety practice.
6.	Preventive maintenance

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Maintenance & Operation of Gas Turbine Auxiliaries
Course Code	:	O-6(M4)
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	10 (ten) days
Objective	:	To familiarize with, study and impart knowledge about Gas Turbine Auxiliaries

Course contents	
Module	
1.	To familiarize with IGV, SRV, GCV & their functions.
	Removal procedure of IGV.
2.	Description of Compressor washing system.
	Necessity of Compressor washing system.
	Protection procedure of other equipments during water wash.
3.	Principle of torque converter and its function.
	To familiarize with different Auxiliaries (MOP, HOP, JOP,CWM, Blower& Exhaust venting system, Turning gear, Lube oil Mist eliminator,
4.	To familiarize with GT MCC-1, 2 and DCDB, Ignition transformer.
	Description on Emergency Drives (EOP, JOE, TJ).
	Maintenance of Auxiliaries
5.	Status of Auxiliaries at the time of emergency.
	Discussion on safety practice and emergency action plan.
	Dynamic balancing of GT rotor maintenance.
6.	Low speed balance of bear rotor.
	Heat balance of GT
7.	Distribution method of unbalance to centre plane (weight balance.) A. Correction of coefficient method. B. Moment method. C. Maximum permissible unbalance.
8.	Preventive maintenance

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Detail study of life history of hot section components
Course Code	:	O-6(M5)
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (three) days
Objective	:	To familiarize with, study and impart knowledge about Emergency.

Course contents	
Module	
1.	To familiarization with Different types of inspection (CI).
	Operational data analysis & recording.
	Inventory of stores for hot section components & it's hardware.
2.	Handling of special tools ,different types of crane, jig & fixtures
	Removal procedure of fuel nozzles
	Pre measurement as per standard all parts such as transition piece, blue horn, end seal, floating seal etc.
	After removal of combustor spares procedure of NDT test.
3.	Repairing procedure of combustor , transition piece, bull horn, cross fire tube, flow sleeve seal, floating seal etc.
	Acceptance or rejection level of Above mentioned components
	Assembling procedure of all the above & setting as per standard practice of manual & Compare with the setting before opening.
4.	Personnel Safety and emergency action plan and Preventive maintenance.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Maintenance of Gas Booster Compressor
Course Code	:	O-6(M6)
Participants	:	Officers (Technical)/Staff (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (three) days
Objective	:	To familiarize with, study and impart knowledge about Gas Booster Compressor

Course contents	
Module	
1.	Functional Discussion of different parts of GBC
	To familiarize with Operational behavior of GBC
2.	Discussion on P& I diagram.
3.	Description on Bypass Cooler, Line capacity, Cooling system, vibration system.
4.	Discussion about Primary sealing, Secondary Sealing & Barrier Sealing
	Maintenance procedure of GBC including preventive.
5.	Knowledge sharing of GBC Failure/trip.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Operation & Maintenance of Instrument Air Compressor
Course Code	:	O-6(M7)
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	05 (five) days
Objective	:	To familiarize with, study and impart knowledge about Instrument Air Compressor.

Course contents		
Module		
1.	To familiarize with Instrument Air Compressor.	M-1, M-2
	Basic working principle.	
	Construction features.	
	Instrument air & Nitrogen Distribution System.	
	Functional Discussion of different parts.	
2.	Discussion on P& I diagram.	
	Starting procedure.	
	Details description of Plant, Instrument & N2 Generating air system.	
3.	Maintenance procedure: Daily, weekly, monthly, Quarterly, Yearly including Preventive maintenance.	
	Problems, Trouble Shooting and Future plan.	
	Discussion on safety practice and fire fighting and emergency action plan.	
4.	Trip logic and Interlocks.	I&C-1
	Description of N2 System, air dryer units, control valve, Loading unloading valve solenoid.	
	To familiarize with Operational behavior (Local, Remote).	
	Annunciator, Signaling, Tripping, Alarm & Trip values.	

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Fire Fighting and Safety Procedure
Course Code	:	O-7
Participants	:	Officers/Staff
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (three) days
Objective	:	To familiarize with, study and impart knowledge about Fire Fighting and Safety Procedure

Course contents	
Module	
1.	Introduction to fire fighting system.
	Operation of fire fighting equipment during emergency.
	To familiarize fire, accident and hazard.
	To develop skill of warning fire fighting.
	To act rapidly to the fire and associated hazards.
	Discussion about fire and its classification.
	Discussion about source of fire.
2.	Discussion about classification of hazards, hazardous materials & their storage guide lines.
	Discussion on different type of Fire Fighting equipment and practical demonstration (if possible).
	Brief idea of safe working arrangement, use of safety and protective gears, brief idea of flame detector, smoke detector, alarm and resetting technique.
	Brief idea of First aid and Safety measures & lost time injuries. Brief idea of Reporting regarding near miss & accidents.
3.	Brief idea of pressurized water sprinkler system.
	Discussion on safety Code & Procedures.
	Brief idea of fire fighting elements and their safe uses.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Human Resource Management
Course Code	:	O-8
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Human Resources Management, Office Administration, Rules and Regulations

Course contents	
Module	
1.	To acquaint with Human Resource Management.
2.	Understanding Strategic Human Resource Management and its procedure in details.
3.	To familiarize with existing service rules/ procedure and regulations.
4.	To acquaint with Disciplinary rules.
5.	Labour welfare & Industrial relations.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Total Quality Management (TQM)
Course Code	:	O-9
Participants	:	Officers/Staff
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (three) days
Objective	:	To familiarize with, study and impart knowledge about Total Quality Management (TQM)

Course contents	
Module	
1.	To familiarize with fundamental concept of TQM.
	Historical background and necessities of TQM.
	TQM and Human Resource Development
	Overview of Total Quality Concept
	Concept of Quality Circle and its Structure
2.	Concept of quality circle and its structure
	Cross-Functional Management
	Quality Management Systems
	Strategic Management Benchmarking.
3.	Conflict Management and Internal Politics
4.	Decision Making and Problem Solving
5.	Six Sigma
	PI Solving Activities and Model Presentation.
	Overall discussion on TQM.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Project Management
Course Code	:	O-10
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Project Management

Course contents	
Module	
1.	Theoretical & practical knowledge about the modern tools & techniques of project Management process
	Concept of Project Management and it's function
	Stages of project development process
2.	Project identification & selection
	Project planning, Project Appraisal, DPP & TPP format
	Sensitivity Analysis
	Project approval steps
3.	Project Implementation & Monitoring.
	Critical Path Method (CPM) & Project Evaluation and Review Technique (PERT)
	Overview of MS Project Technique
	Simulation process for preparation of Project Summary.
4.	Project Management in the light of PPR-2008.
5.	Introduction of Loan Management/Project Financing.
6.	Problems during of project management and its solution.
	Review of projects under EGCB.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	General & advanced use of Computer, ICT, MIS, e-Governance and MS Excel.
Course Code	:	O-11
Participants	:	Officers/staff
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about general & advanced use of Computer, ICT, MIS, e-Governance and MS Excel.

Course contents	
Module	
1.	Management Information System, the Internet, Intranet, data base development, information exchange techniques on network to facilitate organizational functions
	An Introduction to Management Information System(MIS)
	Database Management System.
	Information systems for Managerial Decision Support.
	Strategic Role, Development and Managing Information system.
2.	Basic Hardware & software concept, Operating system.
	Concept of Internet, e-Procurement, e-Governance.
	Networking, Web Browsing, search engine, Web mail (Yahoo, Hotmail etc) chatting.
	MS Excel applications & make them able to analyze data, perform calculation, forecasting, create graph etc by using MS Excel.
	Communication through e-mail, internet etc.
	(i) Introduction to Computer Hardware & Software, (ii) Opening of files/folders, Window Explorer, Search, (iii) Introduction to Excel & Windows, Work sheet, Workbook, Cell, Column, Row, Spread sheet etc.(iv) Standard tool bar, Ruler, Status bar etc.
	Worksheet/spreadsheet analysis wing excel formulas also with advanced formula, power point presentation techniques, MS Access etc.
3.	Introduction to server data management
	Communication theory, web cam and other modern technology
	Paperless office management
4.	Windows server-2012 administration.
	Database server administration using Oracle.
	Network Management and Administration (LAN, WAN, VPN etc.).
5.	Auto CAD

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Operation Procedure of Power Plant & Responsibility of Shift Engineer.
Course Code	:	O-12
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To develop conception of Operation Procedure of Power Plant & Responsibility of Shift Engineer.

Course contents	
Module	
1.	Discussion on Gas Turbine and its components, Essential preparation of gas turbine operation, auxiliary equipment, compressor, and control system
	Operational procedure of the plant, familiarize with operational activities and job responsibility of a plant Shift Engineer
	Discussion or detail startup procedure of the gas turbine, auxiliary system, lubrication and lube oil cycle including the cooling system.
2.	Discussion on different types of auxiliaries of turbine and boiler of Thermal Power station, troubleshooting of all auxiliaries.
	Discussion on start up of GT.
	Discuss on GBC.
3.	Detail discussion of all electrical equipments (such as Generator, Transformer, CT, PT, Motors. Breakers, etc.) of thermal power station and trouble shooting of these equipments.
4.	Discussion and trouble shooting on automation system and water treatment of Hydrogen plant.
	Detail discussion on gas distribution system and circulation of water system and cooling system and Various protection systems and troubleshooting.
	Discuss about governing system, lub oil system, and Generator shaft sealing system.
5.	Practical operation of Boiler, Turbine, all auxiliaries of steam Power Station and Generator Desk
	Startup and shutdown of the unit.
	Brief discussion on steam turbine power plant, economic operation, general ideas about Operation & maintenance.
6.	Commissioning procedure of Combined Cycle Power Plant.
7.	Start-up procedure of Combined Cycle Power Plant.
8.	Discussion on preventive maintenance.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Ethics, integrity and anti-corruption
Course Code	:	O-13
Participants	:	Officers & Staff
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Ethics, integrity and anti-corruption.

Course contents	
Module	
1.	Discussion on ethics, integrity and anti-corruption
2.	Discussion on National Integrity Strategy (NIS) of GoB, Action plan of EGCB Ltd. to implement NIS.
3.	Rules & regulations related to anti-corruption. Ensuring quality service through transparency & accountability
	Anti-Corruption & disciplinary measures in EGCB Service Rules 2017

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Contracts and Agreement
Course Code	:	O-14
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (three) days
Objective	:	To familiarize with Contracts and Agreement

Course contents	
Module	
1.	Discussion on contracts and agreement
	Types of contracts and agreement, and legal aspect of contract and agreement
	Discussion on PPA of EGCB Ltd. with other organizations
2.	Technique of preparation of PPA and Management of PPA
	Discussion on GSA of EGCB Ltd. with other organizations
	Technique of preparation of GSA
3.	Contract Negotiation
	Contract Management & Dispute Resolution

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course : Elements of Gas Turbine Control System.

Course Code : O-15

Participants : Officers (Technical)

No. of Participants : 20 (twenty) persons

Duration of the course : 03(three) days

Objective : To familiarize with, study and impart knowledge about elements of gas turbine control system (E.g. Mark VI control system).

Course contents	
Module	
1.	Introduction and Safety Policy System.
	List and function of hardware components of Gas Turbine Control Panel (e.g. Mark VI Control Panel).
	Interconnection among components of control panel.
	Earthing system of Control Panel.
	List and function of software components of Gas Turbine Control System (e.g. Mark VI Control System).
2.	Discussion about different machining technique & different type of fabrication.
	Alarms, Alarm Server/Viewer, Events, SOE's, Dynamic Data Recorders, Trending, Trip History Log, HMI Screen Navigation Etc.
	Essential Check Lists and preventive maintenance.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Distributed Control System (DCS).
Course Code	:	O-16
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Distributed Control System (DCS).

Course contents	
Module	
1.	Introduction and Safety Policy System and preventive maintenance.
	Plant System Architecture, Network Topology, Redundancy, HMI/Controller Configuration and Turbine Integration as part of the Plant Control System
2.	Introduction to Control ST including Toolbox ST and WorkstationST
	Hardware Configuration in ToolboxST and Troubleshooting
	DCS Hardware Drawings and Panel Design, including IO Configuration, Power Distribution and Redundancy
	Software Configuration in ToolboxST - DCS Library, Creating, Modifying and Troubleshooting Software
3.	HMI and External Device Configuration in WorkstationST - Network Time Synchronization, Alarms, Alarm Server/Viewer, Events, SOE's, Capture Blocks, Dynamic Data Recorders, Trending, Trip History Log, Creating/Modifying HMI Screens, Screen Navigation
	Communications Modbus, Hart, DNP/IEC Protocols

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course : Welding, cutting, grinding, fabrication alignment.

Course Code : O-17

Participants : Officers/Staff (Technical)

No. of Participants : 20 (twenty) persons

Duration of the course : 02 (two) days

Objective : To familiarize with, study and impart knowledge about welding, cutting, grinding, fabrication alignment.

Course contents	
Module	
1.	To familiarize with fundamental concept of welding, cutting, grinding, fabrication alignment.
	Details discussion welding.
	Discussion on different type of cutting, grinding.
2.	Study and practical orientation for welding.
	Study and practical orientation of alignment.
	Welding & Welding Technique both Arc & Gas welding.
	Discussion about different machining technique & different type of fabrication.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course : Maintenance of Gas Turbine.

Course Code : O-18

Participants : Officers/Staff (Technical)

No. of Participants : 20 (twenty) persons

Duration of the course : 05 (five) days

Objective : To familiarize with, study and impart knowledge about Gas Turbine.

Course contents	
Module	
1.	To familiarize with Gas Turbine.
	To familiarize with Operational behavior of Gas Turbine.
	Maintenance Procedure of Gas Turbine including preventive maintenance/CT/HGPI/MI/ Inspection schedule.
2.	Study and practical orientation of maintenance work.
	Different maintenance procedure.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course : Public Procurement Rules (PPR)-2008, EGCB Procurement Policy-2015

Course Code : O-19

Participants : Officers

No. of Participants : 20 (twenty) persons

Duration of the course : 07 (seven) days

Objective : To familiarize with the PPR-2008 and EGCB Procurement Policy-2015, to acquaint with Procurement & Approval procedure, to study the problems of implementing PPR-2008 and EGCB Procurement Policy-2015.

Module	Course contents
1.	Discussion on Regulations & implementation procedures of PPR-2008 (with amendments) and EGCB Procurement Policy-2015
	Procurement processing & Approval procedures.
	Brief discussion on goods, works & service with documents.
2.	Problems encountered in practical application of PPR-2008 and EGCB Procurement Policy-2015.
	General Instructions in the application of Delegation of Financial Power.
	Discussion on application of Delegation of Financial Power in the light of PPR-2008 and EGCB Procurement Policy-2015.
3.	Discussion on Administrative, Technical approval of works, APP, LTM, Amendment of contracts etc.
	Discussion on important Schedules & Approval procedure as per DoFP.
	Discussion & implementation procedures of on e-GP
4.	Preparation of APP and selection of procurement method.
	Tender Document Preparation
	Tender Evaluation and Contract Document Preparation.
	Contract Management.
	Preparation of APP through e-GP system.
	Tender Document Preparation through e-GP system.
	Tender opening, evaluation and contract signing through e-GP system.
	Payment method of e-GP system.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Development Project Planning, Formulation, Approval and Revision in Government Sector.
Course Code	:	O-20
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	02 (Two) days
Objective	:	To familiarize with, study and impart knowledge about Development Project Planning, Formulation, Approval and Revision.

Course contents	
Module	
1.	Different Types of Projects, Development Projects, Project Planning, Appraisal
2.	Different Formats of Project, DPP Formulation, Composition and Terms of References of Different Committees associated with DPP
3.	DPP Approval Process, Meetings of Different Committees
4.	DPP Revision (RDPP)

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course : Financial Management for Foreign Contract.

Course Code : O-21

Participants : Officers

No. of Participants : 210 (Ten) persons

Duration of the course : 02 (Two) days

Objective : To familiarize with foreign contract, Letter of credit, Shipping Document, H.S code, clearing and forwading of goods etc.

Course contents	
Module	
1.	L/C opening, L/C terms and conditions, Insurance
2.	Shipping Document endorsement
3.	CD/VAT assessment and payment ensuring proper HS code.
4.	Port charge payment
5.	Consignment clearing from port
6.	Contractor payment procedure

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Mechanics & Mechanical Fitter Course.
Course Code	:	S-1
Participants	:	Foreman/Technician/Technical Attendant.
No. of Participants	:	10 (ten) persons
Duration of the course	:	five (five) days
Objective	:	To familiarize with, study and impart knowledge about Mechanics & Mechanical fitting.

Course contents	
Module	
1.	To review the activities of proper Operation and Maintenance including preventive maintenance.
	To improve skill of Mechanics/Mechanical Fitter/Pump Operator/Plumber/Helper of Power Stations.
	Brief Description of Electricity Generation, voltage, current, resistance etc.
2.	Discussion on Construction and working principle of Turbine.
	Discussion on different types of Pumps
	Discussion on Different types of Valves Faults and its remedy.
3.	Maintenance of Gate Valve. Stop Valve: Different types of Pumps.
	Practical class on Cutting, Filing, Drilling.
	Discussion about - Different types of Mechanical Measuring Instruments.
4.	Visit to Different Mechanical setup in Power station.
	Types of Insulations, Glands Packing, Problems and remedy of Oil cooler, Different types of Bearing.
	Review of overall technical discussion.
5.	Discussion on Lapping technique and procedure.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Machinist & Workshop Technique.
Course Code	:	S-2
Participants	:	Foreman/Technician/Technical Attendant.
No. of Participants	:	10 (ten) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Machinist & Workshop technique.

Course contents	
Module	
1.	To familiarize with workshop Machineries.
	Brief description of electricity generation, voltage, current, resistance etc.
	To develop skill of Workshop Technician/Machinist Welder Turner.
	To familiarize with workshop measurement & calculations
2.	Discussion about characteristics of different Metals & Parameter of Thermal Power Stations.
	Discussion about different types of measurements & Calculations.
	Discussion about different machining Technique & Tolerance.
	Discussion about type of Fitting & Fitting Tolerance.
	Discussion about different type of Heating & Quenching Technique for shaft fitting.
	Discussion about different Cutting Tools, their properties & application technique.
3.	Welding & Welding Technique both Arc & Gas welding. Discussion about Cutting Speed and its impact on metal finishing.
	Special demonstration and practice on Lathe, Shaper, Milling, Planner & other Machines.
4.	Discussion on cold welding compounds application.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Power Plant Operation (Turbine).
Course Code	:	S-3
Participants	:	Foreman/Technician/Technical Attendant.
No. of Participants	:	10 (ten) persons
Duration of the course	:	10 (ten) days
Objective	:	To familiarize with, study and impart knowledge about Power Plant Operation (Turbine).

Course contents	
Module	
1.	To familiarize with Modern Power Generation in advance form.
	To review with Steam & Thermal Cycle of the plant.
	To review with Operational behavior of power plant, review with auxiliary plant & equipment.
	To remind with basic principle of Power Generation.
	To review the operational procedure of the plant.
	To review the operational activities and job responsibilities.
2.	Brief Description of Electricity Generation, voltage, current, resistance etc.
	Discussion on general idea of heat, temperature, pressure, flow, work, energy, power with Units and symbols used in power plant diagram.
	Discussion on Lub oil system, Turbine sealing system. Discussion about Turbine Protection and interlocking system. Study of different type valves/low pressure and high-pressure Heater/ sealing of Turbine/ Different type Pumps/ Electrolizer Plant/ Deaerator / Turbine Condenser with Ejector.
3.	Discussion about circulating water and turbine cooling system. Preparation procedure of starting of CW pump with trouble Shorting and remedy.
	Discussion about Normal and Emergency Shut down procedure of Turbine.
	Description about different type of manometer, thermometer, level and flow under. Its Protection limit and uses in TPS.
4.	Combined Cycle Power Plant Operation and Emergencies handlings.
5.	Preventive maintenance of Power Plant.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Water Treatment
Course Code	:	S-4
Participants	:	Officers & Technician/Chemical attendant/related staff.
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Water Treatment

Course contents	
Module	
1.	To familiarize with modern water Treatment facility.
	To familiarize with basic principle of Power Generation using treated water.
	Conception of proper Operation and Maintenance of water treatment plant.
	To familiarize with component of the chemical Plant to operate power plant.
2.	Discussion on preventive maintenance of water treatment plant.
	Discussion about - Different parameter of Power Station/Importance of feed water & their safe utilization.
	Discussion about - Flow diagram of Chemical Plant Hard water. Soft water, Acid, Base and salt/ Construction chemical purification of water and clarifier/Different types of filter and Back Washing/Ion, Regin, Regeneration etc.
3.	Discussion about Corrosion and Irruption- Boiler scale and its Remedy/ Different Parameter of boiler. Discussion about - Preparation of Standard solution and its Testing Generator cooling and Method of Hydrogen Production/ Different types Pumps and Pipeline of Thermal Power Station/ Cat-ion and An-ion.
	Chemical plant and its Control Demi water supply and its Different Stage Different types of Measuring Instruments Production of cooling water.
4.	Practical class on P-alkality and N-alkality chloride with Electro-conductivity. Visit to Chemical Plant and Thermal Power Station.
	Discussion about - diagram of Combined Power Plant Power Station Boiler Preservation in Different Period Different Parameter of Boiler and its control Different types oil of Thermal Power Station and it's Testing.
	Discussion about -Measuring system of Ph meter and conductivity Meter Identification of feed water and condenser ammonia phosphate/ Dosing point and Sample collection system/ Electrolyzer/ use of natural gas and Percentage of hydrogen.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Instrumentation & Automation of Steam Power Plant.
Course Code	:	S-5
Participants	:	Foreman/Technician/Technical Attendant.
No. of Participants	:	10 (ten) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Instrument & Automation.

Course contents	
Module	
1.	To discuss with Modern Power Generation.
	To discuss with basic principle of Power System, Generation & Transmission.
	To discuss with operational behavior of power plant, auxiliary plant and equipment.
	To discuss with steam & thermal cycle of the plant.
	To discuss with operational procedure of the plant.
	To discuss with operational activities & job responsibilities.
2.	Discussion about - Different parameter of Thermal Power Station/ Different types of Measuring Instruments/ Thermocouple and Resistance Different types of Auto circuit Breaker/ signaling Circuit/ Electric drives control circuit/ Thermometer/ Self-balancing potentiometer and self-balancing Bridge meter.
	Discussion about Method of level measuring by Vessel/ Different types of Pressure Gauge and Vessel/ Differential Pressure Transducer Sopfer-22DD.
3.	Discussion about-Working principle and construction of different types. Construction and working principle of Pressure and Differential Pressure Transducer/ Different types of valves/ Different types of Starter/ Current and Voltage Relay/ Water conductivity and purity of Hydrogen Gas/ Measuring of Oxygen in Flue gas/Up steam and control of safety Valve/ Control of M O type valve and its Thermal Protection/ Measuring Method of Turbine & Generator Bearing Vibration.
4.	Discussion on different Types Thermometer, Different Types Manometer.
	Pressure level testing calibration/ Electric gate valve Testing Adjustment / Trouble shooting adjustment of flow meter and thermometer.
	Review of overall technical discussion.
5.	Preventive maintenance.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Office Management/Administration
Course Code	:	S-6
Participants	:	Staff
No. of Participants	:	10 (ten) persons
Duration of the course	:	03 (three) days
Objective	:	To familiarize with, study and impart knowledge about Office Administration.

Course contents	
Module	
1.	Discussion on etiquette, manner, attitude. Discussion on job description, responsibilities.
	Discussion on office administration, file/digital file/record management
	Organizational Behavior.
2.	Brief discussion on EGCB service rules 2017.
	Discussion on disciplinary rules of EGCB Ltd.
3.	Discussion on gender issue, women's right & empowerment.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Safe Driving
Course Code	:	S-7
Participants	:	Driver
No. of Participants	:	10 (ten) persons
Duration of the course	:	03 (three) days
Objective	:	To impart knowledge about safe driving, driving rules, maintenance and security of vehicles.

Course contents	
Module	
1.	Discussion on etiquette, manner, attitude.
	Discussion on safe driving & road safety; proper maintenance safety & security of vehicles, parts & tools of vehicle and their use; idea about hygiene & safe driving attitude.
2.	Discussion on Motor vehicles ordinance 1983 and Motor vehicles Rules 1984 of Bangladesh & their subsequent amendments when necessary.
3.	Discussion on job descriptions, service, conditions of service, service benefits and disciplinary rules of EGCB Ltd. & dress codes.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Autism and Problem of Neuro-disability
Course Code	:	STC-1
Participants	:	Officers/Staff
No. of Participants	:	25 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	To familiarize with, study and impart knowledge about Autism and Problem of Neuron-disability

Course contents	
Module	
1.	What is Autism? The characteristics of autism. Causes of Autism. How common is autism? The most common problem in autism.
	Who is affected with autism? Is it only problem for children?
	Influence of autism in human behavior. How severe are behavior problems in people with autism?
	What is the difference between Autism and Mental Retardation?
2.	What do people with autism need when they become adults?
	What kinds of jobs can individuals with autism do?
	What services are available for people with autism in Bangladesh?
3.	What additional services are needed for children with autism in Bangladesh?
	What groups in Bangladesh are working to help people with autism?

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.

Name of the course	:	English Language Course
Course Code	:	STC-2
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To impart knowledge regarding basic English language and its applications.

Course contents	
Module	
1.	Basic English Grammar; Building Sentences; Tense and Time; Use of Prepositions
2.	Techniques of Writing; Writing Skills: Practice sessions; Business (Official) Writing- Writing a CV, Report; Summary, Application, E-mail communication; Writing minutes, memorandum.
3.	Common Mistake in English
4.	Techniques of Speaking; Providing welcome address, vote of thanks and announcement; Asking and answering; Introducing oneself; Command, request, advice etc.
5.	Techniques of Listening

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.

Name of the course	:	Operation and system description of Fuel Gas Compressor (FGC)
Course Code	:	ATC-1
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	02 (two) days
Objective	:	To familiarize with Fuel Gas Compressor (FGC) and its associated auxiliaries.

Course contents	
Module	
1.	Closed Cooling Water System – Functionalities, usage & other details
	Line Tracing of closed cooling water supply
	Auxiliary cooling water supply to FGC
	Line Tracing of Auxiliary Water Supply
2.	Lube Oil System of FGC
	Line tracing of Lube oil system of FGC
	Electrical protection system—Functionalities and usage.
	Seal gas system---Functionalities and Usage
	Line Tracing of seal gas system
3.	Preventive Maintenance

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Description and understanding of Balance of Plant (BOP).
Course Code	:	ATC-2
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (three) days
Objective	:	Understanding different systems of BOP and their functionalities.

Course contents	
Module	
1.	Inlet Water System
	Demineralized water system
	Circulating Water System
	Basic concept of plant whole water system
	Basic concept of plant whole water system (Local)
	Water chemistry and treatment system at local
	Water chemistry and treatment system at local (Local)
2.	Understanding of Clarified water system
	Understanding of Plant cooling tower water system
	Understanding of plant Closed Cooling water system
	Understanding of plant waste water system
	Understanding of plant service and potable water system
3.	Practical Orientation and discussions on Flow Diagram / P & ID of Plant whole water system
	Introduction to plant air conditioning system—Chiller Pump, Compressor

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Functionalities and system descriptions of Steam turbine and its associated auxiliaries.
Course Code	:	ATC-3
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	Understanding Steam turbine, its different auxiliaries and other interconnected equipment and their functions.

Module	Course contents
1.	Condenser/Hotwell –function, location and usage.
	Condenser – Discussions at local
	Vacuum pump system
	Vacuum pump line tracing
	Online Tube Cleaning System (OLTCS)--Functions ,usage and operating details
	OLTCS line tracing and discussions at local
	Condensate system—its importance, different equipments and usage
	Line tracing of Condensate system
	Condensate Spray system
	Spray line Tracing
	Condensate Spray line tracing
	CEP—Equipment details and discussion at local
2.	Feed water system—its importance, different equipment and their usages.
	Feed Water System—discussion at local
	BFP—working, operations & its details
	BFP—discussions at local
3.	Bypass deareator – functions, usages and operating details.
	Bypass deareator – locations and line tracing
	Mainsteam (MS) cycle ---economizer/preheater
	Mainsteam (MS) cycle—HP Steam system.
	RH/LP steam cycle—IP/LP steam system
	HP Turbine—functions, location and usage
	IP Turbine—functions, location and usage
	LP Turbine—functions, location and usage
4.	Turbine lube oil system—functions, usage and operating details.
	Turbine governing oil system-- functions, usage and operating details
	Governing oil system—line tracing at local
	Turbine turning gear system
	Discussion on Turning gear at location
	HP/LP Bypass system
	HP/LP Bypass system --- discussion at local
	Gland Steam System—functions and usage
	Gland Steam Condenser Line tracing.
5.	CW system – functionalities and details
	CCW system line tracing at local
	Auxiliary Water cooling system—Functionalities & details
	ACW system line tracing at local
	Start up procedure of steam turbine
	Shut down procedure of steam turbine.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Heat Recovery Steam Generator
Course Code	:	ATC-4
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (seven) days
Objective	:	Understanding HRSG its different ancillaries and auxiliaries, operation and Shutdown.

Course contents	
Module	
1.	Overall Haripur Plant Flow Diagram
	Overview of Heat Recovery Steam Generator(HRSG)
	Practical orientation of overview of HRSG
2.	Understanding of evaporator, HRSG Drums, HP, IP, LP, SH, DeSH system
	Practical Orientation of Evaporator, HRSG drums, HP, IP and LP, SH, DeSH system
	Understanding Flue gas, diver/stack damper.
3.	Practical orientation of flue gas /diverter/stack damper
	Start up preparation of Heat recovery
4.	Practical orientation on preparatory operation of HRSG
	Understanding start up of HRSG
	Start up of HRSG
	Understanding Shutdown of HRSG
5.	Practical orientation of Shutdown of HRSG
	HRSG blow down system—functionalities and usage
	Line tracing of HRSG blow down system
6.	Chemical dosing system(Boiler drum)—functionalities and usages
	Line tracing of Chemical dosing system.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Mechanical Maintenance
Course Code	:	ATC-5
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	03 (three) days
Objective	:	Understanding and familiarize with basic maintenance practices and developing maintenance schedule.

Course contents	
Module	
1.	Maintenance basics including visual inspection, oil level checking, oil gauges reading etc.
	Preventive and breakdown maintenance frame work including PTW systems (Valves, pumps, bearings etc.)
	Development of Schedule of PM for Haripur CCPP
	Understanding and development of procedures of isolations for different equipment
	Standard Checklist for regular maintenance
2.	Listing of General faults and SOPs for them to help with trouble shooting.
	Trouble shooting framework development
	Mechanical protection and interlock
	Root cause analysis/introduction to RLA analysis
	Understanding CI, HGPI and MI as per OEM
3.	Understanding of statutory HRSG inspection as per Bangladesh regulatory requirements.
	Introduction to condition based monitoring
	Introduction to permit to work system
	Statutory regulation for Air, Public water permission and pollution norms as per Bangladesh laws.
4.	Concept of long term and short term planning
	Introduction to IT tools for optimal plant performance
5.	TQM Philosophy
	TQM—Identification of quality problems
	TQM—list of process improvement tools
	Material Science Hand Book training

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Plant Performance
Course Code	:	ATC-6
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	Introduction, advantage and monitoring parameters.

Course contents	
Module	
1.	Introduction to plant performance system
2.	Advantages of plant performance system
3.	KPI to be monitored for optimal plant performance
4.	Plant performance against KPI target

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Environment, Health and Safety
Course Code	:	ATC-7
Participants	:	Officers
No. of Participants	:	25 (twenty five) persons
Duration of the course	:	01 (one) day
Objective	:	Familiarize with health, safety and environment.

Course contents	
Module	
1.	Training on Hazardous substances
	Waste disposal
2.	Personal Protective equipment
	Cardinal Safety System
	Induction on site regulation

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Electrical, Instrument & Control Engineering
Course Code	:	ATC-8
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	05 (five) days
Objective	:	Understanding and familiarize with Electrical, Instrument and Control system

Course contents	
Module	
1.	Electrical Single line diagram of CCPP
	Practical orientation on electrical single line diagram
	GT Generator
	Generator auxiliary
	Static frequency converter
	Control panel discussion
	Understanding of excitation transformer/Excitation Bus duct
	Discussion of GT Control package
2.	Understanding of Motor Control Centre(MCC)
	Local discussions of MCC
	Introduction and Understanding of DC system
	DC system discussion at local
	Introduction to GT auxiliary motor
	Introduction to GT Control system
3.	Understanding of Instrument
	Understanding of control valves and servo actuators
	Introduction to GT –DCS
	ST Generator design, operation and maintenance
	Electrical system for ST
	I & C for ST
4.	Main Power transformer, unit transformer and auxiliary transformer
	Generator Circuit breaker
	Introduction to MV and LV switchgear
	Understanding of substation
	Understanding of overall I & C system
	Session on contain

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Gas Turbine Operation
Course Code	:	ATC-9
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	To Understand Gas Turbine safe operation, protections and shutdown procedures.

Course contents	
Module	
1.	Start Permissive of Gas Turbine
	Checks during Start up
	Partial load and Full Load Operation
	Parameters to be monitored during Operation
2.	Major Emergencies, abnormal operation procedure
	Shut Down
	Permit to work System

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Gas Turbine Construction
Course Code	:	ATC-10
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	To Understand Gas Turbine major Components and construction.

Course contents	
Module	
1.	Layout of gas Turbine
	Sectional view
	Inlet Air System
	Compressor
2.	Bearings
	Combustion system
	Fuel Nozzles
	Turbine and its components
	Turbine cooling

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Gas Turbine Protection and Interlocks
Course Code	:	ATC-11
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	To Understand Gas Turbine Protections and Interlocks.

Course contents	
Module	
1.	Protections during Turbine start up
	Trips of Gas Turbine
2.	Vibration protection and trips
	Combustion Monitoring and protections.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Introduction to Thermodynamic of Gas Power Plant
Course Code	:	ATC-12
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	To Understand Gas Turbine thermodynamic cycle and its analysis.

Course contents	
Module	
1.	General Introduction to gas Turbine system
	Simple gas Turbine
	Discussion on performance deterioration
	Discussion on analysis of compressor efficiency
2.	Brayton Cycle
	Analysis of Brayton Cycle
	Parametric analysis of the cycle
	Effect on Performance by ambient temperature, altitude, humidity
	Effect of Steam injection

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Major Maintenance in Gas Turbines
Course Code	:	ATC-13
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	02 (two) days
Objective	:	To create awareness Major maintenance activities in gas Turbine

Course contents	
Module	
1.	General Introduction to Gas Turbine
	Factors affecting the life cycle of GT components
	Maintenance Practices
	Short term and long term maintenance Planning
2.	Compressor Fouling
	Inspection Schedules
	Combustion Inspection
	Hot Gas Path Inspection
3.	Major Inspection
	Renovation and Modernization
	Tips for Checking Health of Gas Turbine
	Condition Monitoring Tools

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Environmental aspects of Gas Power Plant
Course Code	:	ATC-14
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	02 (two) days
Objective	:	To create awareness about the environmental impact of Gas Power Plant

Course contents	
Module	
1.	Discussion on the environmental challenges of the gas power plant in term of input and output considerations
	International standards and world bank Guidelines for power plants in line with Environmental Pass meters.
	Bangladesh environment standards as per Environment conservation rules, 1997
2.	Emission characteristics of conventional Power plants
	NO_x formation & control mechanism in GT based Power generation
	Influence of Pollutants on human health and other effects
	Options for control of emissions in including SOx, NOx etc. in power plants.
3.	Carbon Sequestration
	Efficiency Enhancement

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	LT and HT Switchgear
Course Code	:	ATC-15
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	02 (two) days
Objective	:	To understand different types of Switchgear used in the Power Plant, their maintenance, construction, components and protections

Course contents	
Module	
1.	Difference between switch and Breaker
	Classification of switchgear, components of switchgear
	Circuit Breakers: Arcing, types of Circuit breaker, parts of Circuit Breakers.
	Fuses: Principle and Types, Rating.
2.	Low Voltage Switchgear: Types
	MCCB: Types and accessories
	MCBs : Principle and construction
	Residual Current Devices (RCD)
	Contactors: Principle , Closing and opening,
3.	Motor Starting Methods: DoL, Primary Resistance, Auto Transformer, star delta soft starters
	Maintenance of switch Gear, including Preventive Maintenance

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Operation and Maintenance of Transformer
Course Code	:	ATC-16
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	02 (two) days
Objective	:	1. To familiarize with the basic principle, Construction, Operation and maintenance of Transformer 2. To enable the detection of minor faults, its repair and maintenance at field level.

Course contents	
Module	
1.	Basic principle of transformer and construction features.
2.	Fundamental of flux theory, TTR, Vector angle of current and voltage, Insulting material, Termination and bushing. Overloading factors, thermal limit, short circuit rating, loss and quality regulation as per IEC-76.
3.	Transformer protection and requirement for bushing CT (BCT). Over current, Differential, thermal, primary & REF protection etc.
4.	Test of Transformer, Power Freq. HV test. Temperature Correction Factor for Insulation measurement. Oil test, Tan-Delta & other chemical tests on oil, Oil sampling & Oil processing. Tank Vacuum and precaution for vacuum, Oil filling procedure.
5.	Circulating current in parallel operation, vector group and its confirmative test. OLTC oil and its special filtering process, OLTC operating principal, connection etc.
6.	Instrument transformer, CT, PT and matching transformer. Their classification, accuracy level, loading burden test, secondary circuit impedance, cable selection on the basis of impedance. knee point , Mac, curve, selection on the basis of high impedance protection (Diff) scheme.
7.	Transformer Name plate study, supplementary name plate, Receipt & handling of transformer, shock indicators/recording graph. Assembly and vacuum technique, oil filling.
8.	Tap changer, steps, tap percentage, increase and decrease and decrease of taps through mechanical & electrical operation. Auto operation for voltage regulation, Failure and repair work, oil change and oil filtering of OLTC.
9.	Transformer Diagnostic test, detection of failures, oil test analysis, special test as double test (Tan-Delta) on whole transformer, bushing and other components. Acceptance limits.
10.	Routine & Forced maintenance of Transformer, Preparation of various maintenance schedule for minimizing failure & interruption thereof.
11.	Knowledge about various prescribe charts, checklist used in BPDB for proper maintenance of transformer.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Relay and Protection Course
Course Code	:	ATC-17
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	1. To build up skill on Protection of equipment. 2. To acquaint with protective equipment. 3. To feel free to handle with the relays and their performance 4. To enable the basic calculation of the relays. 5. Handling and testing of the common relays

Course contents	
Module	
1.	Concept on Device numbering.
2.	Introduction of vector and vector notations, solving the vector calculations. Calculation of complex quantity, analysis of symmetrical and un-symmetrical faults.
3.	DC system and its requirement for reliable protection.
4.	Basic concept of different type of relays (electro-magnetic, electronic and microprocessor based relays).
5.	Operating principle, time curves, selection of curves, definite time etc. as per field requirement.
6.	Relay coordination with the equipment, equipment operating time, charging time, breaker operating cycle, time gap with other relays.
7.	CT and VT selection as required by the protection requirement .Mac curve, knee point, ALU factors for the protection.
8.	Basic relay testing, test on schedule maintenance work and recording.
9.	Feeder protection, O/C, E/F and its circuit details. HRC fuses verses the relay curves.
10.	Transformer protections.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Accounts and Finance, Auditing
Course Code	:	ATC-18
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	02 (two) days
Objective	:	To understand accounts and finance, Budget, Business Plan and Corporate Plan and auditing

Course contents	
Module	
1.	What is Budget
	Types of Budget
	O&M Budget
	Sales Budget
2.	Repair and maintenance budget
	Gas Consumption Budget
	Business Plan
	Strategic management Process
	Key elements of Business Plan
3.	Corporate Plan
	Auditing
	Managing commercial Agreements

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Safety Management in Power Plants
Course Code	:	ATC-19
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	To understand Safety Management in Power Plants.

Course contents	
Module	
1.	Safety Hazards present in the power plant
	Personal Protective Equipment and their Use
	Identification of Electrical Safety hazards
	Unsafe acts
2.	Electrical accidents
	Safety practices of electrical system
	Electrical Fire
	Prevention of Electrical fire & other accidents
	Method of protection of electrical fires and their associated hazards.
3.	Quality management through maintaining standard procedures of Safety rules.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Maintenance of GBC Gearboxes
Course Code	:	ATC-20
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	To get an overview of the Gearbox and understand the maintenance

Course contents	
Module	
1.	Introduction to Gearbox and the Compressor
	Components of Gearbox
	Safety precautions during erection, operation and maintenance
	Storage of Components
	Installation of Gearbox
	Alignment
2.	Daily and Monthly checks
	Quarterly and Yearly Maintenance, Maintenance schedules
	Lubrication and Importance of oil analysis
	Trouble shooting
	Ordering of Spares.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Strategic HRM
Course Code	:	ATC-21
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (Seven) days
Objective	:	To Familiarize the process of linking HR Functions with the strategic objectives of the organization.

Course contents	
Module	
1.	Conception of Strategic HRM; definition of HRM
2.	Integration of HRM with the organization strategic needs
3.	Affecting behavior of individuals in the offers of organization goals.
4.	Long term people issue and macro-concerns about future need.
5.	Pattern and deployment of human resource in SHRM
6.	Traditional HRM versus SHRM
7.	Benefit of SHRM
8.	Barriers to SHRM

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Communication Skill
Course Code	:	ATC-22
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	01 (one) day
Objective	:	To develop the ability of Communication for Office and Business

Course contents	
Module	
1.	Written Communication
	Writing approval Note-sheets
	Understanding the audience for Presentation
2.	Making Presentation, Understanding the Objective
	Making Business Presentation

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Inventory Management
Course Code	:	ATC-23
Participants	:	Officers
No. of Participants	:	20 (twenty) persons
Duration of the course	:	02 (two) days
Objective	:	To make the participant understand the strategic role of inventory management in the supply chain management of power stations and accomplishment of the business objectives, including cost efficiency and working capital optimization.

Course contents	
Module	
1.	System & processes of material planning and inventory control in power station
	Policies and strategies in inventory management
2.	Codification Issues
	Inventory optimization process
	Lead time analysis and Selective Inventory Control Techniques
3.	Issues in inventory management of power stations and future strategy
	Capitalization of spares

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Security of Installation/ Plant
Course Code	:	ATC-24
Participants	:	Officers/Staff
No. of Participants	:	20 (twenty) persons for each Course
Duration of the course	:	07 (Seven) days
Objective	:	To familiarize with concept of security and intelligence system with the aspect of Key Point Installation (KPI).

Courses	
Sl. No.	
1.	Concept of Security and Intelligence. Security system of large installation.
2.	Key Point Installation and its category.
3.	Concept of Subversion, Counter of sabotage and subversion measures
4.	Concept of threat and analysis of threat and diffusion of thread in power plant and its security measures according to the KPI category
5.	Concept of secrecy and secrecy of classified documents.
6.	KPI security policy 2013 of Government of Bangladesh

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	Senior Management Training
Course Code	:	SMC
Participants	:	ED/CE/GM/Company Secretary/DGM/ Project Director & equivalent officer
No. of Participants	:	20 (twenty) persons
Duration of the course	:	10 (ten) days
Objective	:	To familiarize with, study and impart knowledge about Leadership, Reforms, Policies, Planning, Issues, Acts and Rules, Techniques and Aspects on various subject.

Course contents	
Module	
1.	Overall activities, future role, Mission/Vision, strategy and policy of EGCB
	Developing future executives, promotion of congenial organizational climate and corporate culture for improved performance
2.	Team Building and Corporate/Good Governance
3.	MDGs, SDGs, PRS and PPP (Public Private Partnership)
4.	Human Resource Management
5.	Institutional capacity building and implementation of Citizen Charter
6.	Techniques of Institutional Capacity Building in Public Sector
7.	Techniques of effective Inspection
8.	Managing Competency and Result
9.	Stakeholder analysis & management
10.	Reforms of Power Sector, problems of reform, managing changes.
11.	Familiarize with, study and impart knowledge about MIS, e- Governance, e-Commerce, Intranet data base development, information exchange techniques on network to facilitate organizational functions.
12.	Ensuring transparency, accountability, and quality service through e-governance
13.	Project identification & selection, project planning, project appraisal, DPP & TPP format, stages of project development process, problems during project management and its solution.
14.	Overview of Total Quality Concept with overall discussion on TQM.
15.	Environment administration of power plant & code of environment in setting up power plant.
16.	Overall discussion on Company Act-1994.
17.	Overall discussion on PPR-2008 and Financial Management. Discussion on Tariff of Electricity
18.	Overall discussion on Labour Act-2006
19.	Overall discussion on EGCB Service rule 2017.
20.	Discussion on gender issue, women's right & empowerment.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.

Name of the course	:	Foundation/ Induction/Orientation Training
Course Code	:	FTC-1
Participants	:	Officers
No. of Participants	:	20 (twenty) persons for each Course
Duration of the course	:	30 (thirty) days
Objective	:	To familiarize with, study and impart knowledge about Organizational Management and Technical aspect.

Courses	
Sl. No.	
1.	Reforms Programs of Power Sector
2.	Vision, Mission, Goals & Objectives of EGCB
3.	Introduction to Companies Act 1994
4.	Etiquette, manner & attitude and organizational behavior.
5.	Corporate Culture
6.	Concept and development of Leadership
7.	Employee Conduct & discipline Rules
8.	Introduction to Power Generation
9.	Accounts and Financial Management
10.	Occupational Health, Fire Fighting & Safety and Environment
11.	Human Resource Management
12.	Project Management
13.	Ethics, integrity and anti-corruption
14.	Public Procurement Rules (PPR)-2008
15.	Inventory Management
16.	Communication Skill
17.	MDGs, SDGs, PRS and PPP (Public Private Partnership)
18.	Land Management
19.	Labour Act/Labour laws
20.	Innovation
21.	Gender issues, women's right & empowerment.
22.	Corporate/Good Governance and Motivation Team Building
23.	E-Filing
24.	Office Management

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.

Name of the course	:	Foundation/ Induction/Orientation of Power Plants
Course Code	:	FTC-2
Participants	:	Officers (Technical)
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Power Plant, store management and solar energy.

Course contents	
Module	
1.	To discuss about different Power Stations.
	To develop conception on proper Operation and Maintenance of different types of Power Stations including preventive maintenance.
	Idea about Steam Turbine, Gas Turbine, Boiler, different types of Pumps & Bearings used in Steam Power Plant
2.	Idea about different types of Electricity Generation, AC Wave & Harmonics.
	Detail Discussion about different types of auxiliaries used in thermal and Gas Turbine Plant.
	Detail Discussion of starting & shutdown process, Cooling of turbines etc.
3.	Lubrication and sealing system, thermal insulation, air heating condensation of steam etc.
	Electrical protection of Generator, auxiliary supply and Motor protection system
	Safety of operation and Maintenance procedure during planned and forced condition. Shutdown process of Plant at Normal & Emergency Condition.
4.	Operational and maintenance procedure of electrical equipments such as Generator, Exciter, Thyristor, AVR, Transformer, CT, PT, HT/LT Motors, Breakers, Bus-bar, Isolator, Battery & Battery Charger etc.
	Idea about industrial water treatment and importance of water purification for industrial used in power Generation and properties of demy & Clarified water.
	Discussion about Data Acquisition, Control System, Measuring System, various. Protection & Interlocking system of Boiler and Turbine.
5.	Start Up process of Plant at Hot and Cold condition.
	Idea on store Management & Inventory system.
	Solar energy-its technic and application
6.	Implementation of Clean Development Mechanism (CDM) in power plant.
7.	Energy auditing and energy efficiency improvement in power plant.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.

Name of the course	:	Foundation/ Induction/Orientation Training
Course Code	:	FTC-3
Participants	:	Staff
No. of Participants	:	15 (ten) persons
Duration of the course	:	02(two) days
Objective	:	To familiarize with, study and impart knowledge about Office Service, Service Rules, Health, Safety and women's right.

Course contents	
Module	
1.	Discussion on etiquette, manner & attitude
2.	Discussion on job description & responsibilities, rules of discipline, hygiene, customer service, office security & safety and dress code/office uniform.
3.	Discussion on condition of service, service benefits and disciplinary rules of EGCB Ltd.
4.	Discussion on gender issue, women's right & empowerment.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.

Name of the course	:	Foundation/ Induction/Orientation of Power Plants
Course Code	:	FTC-4
Participants	:	Technical Staff
No. of Participants	:	20 (twenty) persons
Duration of the course	:	07 (seven) days
Objective	:	To familiarize with, study and impart knowledge about Power Plant, store management and solar energy.

Course contents	
Module	
1.	To discuss about different Power Stations.
	To develop conception on proper Operation and Maintenance of different types of Power Stations including preventive maintenance.
	Idea about, Steam Turbine, Gas Turbine, Boiler, different types of Pumps & Bearings used in Steam Power Plant
2.	Idea about different types of Electricity Generation, AC Wave & Harmonics.
	Detail Discussion about different types of auxiliaries used in thermal and Gas Turbine Plant.
	Detail Discussion of starting & shutdown process, Cooling of turbines etc.
3.	Lubrication and sealing system, thermal insulation, air heating condensation of steam etc.
	Electrical protection of Generator, auxiliary supply and Motor protection system
	Safety of operation and Maintenance procedure during planned and forced condition. Shutdown process of Plant at Normal & Emergency Condition.
4.	Operational and maintenance procedure of electrical equipments such as Generator, Exciter, Thyristor, AVR, Transformer, CT, PT, HT/LT Motors, Breakers, Bus-bar, Isolator, Battery & Battery Charger etc.
	Idea about industrial water treatment and importance of water purification for industrial used in power Generation and properties of demy & Clarified water.
	Discussion about Data Acquisition, Control System, Measuring System, various. Protection & Interlocking system of Boiler and Turbine.

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.

Name of the course : SAP Functional Training
Course Code : FTC-5
Participants : Officers
No. of Participants : 20 persons
Duration of the course : 03 (Three) days
Objective : To familiarize with, study and impart knowledge about SAP.

Course contents	
Module	
FICO	SAP Navigation and ESS
	GL - General Ledger
	CA – Cash Accounting
	AA – Asset Accounting
	AP – Accounts Payable
	AR – Accounts Receivable
	FM – Fund Management
	FI Reports
	CO/FM Reports
MM	SAP Navigation
	Material Master Management
	Vendor Master Management
	Annual Procurement Plan
	Procurement of Goods/ Works/ Physical Services under OTM/ DPM/ LTM/ OSTETM/ TSTM
	International/ National Procurement of Services under Quality Cost Based Selection QCBS)/ SBQC/ FBS/ LCS/ SIC/ SSS
	Procurement of Goods/ Works/ Physical Services under request for quotation (RFQ) method
	Procurement of Goods/ Works/ physical services under Direct Cash Purchase (DCP) method
	Inventory Receive and Issuing Process
	Indirect Incoming Invoice Posting Process (MIRO)
	Physical Inventory Process
	Opening and Closing Inventory Process Reports
	Pricing Procedure
	Release Strategy
	MM Reports
HCM & Payroll	SAP Navigation and ESS
	Organization Management
	PA - Personnel Administration (Maintain Employee Information, Benefit Management , Promotion Process, Transfer Process, Discipline Process, Retirement Process, Resignation Process)
	AP – Appraisal Management
	RE – Recruitment Process
	TM - Time Management
	TN – Training Management
	TRP – Transport Management
	PR – Payroll Process
	ESS – Employee Self Service (Administration)
	HR Reports

PM & PP	SAP Navigation and ESS
	Maintaining Master Data,
	Maintain Measuring Document
	Corrective Maintenance Process
	Breakdown Maintenance Process
	Refurbishment Order Process
	Calibration Order Process
	Preventive Maintenance Plan
	Preventive Maintenance Plan
	Outsourcing / Service Order
	Daily Plant Availability (PP Module)
	Declared Plant Capacity (PP Module)
	PP Reports (PP Module)
PS	SAP Navigation and ESS
	Project Master Data Maintaining Process
	Project Creation Process
	Project Document Management Process
	Project Cost Planning Process
	Project Budgeting Process
	Project Procurement Process
	Project Activity Confirmation Process
	Project Physical Progress Planning Process
	Project Change management Process
	Project Closing Process
	Project Risk Management Process
	PP Reports

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.

Name of the course	:	ই-ফাইল (নথি) ব্যবস্থাপনা
Course Code	:	এফটিসি-৬
Participants	:	কর্মকর্তা/কর্মচারী
No. of Participants	:	২০ (বিশ) জন
Duration of the course	:	০১ (এক) দিন
Objective	:	এ প্রশিক্ষণ কোর্সটি ইজিসিবি লিঃ এ " ই-ফাইল (নথি) ব্যবস্থাপনা" কার্যক্রম বাস্তবায়নে কর্মকর্তাদের পারদর্শিতা ও দক্ষতা অর্জনে সহায়ক হবে।

Module	Course contents
১)	কোর্সের গুরুত্ব আলোচনা ।
২)	ই-ফাইল (নথি) সংক্রান্ত ওয়েব সাইটের পরিচিতি, ইউজার আইডি এর ব্যবহার, লগইন, প্রোফাইল আপডেট, লগআউট ইত্যাদি (ব্যবহারিক)।
৩)	দাপ্তরিক ডাক ও নাগরিক ডাক এর পরিচিতি, শীল তৈরী, আপলোড, চর্চা করণ ইত্যাদি (ব্যবহারিক)।
৪)	নথির ধরণ ও নথি তৈরী, নথি প্রেরণ ও সংক্রান্ত আলোচনা।
৫)	নথির ধরণ ও নথি তৈরী, নথি প্রেরণ ইত্যাদি চর্চা করণ (ব্যবহারিক)।
৬)	পত্রের খসড়া তৈরী, পত্র জারি করণ, ট্র্যাকিং করণ ইত্যাদি চর্চা করণ (ব্যবহারিক)।
৭)	নিবন্ধন বহি, প্রতিবেদনসমূহ, ড্যাশবোর্ড সংক্রান্ত ইত্যাদি আলোচনা।
৮)	ডাক ফেরত, স্ব-উদ্যোগে নথি তৈরি, চিঠির প্রকার, নথি নিষ্পত্তি, সিস্টেম প্রশাসনিক ব্যবস্থাপনা ইত্যাদি চর্চা করণ (ব্যবহারিক)।
৯)	কোর্স সমাপনী (প্রশ্ন, উত্তর ও সমাপনী ভাষণ)

Training Method : 1. Discussion and lecture.
2. Practical Demonstration.
3. Multimedia presentation.
4. On the Job Training.